

October 16, 2007

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

> Re: California Independent System Operator Corporation, Docket Nos. ER08-\_\_\_-000 Early Effectiveness of Resource Adequacy Provisions

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act, 16 U.S.C § 824d, and Section 35.15 of the regulations of the Federal Energy Regulatory Commission ("Commission"), 18 C.F.R. § 35.15, the California Independent System Operator Corporation ("CAISO") respectfully submits for filing an original and five copies of proposed amendments to the currently-effective ISO Tariff.<sup>1</sup> These amendments, referred to herein as "RA Early Effectiveness Amendments," promote the timely implementation of the CAISO's Market Redesign and Technology Upgrade ("MRTU") Tariff by allowing the CAISO to perform specific resource adequacy-related tasks that must be accomplished in advance of the MRTU "go live" date, now scheduled for March 31, 2008. In particular, the RA Early Effectiveness Amendments request an effective date of December 17, 2007 for targeted, and, in large part, conditionally accepted, MRTU Tariff provisions.

The RA Early Effectiveness Amendments, therefore, function similarly to those accepted by the Commission in *California Independent System Operator Corporation*, 119 FERC ¶ 61,124 (May 8, 2007), which authorized the early effectiveness in the currently effective ISO Tariff of specific MRTU Tariff provisions related to Existing Transmission Contracts, Transmission Owner Rights, Converted Rights and Congestion Revenue Rights. Like that earlier filing, the RA Early Effectiveness Amendments will be set forth in a new Appendix CC to the currently effective ISO Tariff and will be completely superseded by the MRTU Tariff provisions filed in FERC Docket Nos. ER06-615 and ER07-1257 upon the effective date of those latter provisions.

<sup>&</sup>lt;sup>1</sup> The CAISO also tenders two additional copies of the RA Early Effectiveness Amendments to be time and date stamped and returned to our courier.

# I. DESCRIPTION OF THE NEED FOR THE RA EARLY EFFECTIVENESS AMENDMENTS

The resource adequacy-related provisions of the MRTU Tariff complement state imposed resource adequacy requirements on Load Serving Entities ("LSEs") to establish an integrated process designed to ensure that sufficient capacity will be available when and where needed to reliably operate the power system. Consistent with this core objective, resource adequacy requirements are intended to serve as the primary vehicle under MRTU to replace the Commission's must-offer obligation by which resources, including those required for local reliability, must be made available to the CAISO Markets. However, in order for the CAISO to accommodate and enforce the availability requirements applicable to Resource Adequacy Resources beginning in 2008, whether under the currently effective ISO Tariff or the MRTU Tariff, the CAISO and Market Participants must engage in certain reporting and information exchange activities prior to the effective date of the MRTU Tariff. For example, in MRTU, Resource Adequacy Capacity is ineligible to receive an availability payment to participate in the Residual Unit Commitment process. The CAISO enforces this requirement in MRTU by identifying Resource Adequacy Capacity prior to the operational timeframe through the submission of Resource Adequacy Plans by Scheduling Coordinators ("SCs") for LSEs and Supply Plans by SCs for Resource Adequacy Resources.

Many of these reporting and information exchange activities must, accordingly, occur under the currently effective ISO Tariff. Because the MRTU Tariff modifies the existing resource adequacy program in several ways, the currently effective forward-reporting and information exchange provisions of the ISO Tariff must be modified. The most important changes relate to the ability of LSEs to elect between Reserve Sharing LSE and Modified Reserve Sharing LSE options, which entail different resource availability requirements, and the CAISO's assignment of Local Capacity Area Resource responsibility to LSEs. The specific provisions for which early effectiveness is sought will enable the CAISO to:

- Require Load Serving Entities to elect between Reserving Sharing LSE and Modified Reserve Sharing LSE status;
- Define the information requirements for resource adequacy programs and the two Load Serving Entity status options that must be provided to the CAISO;
- Determine the minimum amount of Local Capacity Area Resources needed in Local Capacity Areas and assign LSEs a proportionate responsibility for Local Capacity Area Resources that will be used for cost allocation purposes for potential CAISO procurement of capacity for reliability purposes under MRTU;
- Require the submission from Load Serving Entities of monthly and annual Resource Adequacy Plans that set forth information, including identification of Local Capacity Area Resources;
- Require the registration of Use-Limited Resources and the submission of use plans by Use-Limited Resources; and
- Apply default resource counting protocols.

As noted above, the CAISO's need to implement MRTU Tariff provisions related to the LSE election between Reserve Sharing LSE and Modified Reserve Sharing LSE status and Local Area Capacity Resources prior to the start of the MRTU markets is particularly significant. The

Modified Reserve Sharing LSE option requires substantial software configuration in order to implement the monitoring and surcharge elements incorporated into MRTU Tariff sections 40.5 et seq. To date, the CAISO has been unable to obtain accurate information from LSEs on an informal basis regarding their intent to elect the Modified Reserve Sharing LSE option. If no LSE is interested in the option of becoming a Modified Reserve Sharing LSE, then the CAISO will be able to reallocate resources for other activities that are necessary for a successful MRTU launch.

Another significant change under MRTU for resource adequacy will be the requirement that LSEs have Resource Adequacy Resources to satisfy reliability needs, including local reliability requirements. Although all LSEs have been aware of their Local Capacity Resource obligation for 2008 through the publication of the 2008 Local Capacity Technical Analysis and other CAISO communications, in the absence of effective tariff provisions authorizing the allocation of such responsibility, the CAISO has been unable to provide LSEs with a formal binding assignment of Local Capacity Area Resource responsibility. The CAISO acknowledges that LSEs must have a reasonable time following the assignment to procure the necessary resources. Accordingly, in order to provide for such time prior to the anticipated implementation of MRTU, the CAISO believes the Local Capacity Area Resource related provisions of the MRTU Tariff should be made effective on December 17, 2007.

# II. DESCRIPTION OF RA EARLY EFFECTIVENESS AMENDMENTS

# A. Scope of MRTU Tariff Provisions Transferred to Appendix CC

Proposed Part A to Appendix CC to the ISO Tariff includes only those MRTU resource adequacy-related provisions submitted in FERC Docket Nos. ER06-615 and ER07-1257 that involve forward reporting or information exchange activities. Accordingly, proposed Appendix CC includes:

- Section 40.1et seq. Applicability and Election of Load Serving Entity Status
- Section 40.2 et seq. Information Requirements Regarding Resource Adequacy Programs for both Reserve Sharing LSE and Modified Reserve Sharing LSE Options
  - Excludes Section 40.2.3.3(b) relating to daily Demand Forecast submissions by Modified Reserve Sharing LSEs
- Section 40.3 et seq. Local Capacity Area Resources, including only those subsections that permit the CAISO to determine Local Capacity Area Resource requirements and assign responsibility for those requirements for potential allocation of costs for CAISO backstop procurement purposes
  - Excludes Section 40.3.4 relating to CAISO backstop procurement of Local Capacity Area resources and the cost allocation methodology
- Section 40.6.4.1 and 40.6.4.2 Use-Limited Resource registration and submission of use plans.
- Section 40.7 Compliance provisions relating to Resource Adequacy Plans and Supply Plans.
   Excludes Sections 40.7.1 and 40.7.2 relating to consequences of non-compliance.
- Section 40.8 et seq. CAISO Default Qualifying Capacity Criteria.

The CAISO recognizes that much of the programmatic information required by Section 40.2 et seq. for both Reserve Sharing LSEs and Modified Reserve Sharing LSEs could be potentially the same as that submitted by LSEs under the currently effective ISO Tariff resource

adequacy provisions. Recognizing this, the CAISO intends to issue instructions to SCs for LSEs that limits the Appendix CC reporting requirements to any changes that may be contemplated by the LSE for commencement of MRTU. The CAISO nevertheless believes it is essential for the coherent application of resource adequacy-related provisions upon the implementation of MRTU that Section 40.2 be effective prior to the implementation of the MRTU Tariff. As noted above, there are material changes between the MRTU Tariff and the current ISO Tariff, including the use of California Energy Commission Demand Forecasts and the inclusion of Local Capacity Area Resources. Similarly, the CAISO believes it is appropriate to utilize the specific default Qualifying Capacity counting criteria that will apply to Resource Adequacy Plans and Supply Plans submitted for MRTU, rather than the current default Qualifying Capacity counting criteria.

Consistent with the intended scope of the RA Early Effectiveness Amendments, those resource adequacy-related provisions of the MRTU Tariff addressing Day-Ahead through Real-Time obligations have been excluded. In addition, the provisions relating to Net Qualifying Capacity have been omitted. Net Qualifying Capacity provisions have been excluded because Net Qualifying Capacity for individual resources for the 2008 Compliance Year have already been established in accordance with the currently effective ISO Tariff. Current ISO Tariff sections 40.5.2.1 and 40.5.2.2, which address deliverability of resources within the CAISO Control Area and from imports, respectively, both expressly provide that determinations made pursuant to those sections shall be effective for the annual terms. The Net Qualifying Capacity provisions of the MRTU Tariff, therefore, may become effective upon commencement of MRTU. The CAISO believes that these provisions do not require early effectiveness even in the event the scheduled MRTU implementation date is delayed because the CAISO's existing authority to determine the deliverability of resources within the CAISO Control Area and to assign Import Capability to LSEs is substantively identical to that under the MRTU Tariff.<sup>2</sup> Thus, the MRTU Tariff provisions excluded from Appendix CC as not requiring early effectiveness, in addition to those exceptions listed above, include:

- Sections 40.4.1 40.4.6 Determination of Net Qualifying Capacity, including the Import Capability Assignment Process
- Section 40.5 et seq. Day-Ahead and Real-Time requirements related to Modified Reserve Sharing LSEs
- Sections 40.6 et seq. Resource Adequacy Resource Availability Requirements

Part B of Appendix CC includes defined terms from the MRTU Tariff that must be incorporated into the currently effective ISO Tariff to give appropriate meaning to the provisions of the MRTU Tariff for which the CAISO seeks early effectiveness. There have been no changes made to these definitions from those filed in FERC Docket Nos. ER06-615 and ER07-1257.

<sup>&</sup>lt;sup>2</sup> See, California Independent System Operator Corp., 119 FERC ¶ 61,164 at P 3 (May 18, 2007), acknowledging development of the MRTU import capability assignment methodology for inclusion in the current ISO Tariff. The CAISO reproduced the Commission-accepted import assignment methodology provisions from the ISO Tariff into the MRTU Tariff as part of the CAISO filing on August 3, 2007 in Docket Nos. ER06-615 and ER07-1257.

# B. Description of Changes Made to Previously Filed MRTU Tariff Provisions

The RA Early Effectiveness Amendments are based on the Section 40 resource adequacy provisions filed by the CAISO on August 3, 2007 in FERC Docket Nos. ER06-615 and ER07-1257. The CAISO's August 3, 2007 filing consisted of MRTU Tariff changes to comply with the Commission's September 21, 2006, Order Conditionally Accepting the CAISO's MRTU Tariff, California Indep. System Operator Corp., 116 FERC 61,274 (2006) ("September 21 MRTU Order"); the Commission's April 20, 2007, Order Granting in Part and Denying in Part Requests for Clarification and Rehearing, California Indep. System Operator Corp., 119 FERC ¶ 61,076 (2007) ("April 20 MRTU Order"); and the Commission's June 25, 2007, Order on Compliance Filings, California Indep. System Operator Corp., 119 FERC ¶ 61,313 (2007). Accordingly, the RA Early Effectiveness Amendments constitute, in large part, language conditionally approved by the Commission or filed in conformance with Commission directives. The RA Early Effectiveness Amendments also reflect language submitted in the August 3, 2007 filing that, although consistent with the Commission's MRTU Orders, were not specifically mandated by those orders and therefore were filed pursuant to Section 205 of the Federal Power Act. These narrowly tailored proposed modifications to Section 40 of the MRTU Tariff are detailed at pages 16-19 of the transmittal letter accompanying the August 3, 2007 filing.<sup>3</sup> Because certain compliance and Section 205 modifications to the MRTU Tariff remain pending, to the extent the Commission orders further changes to the MRTU Tariff language in FERC Docket Nos. ER06-615 and ER07-1257, the CAISO will similarly reflect those changes in the currently effective ISO Tariff on compliance in the instant proceeding as well, as directed by the Commission.

From the foundation of the resource adequacy-related provisions of the August 3, 2007 MRTU Tariff filing, the RA Early Effectiveness Amendments make four categories of modifications.

<u>Clarifying cross-references</u>: Language has been included in Appendix CC provisions to specify whether a reference to another tariff section refers to another provision of Appendix CC or to a tariff section within the main body of the ISO Tariff. This clarification is necessary given that Appendix CC will operate temporally in parallel with resource adequacy provisions contained in Section 40 of the ISO Tariff.

<u>Clarifying dates upon which the CAISO or Market Participants must perform tasks</u>. The CAISO is requesting that the RA Early Effectiveness Amendments have an effective date of December 17, 2007. However, the forward activities, whether directed at the CAISO or Market Participants, are triggered at different times. Under the MRTU Tariff, these dates are to be governed by schedules set forth in the Business Practice Manual for Reliability Requirements. However, given that the transition to MRTU requires modification to the typical annual cycle of resource adequacy implementation activities, the RA Early Effectiveness Amendments include specific dates and deadlines. This will permit Appendix CC to be self-contained and more limited in its temporal scope.

<sup>&</sup>lt;sup>3</sup> The proposed Section 205 modifications affected Sections 40.1, 40.4.7, 40.6.4.1, 40.6.4.2, 40.7, 40.8.1.5 and 40.8.1.6, which are also included in the RA Early Effectiveness Amendments. See, California Independent System Operator Corporation Modifications to Market Redesign and Technology Upgrade Tariff, *California Independent System Operator Corp.*, ER06-615 and ER07-1257 (Aug. 3, 2007) at pp. 16-19 (http://www.caiso.com/1c2f/1c2ffa6d1dd80.pdf.)

Incorporation of modifications proposed in the CAISO's October 5, 2007, reply to protests and comments in FERC Docket Nos. ER06-615 and ER07-1257 ("MRTU Reply"). In the CAISO's MRTU Reply, the CAISO included specific proposed revisions to Sections 40.3.1.1 and 40.3.1.2 to address issues raised by stakeholders. These proposed revisions are also included in the instant filing and are intended to more clearly delineate the NERC/WECC reliability standards and other CAISO Reliability Criteria applied in the Local Capacity Technical Study and transfer the "notes" from the contingency table in Section 40.3.1.2 to their more appropriate location in Section 40.3.1.1.

Inclusion of an explicit reference in Section 40.3.1 to the CAISO's 2008 Local Capacity <u>Technical Analysis.</u> The RA Early Effectiveness Amendments clarify that, for the 2008 RA Compliance Year, the CAISO will assign responsibility for Local Capacity Area Resources based on the results of the 2008 Local Capacity Technical Analysis completed in April 2007. The results of this study already have been adopted by the CPUC as the basis for Local Capacity Area Resource obligations imposed on CPUC jurisdictional LSEs for 2008.<sup>4</sup> Extending the use of the 2008 Local Capacity Technical Analysis uniformly to all LSEs serving Load in the CAISO Control Area to determine their proportionate responsibility for Local Capacity Area Resources is just and reasonable.

In the September 21 MRTU Order, the Commission found that "a detailed description of the technical study to determine local capacity area resource requirements is not needed in the MRTU Tariff." The Commission further noted that the CAISO's role in assessing local capacity needs is analogous to the CAISO's long-standing identification of RMR units and that the CAISO "should possess similar flexibility to evaluate local capacity requirements."<sup>5</sup> Nevertheless, the Commission directed the CAISO to specify in the MRTU Tariff the set of reliability criteria the CAISO will employ in establishing Local Capacity Area Resource needs.<sup>6</sup> As part of the August 3, 2007 MRTU filing, the CAISO submitted its reliability criteria, which are the same as those utilized in conducting the 2008 Local Capacity Technical Analysis.

In addition, the Commission recently endorsed the use of California Energy Commission Demand Forecast data for conducting resource adequacy analyses. In the April 20 MRTU Order, the Commission stated, "coincident peak demand determinations should be made by one entity and that the California Energy Commission is best situated to provide this service, both for CPUC and non-CPUC jurisdictional LSEs."<sup>7</sup> Thus, assuming the CAISO's reliability criteria reviewed by the Commission as part of the August 3, 2007 MRTU filing are accepted, the Commission has explicitly approved the two primary inputs that drive Local Capacity Area Resource requirements, which together with the flexibility accorded by the Commission to the CAISO in this area, warrants acceptance of the use of the 2008 Local Capacity Technical Analysis for 2008 Local Capacity Area Resource allocation purposes under the ISO Tariff.

The CAISO notes that the State Water Project unsuccessfully sought rehearing of the April 20 MRTU Order or, alternatively, to reopen the record in FERC Docket No. ER06-615 primarily on

<sup>&</sup>lt;sup>4</sup> Opinion on Phase 2- Track 1 Issues, CPUC Decision 07-06-029 (June 21, 2007).

<sup>&</sup>lt;sup>5</sup> September 21 MRTU Order at P 1166.

<sup>&</sup>lt;sup>6</sup> *Id.* at P 1167.

<sup>&</sup>lt;sup>7</sup> April 20 Order at P 638.

the basis of the procedures used by the CAISO to develop the 2008 Local Capacity Technical Analysis.<sup>8</sup> The proposal in the RA Early Effectiveness Amendments to modify Section 40.3.1 to expressly refer to the 2008 Local Capacity Technical Analysis precludes the resurrection of any similar argument. Rather, the focus must lie solely in whether the 2008 Local Capacity Technical Analysis is just and reasonable. As detailed extensively in the Declaration of Catalin M. Micsa, attached hereto as Attachment D, the 2008 Local Capacity Technical Analysis was developed under the dual microscope of an extensive CAISO stakeholder process as well as an open and transparent proceeding before the CPUC, both of which included the participation of CPUC and non-CPUC jurisdictional LSEs.<sup>9</sup> Although the CAISO will not recount in detail those two processes, the CAISO notes:

- The CAISO formed Locational Study Advisory Group ("LSAG") with representation from state regulators, Energy Service Providers, generators, municipal utilities from northern and southern California, and the three large investor-owned utilities. LSAG met on October 20, 2006 and November 6, 2006 and published notes from those meetings on the CAISO website.
- The summary of the November 6, 2006, LSAG meeting confirms there was consensus regarding the interpretation and application of the NERC/WECC standards.
- The CAISO held a general stakeholder meeting on December 6, 2006 to review data inputs for the 2008 Local Capacity Technical Analysis and comments on the proposed study format were requested.
- The CAISO published a draft 2008 Local Capacity Technical Analysis on March 9, 2007 that was reviewed at a general CAISO stakeholder meeting held on March 21, 2007.
- Comments on the draft study were requested and received on March 29, 2007, many of which were incorporated into the final 2008 Local Capacity Technical Analysis issued on April 3, 2007.
- All stakeholders had a further opportunity to comment on the 2008 Local Capacity Technical Analysis in the context of the CPUC's resource adequacy proceeding (CPUC Docket No. Rulemaking 05-12-013), in which the study results were adopted in Decision 07-06-029.

Based on the foregoing, the CAISO asserts that the process in developing, and the substance of, the 2008 Local Capacity Technical Analysis is just and reasonable.

# III. CONTENTS OF FILING

This filing comprises:

This Transmittal Letter

Attachment AClean Tariff Sheets from the currently-effective ISO TariffAttachment BBlacklined Tariff Sheets from the currently-effective ISO Tariff

<sup>&</sup>lt;sup>8</sup> California Independent System Operator Corp., 120 FERC ¶ 61,271 (Sept. 24, 2007).

<sup>&</sup>lt;sup>9</sup> See also, "Answer of the California Independent System Operator Corporation to the Motion to Reopen the Record of the California Department of Water Resources' State Water Project," *California Independent System Operator Corporation*, FERC Docket No. ER06-615-007 (June 5, 2007), including Exhibit A thereto, the Declaration of Catalin M. Micsa.

Attachment C For Information only, blacklined Tariff Sheets showing changes to provisions from the currently-approved MRTU Tariff submitted in FERC Docket Nos. ER06-615 and ER07-1257 for informational purposes only Attachment D Declaration of Catalin M. Micsa

#### IV. COMMUNICATIONS

Correspondence and other communications regarding this filing should be directed to:<sup>10</sup>

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\* Parties designated for service.

#### V. EFFECTIVE DATE AND REQUEST FOR WAIVER OF THE ORDER NO. 614 FILING REQUIREMENTS

Given the scheduled start date for the MRTU Markets and the CAISO's need for resource adequacy related information prior to that time, the CAISO is filing the RA Early Effectiveness Amendments to request an effective date of December 17, 2007, 62 days from the date of this filing.

To the extent necessary, the CAISO also requests waiver of Order No. 614<sup>11</sup> and section 35.9 of the Commission's regulations.<sup>12</sup> To better assist the Commission and Market Participants in understanding the proposed changes to the previously submitted, and in many cases, accepted MRTU Tariff provisions, the CAISO presents strictly for informational purposes in Attachment C to this filing blacklines against the MRTU Tariff provisions as reflected in the CAISO's August 3, 2007 filing in FERC Docket Nos. ER06-615 and ER07-1257. All of the new Appendix CC, as reflected in the blacklines included in Attachment B to this filing, represents modifications to the current effective version of the ISO Tariff.

The CAISO respectfully requests waiver of Rule 203(b)(3), 18 C.F.R. § 385.203(b)(3), to permit each of the persons listed above to be included on the service list for this proceeding.

Designation of Electric Rate Schedule Sheets, FERC Stats. & Regs., Regs. ¶ 31,096 [Preambles 1996-2000] 11 (2000). 12

<sup>18</sup> C.F.R. § 35.9 (2006).

The CAISO also requests waiver of Part 35 of the Commission's regulations, 18 C.F.R. § 35 (2006), to the extent not met by this filing.

# VI. SERVICE

The CAISO has served copies of this filing on the Public Utilities Commission of the State of California, the California Energy Commission, the California Electricity Oversight Board, and all parties with Scheduling Coordinator Agreements under the CAISO Tariff. In addition, the CAISO has posted a copy of the filing on the CAISO Website and will provide courtesy copies of this filing to all parties in the MRTU proceeding, FERC Docket Nos. ER06-615-000 and ER07-1254, and the IRRP proceeding, FERC Docket No. ER06-723-000.

# VII. CONCLUSION

The CAISO respectfully requests that the RA Early Effectiveness Amendments as reflected in the revised ISO Tariff sheets attached hereto be approved, without modification, suspension, or hearing, to go into effect on December 17, 2007.

M. Sidney M. Davies 5. Assistant General Counsel Grant Rosenblum Counsel California Independent System **Operator Corporation** 151 Blue Ravine Road Folsom, CA 95630 916-608-7138 - telephone 916-351-2350 - facsimile grosenblum@caiso.com Counsel for the California Independent System **Operator Corporation** 

Attachment A – Clean Sheets of Currently Effective ISO Tariff Early Effectiveness of Resource Adequacy Requirements Amendment Filing

October 16, 2007

# **ISO TARIFF APPENDIX CC**

For the purpose of enforcing Market Participant compliance with the forward reporting activities associated with resource adequacy and to enable the CAISO to assign Local Capacity Area Resource responsibility prior to the effective date of the CAISO Tariff as filed in FERC Docket No. ER06-615 and ER07-1257, the CAISO shall operate pursuant to this Appendix CC. This Appendix CC is included in the ISO Tariff to set forth temporary provisions that are based on tariff authority conditionally accepted in FERC Docket No. ER06-615 and as filed in Docket No. ER07-1257. These provisions enable the CAISO to: 1) require Load Serving Entities to elect between Reserving Sharing LSE and Modified Reserve Sharing LSE options; 2) define the information requirements for resource adequacy programs and the two Load Serving Entity options that must be provided to the CAISO; 3) require the submission from Load Serving Entities of monthly and annual Resource Adequacy Plans that set forth information, including identification of Local Capacity Area Resources; 4) determine the minimum amount of Local Capacity Area Resources needed in Local Capacity Areas and allocate responsibility to Load Serving Entities for such Local Capacity Area Resources; 5) require the registration of Use-Limited Resources and the submission of use plans by Use-Limited Resources; and 6) apply default resource counting protocols. This Appendix CC, therefore, does not replace or supersede those at provisions contained in the ISO Tariff.

# PART A – RESOURCE ADEQUACY

# 40 RESOURCE ADEQUACY DEMONSTRATION FOR ALL SCHEDULING

# COORDINATORS SCHEDULING DEMAND IN THE CAISO CONTROL AREA.

# 40.1 Applicability.

A Load Serving Entity, and its Scheduling Coordinator, shall be exempt from Section 40 of this appendix, if the metered peak Demand of the Load Serving Entity did not exceed one (1) MW during the twelve months preceding the last date on which the Load Serving Entity can make the election in Section 40.1.1 of this appendix for the 2008 Resource Adequacy Compliance Year. Section 40 of this appendix shall apply to all other Load Serving Entities and their respective Scheduling Coordinators. For purposes of Section 40 of this appendix, a Load Serving Entity shall not include any entity satisfying the terms of California Public Utilities Code Section 380(j)(3).

# 40.1.1 Election of Load Serving Entity Status.

By December 18, 2007, via e-mail to reliabilityrequirements@caiso.com, the Scheduling Coordinator for a Load Serving Entity, not exempt under Section 40.1 of this appendix, shall inform the CAISO whether each such LSE elects to be either: (i) a Reserve Sharing LSE or (ii) a Modified Reserve Sharing LSE for the 2008 Resource Adequacy Compliance Year. A Scheduling Coordinator for a Load-following MSS is not required to make an election under this Section. Scheduling Coordinators for Load-following MSSs are subject solely to Sections 40.2.4 and 40.3 of this appendix.

The CAISO may confirm with the CPUC, Local Regulatory Authority, or federal agency, as applicable, the accuracy of the election by the Scheduling Coordinator for any LSE under its respective jurisdiction, or, in the absence of any election by the Scheduling Coordinator, the desired election for any LSE under its jurisdiction. The determination of the CPUC, Local Regulatory Authority, or federal agency will be deemed binding by the CAISO on the Scheduling Coordinator and the LSE. If the Scheduling Coordinator and CPUC, Local Regulatory Authority, or federal agency, as appropriate, fails to make the election on behalf of an LSE in accordance with the Business Practice Manual, the LSE shall be deemed a Reserve Sharing LSE.

# 40.2 Information Requirements Regarding Resource Adequacy Programs.

# 40.2.1. Reserve Sharing LSEs.

# 40.2.1.1 Requirements for CPUC Load Serving Entities Electing Reserve Sharing LSE Status.

The information required by Section 40.2.1.1 of this appendix shall be provided to the CAISO within five (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

- (a) The Scheduling Coordinator for a CPUC Load Serving Entity electing Reserve Sharing LSE status must provide the CAISO with all information or data to be provided to the CAISO as required by the CPUC and pursuant to the schedule adopted by the CPUC.
- (b) Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include Reserve Margin(s), then the provisions of Section 40.2.2.1(b) of this appendix shall apply.
- (c) Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include criteria for determining qualifying resource types and their Qualifying Capacity, then the provisions of Section 40.8 of this appendix shall apply.
- (d) Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include annual and monthly Demand Forecast requirements, then the provisions of Section 40.2.2.3 of this appendix shall apply.
- (e) Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include annual and monthly Resource Adequacy Plan requirements, then Section 40.2.2.4 of this appendix shall apply.

# 40.2.2 Requirements for Non-CPUC Load Serving Entities Electing Reserve Sharing LSE Status, Including Default Provisions for CPUC Load Serving Entities.

# 40.2.2.1 Reserve Margin.

The information required by Section 40.2.2.1 of this appendix shall be provided to the CAISO within five (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC **[**61,274 (2006).

- (a) The Scheduling Coordinator for a Non-CPUC Load Serving Entity electing Reserve Sharing LSE status must provide the CAISO with the Reserve Margin(s) adopted by the appropriate Local Regulatory Authority or federal agency for use in the annual Resource Adequacy Plan and monthly Resource Adequacy Plans listed as a percentage of the Demand Forecasts developed in accordance with Section 40.2.2.3 of this appendix.
- (b) For the Scheduling Coordinator for a Non-CPUC Load Serving Entity for which the appropriate Local Regulatory Authority or federal agency has not established a Reserve Margin(s) or a CPUC Load Serving Entity subject to Section 40.2.1.1(b) of this appendix that has elected Reserve Sharing LSE status, the Reserve Margin for each month shall be no less than 15% of the LSE's peak hourly Demand for the applicable month, as determined by the Demand Forecasts developed in accordance with Section 40.2.2.3 of this appendix.

# 40.2.2.2 Qualifying Capacity Criteria.

The information required by Section 40.2.2.2 of this appendix shall be provided to the CAISO within five (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

Original Sheet No. 1369

The Scheduling Coordinator for a Non-CPUC Load Serving Entity electing Reserve Sharing LSE status must provide the CAISO with a description of the criteria adopted by the Local Regulatory Authority or federal agency for determining qualifying resource types and the Qualifying Capacity from such resources and any modifications thereto as they are implemented from time to time. The Reserve Sharing LSE may elect to utilize the criteria set forth in Section 40.8 of this appendix.

# 40.2.2.3 Demand Forecasts.

The information required by Section 40.2.2.3 of this appendix shall be provided to the CAISO within five (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

The Scheduling Coordinator for a Non-CPUC Load Serving Entity or CPUC Load Serving Entity subject to Section 40.2.1.1(b) of this appendix electing Reserve Sharing LSE status must provide annual and monthly Demand Forecasts as part of the annual and monthly Resource Adequacy Plans under this appendix. The annual and monthly Demand Forecasts shall utilize the annual and monthly coincident peak Demand determinations provided by the California Energy Commission for such Load Serving Entity, which will be calculated from the Demand Forecast information submitted to the California Energy Commission by each Reserve Sharing LSE; or (ii) if the California Energy Commission does not produce coincident peak Demand Forecasts for the Load Serving Entity, the annual and monthly coincident peak Demand Forecasts produced by the CAISO for such Load Serving Entity in accordance with its Business Practice Manual. Scheduling Coordinators must provide data and information, as may be requested by the CAISO, necessary to develop or support the Demand Forecasts required by this Section.

# 40.2.2.4 Annual and Monthly Resource Adequacy Plans.

The Scheduling Coordinator for a Non-CPUC Load Serving Entity or a CPUC Load Serving Entity subject to Section 40.2.1.1(b) electing Reserve Sharing LSE status must provide annual and monthly Resource Adequacy Plans for such Load Serving Entity. For 2008 Resource Adequacy Compliance Year, the annual Resource Adequacy Plan shall be submitted to the CAISO on January 31, 2008 in the form set forth on the CAISO Website. The initial monthly Resource Adequacy Plan under this appendix shall be submitted to the CAISO on the first Business Day after 30 calendar days from the date the CAISO files its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006) in the form set forth on the CAISO Website. Thereafter, monthly Resource Adequacy Plans shall be submitted to the CAISO by the last Business Day of the second month prior to the compliance month and in the form set forth on the CAISO Website. Prior to the requirement to submit monthly Resource Adequacy Plans to the CAISO in accordance with Section 40.2.2.4 of this appendix, monthly Resource Adequacy Plans must continue to be submitted in accordance with Section 40.2.2 of the ISO Tariff. The annual Resource Adequacy Plan must, at a minimum, set forth the Local Capacity Area Resources, if any, procured by the Load Serving Entity as described in Section 40.3 of this appendix. The monthly Resource Adequacy Plan should identify all resources, including Local Capacity Area Resources, the Load Serving Entity will rely upon to satisfy the applicable month's peak hour Demand of the Load Serving Entity as determined by the Demand Forecasts developed in accordance with Section 40.2.2.3 of this appendix and applicable Reserve Margin. Resource Adequacy Plans must utilize the Net Qualifying Capacity requirements of Section 40.5.2 of the ISO Tariff.

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### 40.2.3 Modified Reserve Sharing LSEs.

# 40.2.3.1 Reserve Margin.

The information required by Section 40.2.3.1 of this appendix shall be provided to the CAISO within five (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

- (a) The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide the CAISO with the Reserve Margin(s) adopted by the CPUC, Local Regulatory Authority, or federal agency, as appropriate, for use in the annual Resource Adequacy Plan and monthly Resource Adequacy Plans listed as a percentage of the Demand Forecasts developed in accordance with Section 40.2.3.3 of this appendix.
- (b) For the Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status for which the CPUC, Local Regulatory Authority, or federal agency, as appropriate, has not established a Reserve Margin, the Reserve Margin shall be no less than fifteen percent (15%) of the applicable month's peak hour Demand of the Load Serving Entity, as determined by the Demand Forecasts developed in accordance with Section 40.2.3.3 of this appendix.

# 40.2.3.2 Qualifying Capacity.

The information required by Section 40.2.3.2 of this appendix shall be provided to the CAISO within five (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide the CAISO with a description of the criteria for determining qualifying resource types and the Qualifying Capacity from such resources and any modifications thereto as they are implemented from time to time. The Modified Reserve Sharing LSE may elect to utilize the criteria set forth in Section 40.8 of this appendix.

# 40.2.3.3 Demand Forecasts.

(a) The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide annual and monthly Demand Forecasts as part of the annual and monthly Resource Adequacy Plans under this appendix. The annual and monthly Demand Forecasts shall utilize the annual and monthly coincident peak Demand determinations provided by the California Energy Commission for such Load Serving Entity, which will be calculated from Demand Forecast data submitted to the California Energy Commission by each Modified Reserve Sharing LSE; or (ii) if the California Energy Commission does not produce coincident peak Demand Forecasts for the Load Serving Entity, the annual and monthly coincident peak Demand Forecasts produced by the CAISO for such Load Serving Entity. Scheduling Coordinators must provide data and information, as may be requested by the CAISO, to develop or support the Demand Forecast required by this Section 40.2.3.3 of this appendix.

# 40.2.3.4 Annual and Monthly Resource Adequacy Plans.

The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide annual and monthly Resource Adequacy Plans. For 2008 Resource Adequacy Compliance Year, the annual Resource Adequacy Plan shall be submitted to the CAISO on January 31, 2008 in the form set forth on the CAISO Website. The monthly Resource Adequacy Plan shall be submitted to the CAISO on the first Business Day after 30 calendar days from the date the CAISO files its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006) in the form set forth on the CAISO Website. Thereafter, monthly Resource Adequacy Plans shall be submitted to the CAISO by the last Business Day of the second month prior to the compliance month and in the form set forth on the CAISO Website for each Modified Reserve Sharing LSE served by the Scheduling Coordinator. Prior to the requirement to submit monthly Resource Adequacy Plans to the CAISO in accordance with Section 40.2.3.4 of this appendix, monthly Resource Adequacy Plans must continue to be submitted in

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accordance with Section 40.2.2 of the ISO Tariff. The annual Resource Adequacy Plan must, at a minimum, set forth the Local Capacity Area Resources, if any, procured by the Modified Reserve Sharing LSE as described in Section 40.3 of this appendix. The monthly Resource Adequacy Plan must identify the resources the Modified Reserve Sharing LSE will rely upon to satisfy its forecasted monthly Demand and Reserve Margin as set forth in Section 40.2.3.1 of this appendix, for the relevant reporting period and must utilize the Net Qualifying Capacity requirements of Section 40.5.2 of the ISO Tariff.

# 40.2.4 Load-Following MSS.

A Scheduling Coordinator for a Load-following MSS must provide an annual Resource Adequacy Plan on January 31, 2008 for 2008 Resource Adequacy Compliance Year that sets forth, at a minimum, the Local Capacity Area Resources, if any, procured by the Load-following MSS as described in Section 40.3 of this appendix. The annual Resource Adequacy Plan shall utilize the annual coincident peak Demand determination provided by the California Energy Commission for such Load-following MSS, or, if the California Energy Commission by the Load-following MSS, or, if the California Energy Commission by the Load-following MSS, or, if the California Energy Commission by the Load-following MSS, or the Load-following MSS, the annual coincident peak Demand Forecast produce by the CAISO for such Load-following MSS in accordance with its Business Practice Manual using Demand Forecast data submitted to the CAISO by the Load-following MSS.

# 40.3 Local Capacity Area Resource Requirements Applicable to Scheduling Coordinators for All Load Serving Entities.

# 40.3.1 Local Capacity Technical Study.

For 2008 Resource Adequacy Compliance Year, the CAISO's 2008 Local Capacity Technical Analysis, dated April 3, 2007, located at http://www.caiso.com/1bb5/1bb5ed3d46430.pdf on the CAISO Website shall constitute the Local Capacity Technical Study for purposes of Section 40 of this appendix. For the 2009 Resource Adequacy Compliance Year, on an annual basis, pursuant to the schedule set forth in the Business Practice Manual, the CAISO will, perform, and publish on the CAISO Website the Local Capacity Technical Study. The Local Capacity Technical Study shall identify Local Capacity Areas, determine the minimum amount of Local Capacity Area Resources in MW that must be available to the CAISO within each identified Local Capacity Area, and identify the Generating Units within each identified Local Capacity Area. The CAISO shall collaborate with the CPUC, Local Regulatory Authorities within the CAISO Control Area, federal agencies, and Market Participants to ensure that the Local Capacity Technical Study is performed in accordance with this Section 40.3 and to establish for inclusion in the Business Practice Manual other parameters and assumptions applicable to the Local Capacity Technical Study and a schedule that provides for: (i) reasonable time for review of a draft Local Capacity Technical Study, (ii) reasonable time for Participating TOs to propose operating solutions, and (iii) release of the final Local Capacity Technical Study no later than 120 days prior to the date annual Resource Adequacy Plans must be submitted.

# 40.3.1.1 Local Capacity Technical Study Criteria.

The Local Capacity Technical Study will determine the minimum amount of Local Capacity Area

Resources needed to address the Contingencies identified in Section 40.3.1.2 of this appendix. In

performing the Local Capacity Technical Study, the CAISO will apply those methods for resolving

Contingencies considered appropriate for the performance level that corresponds to a particular studied

Contingency, as provided in NERC Reliability Standards TPL-001-0, TPL-002-0, TPL-003-0 and TPL-

004-0, as augmented by CAISO Reliability Criteria in accordance with the Transmission Control

Agreement and Section 24.1.2 of the ISO Tariff. The CAISO Reliability Criteria shall include:

(1) Time Allowed for Manual Readjustment: This is the amount of time required for the operatior to take

all actions necessary to prepare the system for the next contingency. This time should not be less than

30 minutes.

(2) No voltage collapse or dynamic instability shall be allowed for the Category D event any B1-4 system

readjusted (Common Mode) L-2, as listed in Section 40.3.1.2.

# 40.3.1.2 Local Capacity Technical Study Contingencies.

The Local Capacity Technical Study shall assess the following Contingencies:

Continuon ou Common on t(o)		
Contingency Component(s)		
NERC/WECC Performance Level A – No Contingencies		
NERC/WECC Performance Level B – Loss of a single element		
1. Generator (G-1)		
2. Transmission Circuit (L-1)		
3. Transformer (T-1)		
4. Single Pole (dc) Line		
5. G-1 system readjusted L-1		
NERC/WECC Performance Level C – Loss of two or more elements		
3. L-1 system readjusted G-1		
3. G-1 system readjusted T-1 or T-1 system readjusted G-1		
<ol><li>L-1 system readjusted T-1 or T-1 system readjusted L-1</li></ol>		
3. G-1 system readjusted G-1		
3. L-1 system readjusted L-1		
4. Bipolar (dc) Line		
5. Two circuits (Common Mode) L-2		
9. SLG fault (stuck breaker or protection failure) for Bus section		
WECC-S3. Two generators (Common Mode) G-2		
D – Extreme event – loss of two or more elements		
Any B1-4 system readjusted (Common Mode) L-2		
All other extreme combinations D1-14.		

# 40.3.2 Allocation of Local Capacity Area Resource Obligations.

The CAISO will allocate responsibility for Local Capacity Area Resources to Scheduling Coordinators for Load Serving Entities in the following sequential manner:

(a) The responsibility for the aggregate Local Capacity Area Resources required for all Local Capacity Areas within each TAC Area as determined by the Local Capacity Technical Study will be allocated to all Scheduling Coordinators for Load Serving Entities that serve Load in the TAC Area in accordance with the Load Serving Entity's proportionate share of the LSE's TAC Area Load at the time of the CAISO's annual coincident peak Demand set forth in the annual peak Demand Forecast for the next Resource Adequacy Compliance Year as determined by the California Energy Commission. Expressed as a formula, the allocation of Local Area Capacity Resource obligations will be as follows: ( $\Sigma$  Local Capacity Area MW in TAC Area from the Local Capacity Technical Study) \* (LSE Demand in TAC Area at CAISO annual coincident peak Demand). This will result in a MW responsibility for each Local Serving Entity for each TAC Area in which the LSE serves Load. The LSE may meet its MW responsibility, as assigned under this Section, for each TAC Area in which the LSE serves Load by procurement of that MW quantity in any Local Capacity Area in the TAC Area.

(b) For Scheduling Coordinators for Non-CPUC Load Serving Entities, the Local Capacity Area Resource obligation will be allocated based on Section 40.3.2(a) of this appendix.

(c) For Scheduling Coordinators for CPUC Load Serving Entities, the CAISO will allocate the Local Capacity Area Resource obligation based on an allocation methodology, if any, adopted by the CPUC. However, if the allocation methodology adopted by the CPUC does not fully allocate the total sum of each CPUC Load Serving Entity's proportionate share calculated under Section 40.3.2(a) of this appendix, the CAISO will allocate the difference to all Scheduling Coordinators for CPUC Load Serving Entities in accordance with their proportionate share calculated under 40.3.2(a) of this

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appendix. If the CPUC does not adopt an allocation methodology, the CAISO will allocate Local Capacity Area Resources to Scheduling Coordinators for CPUC Load Serving Entities based on Section 40.3.2(a) of this appendix.

Once the CAISO has allocated the total responsibility for Local Capacity Area Resources, the CAISO will inform the Scheduling Coordinator for each LSE of the LSE's specific allocated responsibility for Local Capacity Area Resources in each TAC Area in which the LSE serves Load.

# 40.3.3 Procurement of Local Capacity Area Resource Obligations by Load Serving Entities.

Nothing in Section 40 of this appendix obligates a Load Serving Entity to procure Local Capacity Area Resources to satisfy capacity requirements for each Local Capacity Area identified in the Local Capacity Technical Study. Scheduling Coordinators for Load Serving Entities may aggregate responsibilities for procurement of Local Capacity Area Resources. If a Load Serving Entity has procured Local Capacity Area Resources that satisfy generation capacity requirements for Local Capacity Areas, the Scheduling Coordinator for such Load Serving Entity shall include this information in its annual and monthly Resource Adequacy Plan(s).

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# 40.4.7 Submission of Supply Plans.

Scheduling Coordinators representing Resource Adequacy Resources supplying Resource Adequacy Capacity shall provide the CAISO with annual and monthly Supply Plans verifying their agreement to provide Resource Adequacy Capacity during the 2008 Resource Adequacy Compliance Year or relevant month, as applicable. For 2008 Resource Adequacy Compliance Year, the annual Supply Plan shall be submitted to the CAISO on January 31, 2008 in the form set forth on the CAISO Website, and the initial monthly Supply Plan shall be submitted to the CAISO on January 31, 2008 in the form set forth on the CAISO Website, and the initial monthly Supply Plan shall be submitted to the CAISO on the first Business Day after 30 calendar days from the date the CAISO files its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006). Thereafter, Supply Plans shall be submitted to the CAISO by the last Business Day of the second month prior to the compliance month. The Supply Plan must be in the form of the template provided on the CAISO Website, which shall include an affirmative representation by the Scheduling Coordinator submitting the Supply Plan that the CAISO is entitled to rely on the accuracy of the information provided in the Supply Plan. The CAISO shall be entitled to take reasonable measures to validate the accuracy of the information submitted in Supply Plans under this Section 40.4.7 of this appendix, monthly Supply Plans must be submitted in accordance with Section 40.6 of the ISO Tariff.

# 40.6.4 Additional Availability Requirements for Use-Limited Resources.

# 40.6.4.1 Registration of Use-Limited Resources.

Scheduling Coordinators for Use-Limited Resources, other than for hydroelectric Generating Units and Participating Load, including Pumping Load, must provide the CAISO an application in the form specified on the CAISO Website requesting registration of a specifically identified resource as a Use-Limited Resource. For any Use-Limited Resource that anticipates being included in an annual or monthly Resource Adequacy Plan and/or Supply Plan under this appendix, the registration shall be submitted by January 7, 2008. This application shall include specific operating data and supporting documentation including, but not limited to;

- 1) a detailed explanation of why the resource is subject to operating limitations;
- 2) historical data to show attainable MWhs for each 24-hour period during the preceding year, including, as applicable, environmental restrictions for NOx, SOx, or other factors; and
- further data or other information as may be requested by the CAISO to understand the operating characteristics of the unit.

Within fifteen (15) Business Days after receipt of the application, the CAISO will respond to the Scheduling Coordinator as to whether or not the CAISO agrees that the facility is eligible to be a Use-Limited Resource. If the CAISO determines the facility is not a Use-Limited Resource, the Scheduling. Coordinator may challenge that determination in accordance with the CAISO ADR Procedures.

# 40.6.4.2 Use Plan.

The Scheduling Coordinator shall provide for the 2008 Resource Adequacy Compliance Year a proposed annual use plan for each Use-Limited Resource that is a Resource Adequacy Resource. The proposed annual use plan will delineate on a month-by-month basis the total MWhs of Generation, total run hours, expected daily supply capability (if greater than four hours) and the daily Energy limit, operating constraints, and the timeframe for each constraint. The CAISO will have an opportunity to discuss the proposed annual use plan with the Scheduling Coordinator and suggest potential revisions to meet reliability needs of the system. The Scheduling Coordinator shall then submit its final annual use plan. Scheduling Coordinators for Use-Limited Resources must submit the proposed and final annual use plans in accordance with the schedule set forth in the Business Practice Manual. The Scheduling Coordinator will be able to update the projections made in the annual use plan in the monthly Resource Adequacy Plans. Hydroelectric Generating Units and Pumping Load will be able to update use plans intra-monthly as necessary to reflect evolving hydrological and meteorological conditions. The annual use plan must reflect the potential operation of the Use-Limited Resource at a level no less than the minimum criteria set forth by the Local Regulatory Authority for qualification of the resource.

# 40.7 Compliance.

The CAISO will evaluate whether each annual and monthly Resource Adequacy Plan submitted by a Scheduling Coordinator on behalf of a Load Serving Entity under this appendix demonstrates Resource Adequacy Capacity sufficient to satisfy the Load Serving Entity's (i) allocated responsibility for Local Capacity Area Resources under Section 40.3.2 of this appendix and (ii) applicable Demand and Reserve Margin requirements. If the CAISO determines that a Resource Adequacy Plan does not demonstrate Local Capacity Area Resources sufficient to meet its allocated responsibility under Section 40.3.2 of this appendix, compliance with applicable Demand and Reserve Margin requirements, or compliance with any other resource adequacy requirement in this appendix or adopted by the CPUC, Local Regulatory

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Authority, or federal agency, as applicable, the CAISO will notify the relevant Scheduling Coordinator, CPUC, Local Regulatory Authority, or federal agency with jurisdiction over the relevant Load Serving Entity, or in the case of a mismatch between Resource Adequacy Plan(s) and Supply Plan(s), the relevant Scheduling Coordinators, in an attempt to resolve any deficiency. The notification will include the reasons the CAISO believes a deficiency exists. If the deficiency relates to the demonstration of Local Capacity Area Resources in a Load Serving Entity's annual Resource Adequacy Plan, and the CAISO does not provide a written notice of resolution of the deficiency, the Scheduling Coordinator for the Load Serving Entity may demonstrate that the identified deficiency is cured by submitting a revised annual Resource Adequacy Plan within sixty (60) days after the annual Resource Adequacy Plan is due under Section 40.2.3.4 of this appendix. For all other identified deficiencies, at least ten (10) days prior the effective month of the relevant Resource Adequacy Plan, the Scheduling Coordinator for the Load Serving Entity shall (i) demonstrate that the identified deficiency is cured by submitting a revised Resource Adequacy Plan or (ii) advise the CAISO that the CPUC, Local Regulatory Authority, or federal agency, as appropriate, has determined that no deficiency exists. In the case of a mismatch between Resource Adequacy Plan(s) and Supply Plan(s), if resolved, the relevant Scheduling Coordinator(s) must provide the CAISO with revised Resource Adequacy Plan(s) or Supply Plans, as applicable, at least ten (10) days prior to the effective month. If the CAISO is not advised that the deficiency or mismatch is resolved at least ten (10) days prior to the effective month, the CAISO will use the information contained in the Supply Plan to set the obligations of Resource Adequacy Resources under Section 40 of this appendix.

# 40.8 CAISO Default Qualifying Capacity Criteria.

# 40.8.1 Applicability.

The criteria in Section 40.8 of this appendix shall apply only: (i) where the CPUC or Local Regulatory Authority has not established and provided to the CAISO criteria to determine the types of resources that may be eligible to provide Qualifying Capacity and for calculating Qualifying Capacity for such eligible resource types and (ii) until the CAISO has been notified in writing by the CPUC of its intent to overturn, reject or fundamentally modify the capacity-based framework in CPUC Decisions 04-01-050 (Jan. 10, 2004), 04-10-035 (Oct. 28, 2004), and 05-10-042 (Oct. 31, 2005). The types of resources specified in Section 40.8.1 of this appendix will be eligible to provide Qualifying Capacity to the extent they meet the criteria for each type of resource set forth in Section 40.8.1 of this appendix.

# 40.8.1.2 Nuclear and Thermal.

Nuclear and thermal Generating Units, other than Qualifying Facilities with effective contracts under the Public Utility Regulatory Policies Act addressed in Section 40.8.1.8 of this appendix below, must be a Participating Generator or a System Unit. The Qualifying Capacity of nuclear and thermal units, other than Qualifying Facilities addressed in Section 40.8.1.8 of this appendix, will be based on net dependable capacity defined by NERC Generating Availability Data System information.

# 40.8.1.3 Hydro.

Hydroelectric Generating Units, other than Qualifying Facilities with contracts under the Public Utility Regulatory Policies Act, must be either Participating Generators or System Units. The Qualifying Capacity of a pond or Pumped-Storage Hydro Unit, other than a QF, will be determined based on net dependable capacity defined by NERC GADS minus variable head derate based on an average dry year reservoir level. The Qualifying Capacity of a pond or Pumped-Storage Hydro Unit that is a QF will be determined based on historic performance during the hours of noon to 6:00 p.m., using a three-year rolling average.

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The Qualifying Capacity of all run-of-river hydro units, including Qualifying Facilities, will be based on net dependable capacity defined by NERC GADS minus an average dry year conveyance flow, stream flow, or canal head derate. As used in this section, average dry year reflects a one-in-five year dry hydro scenario (for example, using the 4th driest year from the last 20 years on record).

# 40.8.1.4 Unit-Specific Contracts.

Unit-specific contracts with Participating Generators or System Units will qualify as Resource Adequacy Capacity subject to the verification that the total MW quantity of all contracts from a specific unit do not exceed the total Net Qualifying Capacity (MW) consistent with the Net Qualifying Capacity determination for that unit.

# 40.8.1.5 Contracts with Liquidated Damage Provisions.

Firm Energy contracts with liquidated damages provisions, as generally reflected in Service Schedule C of the Western Systems Power Pool Agreement or the Firm LD product of the Edison Electric Institute pro forma agreement, or any other similar firm Energy contract that does not require the seller to source the Energy from a particular unit, and specifies a delivery point internal to the CAISO Control Area entered into before October 27, 2005 shall be eligible to count as Qualifying Capacity until the end of 2008. A Scheduling Coordinator, however, cannot have more than 25% of its portfolio of Qualifying Capacity met by contracts with liquidated damage provisions for 2008.

# 40.8.1.6 Wind and Solar.

As used in this Section, wind units are those wind Generating Units without backup sources of Generation and solar units are those solar Generating Units without backup sources of Generation. Wind and solar units, other than Qualifying Facilities with effective contracts under the Public Utility Regulatory Policies Act, must be Participating Intermittent Resources or subject to availability provisions of Section 40.6.4.3.4 upon that section's effective date.

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The Qualifying Capacity of all wind or solar units, including Qualifying Facilities, for each month will be based on their monthly historic performance during that same month during the hours of noon to 6:00 p.m., using a three-year rolling average. For wind or solar units with less than three years operating history, all months for which there is no historic performance data will utilize the monthly average production factor of all units (wind or solar, as applicable) within the TAC Area in which the Generating Unit is located.

# 40.8.1.7 Geothermal.

Geothermal Generating Units, other than Qualifying Facilities addressed in Section 40.8.1.8 of this appendix, must be Participating Generators or System Units. The Qualifying Capacity of geothermal units, other than Qualifying Facilities addressed in Section 40.8.1.8 of this appendix, will be based on NERC GADS net dependable capacity minus a derate for steam field degradation.

# 40.8.1.8 Treatment of Qualifying Capacity for Qualifying Facilities.

Qualifying Facilities must be subject to an effective Participating Generator Agreement or QF Participating Generator Agreement or must be System Units, unless they have a PURPA contract. Except for hydro, wind, and solar Qualifying Facilities addressed pursuant to Sections 40.8.1.3 and 40.8.1.6 of this appendix, the Qualifying Capacity of Qualifying Facilities under PURPA contracts, will be based on historic monthly Generation output during the hours of noon to 6:00 p.m. (net of Self-provided Load) during a three-year rolling average.

# 40.8.1.9 Participating Loads.

The Qualifying Capacity of Participating Loads shall be the average reduction in Demand over a threeyear period on a per Dispatch basis or, if the Participating Load does not have three years of performance history, based on comparable evaluation data using similar programs. Participating Loads must be available at least 48 hours, and if the Participating Loads can only be dispatched for a maximum of two hours per event, then only 0.89 percent of a Scheduling Coordinator's portfolio may be made up of such Loads.

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# 40.8.1.10 Jointly-Owned Facilities.

A jointly-owned facility must be either a Participating Generator or a System Unit. The Qualifying Capacity for the entire facility will be determined based on the type of resource as described elsewhere in this Section 40.8.1 of this appendix. In addition, the Scheduling Coordinator must provide the CAISO with a demonstration of its entitlement to the output of the jointly-owned facility's Qualified Capacity and an explanation of how that entitlement may change if the facility's output is restricted.

# 40.8.1.11 Facilities under Construction.

The Qualifying Capacity for facilities under construction will be determined based on the type of resource as described elsewhere in Section 40.8 of this appendix. In addition, the facility must have been in commercial operation for no less than one month to be eligible to be included as a Resource Adequacy Resource in a Scheduling Coordinator's monthly Resource Adequacy Plan.

# 40.8.1.12 System Resources.

# 40.8.1.12.1 Dynamic System Resources.

Dynamic System Resources shall be treated similar to resources within the CAISO Control Area, except with respect to the deliverability screen under Section 40.5.2.1 of the CAISO Tariff. However, eligibility as a Resource Adequacy Resource is contingent upon a showing by the Scheduling Coordinator that the Dynamic System Resource has secured transmission through any intervening Control Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission and that the Load Serving Entity for which the Scheduling Coordinator is submitting Demand Bids has an allocation of import capacity at the import Scheduling Point under Section 40.5.2.2 of the CAISO Tariff that is not less than the Resource Adequacy Capacity provided by the Dynamic System Resource.

# 40.8.1.12.2 Non-Dynamic System Resources.

For Non-Dynamic System Resources, the Scheduling Coordinator must demonstrate that the Load Serving Entity for which the Scheduling Coordinator is scheduling Demand has an allocation of import capacity at the import Scheduling Point under Section 40.5.2.2 of the CAISO Tariff that is not less than the Resource Adequacy Capacity from the Non-Dynamic System Resource. The Scheduling Coordinator must also demonstrate that the Non-Dynamic System Resource is covered by Operating Reserves, unless unit contingent, in the sending Control Area. Eligibility as Resource Adequacy Capacity is contingent upon a showing by the Scheduling Coordinator of the System Resource that it has secured transmission through any intervening Control Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission. With respect to Non-Dynamic System Resources, any inter-temporal constraints, such as multi-hour run blocks, must be explicitly identified in the monthly Resource Adequacy Plan, and no constraints may be imposed beyond those explicitly stated in the plan.

# **PART B - DEFINITIONS**

Unless defined in this Appendix CC or the context otherwise requires, all capitalized terms and expressions used in this Appendix CC shall have the meaning as defined in the Master Definitions Supplement in Appendix A. The following capitalized terms and expressions used in this Appendix CC shall have the meanings set forth below unless otherwise stated or the context otherwise requires. If two or more capitalized terms are used together in a manner not uniquely defined in Appendix A or this Appendix CC, the meanings of each defined term apply.

CPUC Load Serving Entity	Any entity serving retail Load in the CAISO Control Area under the jurisdiction of the CPUC, including an electrical corporation under section 218 of the California Public Utilities Code, an electric service provider under section 218.3 of the California Public Utilities Code, and a community choice aggregator under section 331.1 of the California Public Utilities Code.
Dynamic Resource- Specific System Resource	A Dynamic System Resource that is a specific generation resource outside the CAISO Control Area.
Firm Liquidated Damages Contract	A contract utilizing or consistent with Service Schedule C of the Western Systems Power Pool Agreement or the Firm Liquidated Damages product of the Edison Electric Institute pro forma agreement, or any other similar firm Energy contract that does not require the seller to source the Energy from a particular unit, and specifies a delivery point internal to the CAISO Control Area.
Load Serving Entity (LSE)	Any entity (or the duly designated agent of such an entity, including, e.g. a Scheduling Coordinator), including a load aggregator or power marketer, that (a) (i) serves End Users within the CAISO Control Area and (ii) has been granted authority or has an obligation pursuant to California state or local law, regulation, or franchise to sell electric energy to End Users located within the CAISO Control Area; (b) is a federal power marketing authority that serves End Users; or (c) is the State Water Resources Development System commonly known as the State Water Project of the California Department of Water Resources.

Local Capacity Technical Study	The study performed by the CAISO pursuant to Section 40.3.
Modified Reserve Sharing LSE	A Load Serving Entity whose Scheduling Coordinator has informed the
	CAISO in accordance with Section 40.1 of its election to be a Modified
	Reserve Sharing LSE.
Non-CPUC Load Serving Entity	Any entity serving retail Demand in the CAISO Control Area not within
	the jurisdiction of the CPUC, including (i) a local publicly owned electric
	utility under section 9604 of the California Public Utilities Code and (ii)
	any federal entities, including but not limited to federal power marketing
	authorities, that serve retail Load.
Non-Dynamic Resource- Specific System Resource	A Non-Dynamic System Resource that is a specific generation resource
	outside the CAISO Control Area.
Pumped-Storage Hydro Unit	A hydroelectric dam with the capability to produce electricity and the
	ability to pump water between reservoirs at different elevations to store
	such water for the production of electricity.
Pumping Load	A hydro pumping resource that is capable of responding to Dispatch
	Instructions by ceasing to pump.
Reserve Margin	The amount of Resource Adequacy Capacity that a Scheduling
	Coordinator is required to maintain in accordance with Section 40.
Reserve Sharing LSE	A Load Serving Entity whose Scheduling Coordinator has informed the
	CAISO in accordance with Section 40.1 of its election to be a Reserve
	Sharing LSE.
Resource Adequacy Compliance Year Resource-Specific System Resource	A calendar year from January 1 through December 31.
	A Dynamic or Non-Dynamic Resource-Specific System Resource.
	A bynamic of Non-bynamic Resource-opecine System Resource.
Use-Limited Resource	A resource that, due to design considerations, environmental restrictions
	on operations, cyclical requirements, such as the need to recharge or
	refill, or other non-economic reasons, is unable to operate continuously
	on a daily basis, but is able to operate for a minimum set of consecutive
	Trading Hours each Trading Day.

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# Attachment B – Blacklines of Currently Effective ISO Tariff Early Effectiveness of Resource Adequacy Requirements Amendment Filing

October 16, 2007

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# **ISO TARIFF APPENDIX CC**

For the purpose of enforcing Market Participant compliance with the forward reporting activities associated with resource adequacy and to enable the CAISO to assign Local Capacity Area Resource responsibility prior to the effective date of the CAISO Tariff as filed in FERC Docket No. ER06-615 and ER07-1257, the CAISO shall operate pursuant to this Appendix CC. This Appendix CC is included in the ISO Tariff to set forth temporary provisions that are based on tariff authority conditionally accepted in FERC Docket No. ER06-615 and as filed in Docket No. ER07-1257. These provisions enable the CAISO to: 1) require Load Serving Entities to elect between Reserving Sharing LSE and Modified Reserve Sharing LSE options; 2) define the information requirements for resource adequacy programs and the two Load Serving Entity options that must be provided to the CAISO; 3) require the submission from Load Serving Entities of monthly and annual Resource Adequacy Plans that set forth information, including identification of Local Capacity Area Resources; 4) determine the minimum amount of Local Capacity Area Resources needed in Local Capacity Areas and allocate responsibility to Load Serving Entities for such Local Capacity Area Resources; 5) require the registration of Use-Limited Resources and the submission of use plans by Use-Limited Resources; and 6) apply default resource counting protocols. This Appendix CC, therefore, does not replace or supersede thoseat provisions contained in the ISO Tariff.

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# PART A – RESOURCE ADEQUACY

# 40 RESOURCE ADEQUACY DEMONSTRATION FOR ALL SCHEDULING COORDINATORS SCHEDULING DEMAND IN THE CAISO CONTROL AREA.

40.1 Applicability.

<u>A Load Serving Entity, and its Scheduling Coordinator, shall be exempt from Section 40 of this appendix,</u> if the metered peak Demand of the Load Serving Entity did not exceed one (1) MW during the twelve months preceding the last date on which the Load Serving Entity can make the election in Section 40.1.1 of this appendix for the 2008 Resource Adequacy Compliance Year. Section 40 of this appendix shall apply to all other Load Serving Entities and their respective Scheduling Coordinators. For purposes of Section 40 of this appendix, a Load Serving Entity shall not include any entity satisfying the terms of California Public Utilities Code Section 380(j)(3).

# 40.1.1 Election of Load Serving Entity Status.

By December 18, 2007, via e-mail to reliabilityrequirements@caiso.com, the Scheduling Coordinator for a Load Serving Entity, not exempt under Section 40.1 of this appendix, shall inform the CAISO whether each such LSE elects to be either: (i) a Reserve Sharing LSE or (ii) a Modified Reserve Sharing LSE for the 2008 Resource Adequacy Compliance Year. A Scheduling Coordinator for a Load-following MSS is not required to make an election under this Section. Scheduling Coordinators for Load-following MSSs are subject solely to Sections 40.2.4 and 40.3 of this appendix.

The CAISO may confirm with the CPUC, Local Regulatory Authority, or federal agency, as applicable, the accuracy of the election by the Scheduling Coordinator for any LSE under its respective jurisdiction, or, in the absence of any election by the Scheduling Coordinator, the desired election for any LSE under its jurisdiction. The determination of the CPUC, Local Regulatory Authority, or federal agency will be deemed binding by the CAISO on the Scheduling Coordinator and the LSE. If the Scheduling Coordinator and CPUC, Local Regulatory Authority, or federal agency, as appropriate, fails to make the election on behalf of an LSE in accordance with the Business Practice Manual, the LSE shall be deemed a Reserve Sharing LSE.

40.2 Information Requirements Regarding Resource Adequacy Programs.

40.2.1. Reserve Sharing LSEs.

# 40.2.1.1 Requirements for CPUC Load Serving Entities Electing Reserve Sharing LSE Status.

<u>The information required by Section 40.2.1.1 of this appendix shall be provided to the CAISO within five</u> (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

- (a) The Scheduling Coordinator for a CPUC Load Serving Entity electing Reserve Sharing LSE status must provide the CAISO with all information or data to be provided to the CAISO as required by the CPUC and pursuant to the schedule adopted by the CPUC.
- (b) Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include Reserve Margin(s), then the provisions of Section 40.2.2.1(b) of this appendix shall apply.
- (c) Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include criteria for determining qualifying resource types and their Qualifying Capacity, then the provisions of Section 40.8 of this appendix shall apply.
- (d) Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include annual and monthly Demand Forecast requirements, then the provisions of Section 40.2.2.3 of this appendix shall apply.
- (e) Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include annual and monthly Resource Adequacy Plan requirements, then Section 40.2.2.4 of this appendix shall apply.

 40.2.2
 Requirements for Non-CPUC Load Serving Entities Electing Reserve Sharing LSE

 Status, Including Default Provisions for CPUC Load Serving Entities.

# 40.2.2.1 Reserve Margin.

The information required by Section 40.2.2.1 of this appendix shall be provided to the CAISO within five (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

- (a) The Scheduling Coordinator for a Non-CPUC Load Serving Entity electing Reserve
   Sharing LSE status must provide the CAISO with the Reserve Margin(s) adopted by the
   appropriate Local Regulatory Authority or federal agency for use in the annual Resource
   Adequacy Plan and monthly Resource Adequacy Plans listed as a percentage of the
   Demand Forecasts developed in accordance with Section 40.2.2.3 of this appendix.
- (b) For the Scheduling Coordinator for a Non-CPUC Load Serving Entity for which the appropriate Local Regulatory Authority or federal agency has not established a Reserve Margin(s) or a CPUC Load Serving Entity subject to Section 40.2.1.1(b) of this appendix that has elected Reserve Sharing LSE status, the Reserve Margin for each month shall be no less than 15% of the LSE's peak hourly Demand for the applicable month, as determined by the Demand Forecasts developed in accordance with Section 40.2.2.3 of this appendix.

40.2.2.2 Qualifying Capacity Criteria.

<u>The information required by Section 40.2.2.2 of this appendix shall be provided to the CAISO within five</u> (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

The Scheduling Coordinator for a Non-CPUC Load Serving Entity electing Reserve Sharing LSE status must provide the CAISO with a description of the criteria adopted by the Local Regulatory Authority or federal agency for determining qualifying resource types and the Qualifying Capacity from such resources and any modifications thereto as they are implemented from time to time. The Reserve Sharing LSE may elect to utilize the criteria set forth in Section 40.8 of this appendix.

40.2.2.3 Demand Forecasts.

The information required by Section 40.2.2.3 of this appendix shall be provided to the CAISO within five (5) Business Days of the CAISO filing its statement certifying market readiness of in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

<u>The Scheduling Coordinator for a Non-CPUC Load Serving Entity or CPUC Load Serving Entity subject to</u> <u>Section 40.2.1.1(b) of this appendix electing Reserve Sharing LSE status must provide annual and</u> monthly Demand Forecasts as part of the annual and monthly Resource Adequacy Plans under this appendix. The annual and monthly Demand Forecasts shall utilize the annual and monthly coincident peak Demand determinations provided by the California Energy Commission for such Load Serving Entity, which will be calculated from the Demand Forecast information submitted to the California Energy Commission by each Reserve Sharing LSE; or (ii) if the California Energy Commission does not produce coincident peak Demand Forecasts for the Load Serving Entity, the annual and monthly coincident peak Demand Forecasts produced by the CAISO for such Load Serving Entity in accordance with its Business Practice Manual. Scheduling Coordinators must provide data and information, as may be requested by the CAISO, necessary to develop or support the Demand Forecasts required by this Section.

#### 40.2.2.4 Annual and Monthly Resource Adequacy Plans.

The Scheduling Coordinator for a Non-CPUC Load Serving Entity or a CPUC Load Serving Entity subject to Section 40.2.1.1(b) electing Reserve Sharing LSE status must provide annual and monthly Resource Adequacy Plans for such Load Serving Entity. For 2008 Resource Adequacy Compliance Year, the annual Resource Adequacy Plan shall be submitted to the CAISO on January 31, 2008 in the form set forth on the CAISO Website. The initial monthly Resource Adequacy Plan under this appendix shall be submitted to the CAISO on the first Business Day after 30 calendar days from the date the CAISO files its statement certifying market readiness of in accordance with Paragraph 1414 of 116 FERC 161,274 (2006) in the form set forth on the CAISO Website. Thereafter, monthly Resource Adequacy Plans shall be submitted to the CAISO by the last Business Day of the second month prior to the compliance month and in the form set forth on the CAISO Website. Prior to the requirement to submit monthly Resource Adequacy Plans to the CAISO in accordance with Section 40.2.2.4 of this appendix, monthly Resource Adequacy Plans must continue to be submitted in accordance with Section 40.2.2 of the ISO Tariff. The annual Resource Adequacy Plan must, at a minimum, set forth the Local Capacity Area Resources, if any, procured by the Load Serving Entity as described in Section 40.3 of this appendix. The monthly Resource Adequacy Plan should identify all resources, including Local Capacity Area Resources, the Load Serving Entity will rely upon to satisfy the applicable month's peak hour Demand of the Load Serving Entity as determined by the Demand Forecasts developed in accordance with Section 40.2.2.3 of this appendix and applicable Reserve Margin. Resource Adequacy Plans must utilize the Net Qualifying Capacity requirements of Section 40.5.2 of the ISO Tariff.

# 40.2.3 Modified Reserve Sharing LSEs.

# 40.2.3.1 Reserve Margin.

<u>The information required by Section 40.2.3.1 of this appendix shall be provided to the CAISO within five</u> (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

- (a) The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide the CAISO with the Reserve Margin(s) adopted by the CPUC, Local Regulatory Authority, or federal agency, as appropriate, for use in the annual Resource Adequacy Plan and monthly Resource Adequacy Plans listed as a percentage of the Demand Forecasts developed in accordance with Section 40.2.3.3 of this appendix.
- (b) For the Scheduling Coordinator for a Load Serving Entity electing Modified Reserve
   Sharing LSE status for which the CPUC, Local Regulatory Authority, or federal agency,
   as appropriate, has not established a Reserve Margin, the Reserve Margin shall be no
   less than fifteen percent (15%) of the applicable month's peak hour Demand of the Load
   Serving Entity, as determined by the Demand Forecasts developed in accordance with
   Section 40.2.3.3 of this appendix.

40.2.3.2 Qualifying Capacity.

<u>The information required by Section 40.2.3.2 of this appendix shall be provided to the CAISO within five</u> (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

<u>The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must</u> <u>provide the CAISO with a description of the criteria for determining qualifying resource types and the</u> <u>Qualifying Capacity from such resources and any modifications thereto as they are implemented from</u> time to time. The Modified Reserve Sharing LSE may elect to utilize the criteria set forth in Section 40.8 of this appendix.

# 40.2.3.3 Demand Forecasts.

(a) The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing
 LSE status must provide annual and monthly Demand Forecasts as part of the annual and monthly Resource Adequacy Plans under this appendix. The annual and monthly
 Demand Forecasts shall utilize the annual and monthly coincident peak Demand determinations provided by the California Energy Commission for such Load Serving
 Entity, which will be calculated from Demand Forecast data submitted to the California
 Energy Commission by each Modified Reserve Sharing LSE; or (ii) if the California
 Energy Commission does not produce coincident peak Demand Forecasts for the Load
 Serving Entity, the annual and monthly coincident peak Demand Forecasts produced by
 the CAISO for such Load Serving Entity. Scheduling Coordinators must provide data and
 information, as may be requested by the CAISO, to develop or support the Demand
 Forecast required by this Section 40.2.3.3 of this appendix.

# 40.2.3.4 Annual and Monthly Resource Adequacy Plans.

The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide annual and monthly Resource Adequacy Plans. For 2008 Resource Adequacy Compliance Year, the annual Resource Adequacy Plan shall be submitted to the CAISO on January 31, 2008 in the form set forth on the CAISO Website. The monthly Resource Adequacy Plan shall be submitted to the CAISO on the first Business Day after 30 calendar days from the date the CAISO files its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006) in the form set forth on the CAISO by the last Business Day of the second month prior to the compliance month and in the form set forth on the CAISO Website for each Modified Reserve Sharing LSE served by the Scheduling Coordinator. Prior to the requirement to submit monthly Resource Adequacy Plans must continue to be submitted in accordance with Section 40.2.2 of the ISO Tariff. The annual Resource Adequacy Plan must, at a

minimum, set forth the Local Capacity Area Resources, if any, procured by the Modified Reserve Sharing LSE as described in Section 40.3 of this appendix. The monthly Resource Adequacy Plan must identify the resources the Modified Reserve Sharing LSE will rely upon to satisfy its forecasted monthly Demand and Reserve Margin as set forth in Section 40.2.3.1 of this appendix, for the relevant reporting period and must utilize the Net Qualifying Capacity requirements of Section 40.5.2 of the ISO Tariff.

# 40.2.4 Load-Following MSS.

A Scheduling Coordinator for a Load-following MSS must provide an annual Resource Adequacy Plan on January 31, 2008 for 2008 Resource Adequacy Compliance Year that sets forth, at a minimum, the Local Capacity Area Resources, if any, procured by the Load-following MSS as described in Section 40.3 of this appendix. The annual Resource Adequacy Plan shall utilize the annual coincident peak Demand determination provided by the California Energy Commission for such Load-following MSS using Demand Forecast data submitted to the California Energy Commission by the Load-following MSS, or, if the California Energy Commission does not produce coincident peak Demand Forecasts for the Loadfollowing MSS, the annual coincident peak Demand Forecast produced by the CAISO for such Loadfollowing MSS in accordance with its Business Practice Manual using Demand Forecast data submitted to the CAISO by the Load-following MSS.

# 40.3 Local Capacity Area Resource Requirements Applicable to Scheduling Coordinators for All Load Serving Entities.

40.3.1 Local Capacity Technical Study.

For 2008 Resource Adequacy Compliance Year, the CAISO's 2008 Local Capacity Technical Analysis, dated April 3, 2007, located at http://www.caiso.com/1bb5/1bb5ed3d46430.pdf on the CAISO Website shall constitute the Local Capacity Technical Study for purposes of Section 40 of this appendix. For the 2009 Resource Adequacy Compliance Year, on an annual basis, pursuant to the schedule set forth in the Business Practice Manual, the CAISO will, perform, and publish on the CAISO Website the Local Capacity Technical Study. The Local Capacity Technical Study shall identify Local Capacity Areas, determine the minimum amount of Local Capacity Area Resources in MW that must be available to the CAISO within each identified Local Capacity Area, and identify the Generating Units within each identified Local Capacity Area. The CAISO shall collaborate with the CPUC, Local Regulatory Authorities within the CAISO Control Area, federal agencies, and Market Participants to ensure that the Local Capacity Technical Study is performed in accordance with this Section 40.3 and to establish for inclusion in the Business Practice Manual other parameters and assumptions applicable to the Local Capacity Technical Study and a schedule that provides for: (i) reasonable time for review of a draft Local Capacity Technical Study, (ii) reasonable time for Participating TOs to propose operating solutions, and (iii) release of the final Local Capacity Technical Study no later than 120 days prior to the date annual Resource Adequacy Plans must be submitted.

# 40.3.1.1 Local Capacity Technical Study Criteria.

The Local Capacity Technical Study will determine the minimum amount of Local Capacity Area Resources needed to address the Contingencies identified in Section 40.3.1.2 of this appendix. In performing the Local Capacity Technical Study, the CAISO will apply those methods for resolving Contingencies considered appropriate for the performance level that corresponds to a particular studied Contingency, as provided in NERC Reliability Standards TPL-001-0, TPL-002-0, TPL-003-0 and TPL-004-0, as augmented by CAISO Reliability Criteria in accordance with the Transmission Control Agreement and Section 24.1.2 of the ISO Tariff. The CAISO Reliability Criteria shall include:

 (1) Time Allowed for Manual Readjustment: This is the amount of time required for the operation to take all actions necessary to prepare the system for the next contingency. This time should not be less than 30 minutes.

(2) No voltage collapse or dynamic instability shall be allowed for the Category D event any B1-4 system readjusted (Common Mode) L-2, as listed in Section 40.3.1.2.

# 40.3.1.2 Local Capacity Technical Study Contingencies.

The Local Capacity Technical Study shall assess the following Contingencies:

Contingency Component(s)		
NERC/WECC Performance Level A – No Contingencies		
NERC/WECC Performance Level B – Loss of a single element		
1. Generator (G-1)		
2. Transmission Circuit (L-1)		
3. Transformer (T-1)		
4. Single Pole (dc) Line		
5. G-1 system readjusted L-1		
NERC/WECC Performance Level C – Loss of two or more elements		
3. L-1 system readjusted G-1		

G-1 system readjusted T-1 or T-1 system readjusted G-1
 L-1 system readjusted T-1 or T-1 system readjusted L-1
 G-1 system readjusted G-1
 L-1 system readjusted L-1
 Bipolar (dc) Line
 Two circuits (Common Mode) L-2
 SLG fault (stuck breaker or protection failure) for Bus section
 WECC-S3. Two generators (Common Mode) G-2
 D - Extreme event - loss of two or more elements
 Any B1-4 system readjusted (Common Mode) L-2
 All other extreme combinations D1-14.

# 40.3.2 Allocation of Local Capacity Area Resource Obligations.

The CAISO will allocate responsibility for Local Capacity Area Resources to Scheduling Coordinators for Load Serving Entities in the following sequential manner:

(a) The responsibility for the aggregate Local Capacity Area Resources required for all Local Capacity Areas within each TAC Area as determined by the Local Capacity Technical Study will be allocated to all Scheduling Coordinators for Load Serving Entities that serve Load in the TAC Area in accordance with the Load Serving Entity's proportionate share of the LSE's TAC Area Load at the time of the CAISO's annual coincident peak Demand set forth in the annual peak Demand Forecast for the next Resource Adequacy Compliance Year as determined by the California Energy Commission. Expressed as a formula, the allocation of Local Area Capacity Resource obligations will be as follows: (Σ Local Capacity Area MW in TAC Area from the Local Capacity Technical Study) \* (LSE Demand in TAC Area at CAISO annual coincident peak Demand)/(Total TAC Area Demand at the time of CAISO annual coincident peak Demand). This will result in a MW responsibility for each Load Serving Entity for each TAC Area in which the LSE serves Load. The LSE may meet its MW responsibility, as assigned under this Section, for each TAC Area in which the LSE serves Load by procurement of that MW quantity in any Local Capacity Area in the TAC Area. For Scheduling Coordinators for Non-CPUC Load Serving Entities, the Local Capacity (b) Area Resource obligation will be allocated based on Section 40.3.2(a) of this appendix.

(c) For Scheduling Coordinators for CPUC Load Serving Entities, the CAISO will allocate the Local Capacity Area Resource obligation based on an allocation methodology, if any, adopted by the CPUC. However, if the allocation methodology adopted by the CPUC does not fully allocate the total

sum of each CPUC Load Serving Entity's proportionate share calculated under Section 40.3.2(a) of this appendix, the CAISO will allocate the difference to all Scheduling Coordinators for CPUC Load Serving Entities in accordance with their proportionate share calculated under 40.3.2(a) of this appendix. If the CPUC does not adopt an allocation methodology, the CAISO will allocate Local Capacity Area Resources to Scheduling Coordinators for CPUC Load Serving Entities based on Section 40.3.2(a) of this appendix.

Once the CAISO has allocated the total responsibility for Local Capacity Area Resources, the CAISO will inform the Scheduling Coordinator for each LSE of the LSE's specific allocated responsibility for Local Capacity Area Resources in each TAC Area in which the LSE serves Load.

40.3.3 Procurement of Local Capacity Area Resource Obligations by Load Serving Entities.

Nothing in Section 40 of this appendix obligates a Load Serving Entity to procure Local Capacity Area Resources to satisfy capacity requirements for each Local Capacity Area identified in the Local Capacity Technical Study. Scheduling Coordinators for Load Serving Entities may aggregate responsibilities for procurement of Local Capacity Area Resources. If a Load Serving Entity has procured Local Capacity Area Resources that satisfy generation capacity requirements for Local Capacity Areas, the Scheduling Coordinator for such Load Serving Entity shall include this information in its annual and monthly Resource Adequacy Plan(s).

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#### 40.4.7 Submission of Supply Plans.

Scheduling Coordinators representing Resource Adequacy Resources supplying Resource Adequacy Capacity shall provide the CAISO with annual and monthly Supply Plans verifying their agreement to provide Resource Adequacy Capacity during the 2008 Resource Adequacy Compliance Year or relevant month, as applicable. For 2008 Resource Adequacy Compliance Year, the annual Supply Plan shall be submitted to the CAISO on January 31, 2008 in the form set forth on the CAISO Website, and the initial monthly Supply Plan shall be submitted to the CAISO on the first Business Day after 30 calendar days from the date the CAISO files its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006). Thereafter, Supply Plans shall be submitted to the CAISO by the last Business Day of the second month prior to the compliance month. The Supply Plan must be in the form of the template provided on the CAISO Website, which shall include an affirmative representation by the Scheduling Coordinator submitting the Supply Plan that the CAISO is entitled to rely on the accuracy of the information provided in the Supply Plan. The CAISO shall be entitled to take reasonable measures to validate the accuracy of the information submitted in Supply Plans under this Section of the appendix. Prior to the requirement to submit Supply Plans to the CAISO in accordance with Section 40.4.7 of this appendix, monthly Supply Plans must be submitted in accordance with Section 40.6 of the ISO Tariff.

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### 40.6.4 Additional Availability Requirements for Use-Limited Resources.

#### 40.6.4.1 Registration of Use-Limited Resources.

Scheduling Coordinators for Use-Limited Resources, other than for hydroelectric Generating Units and Participating Load, including Pumping Load, must provide the CAISO an application in the form specified on the CAISO Website requesting registration of a specifically identified resource as a Use-Limited Resource. For any Use-Limited Resource that anticipates being included in an annual or monthly Resource Adequacy Plan and/or Supply Plan under this appendix, the registration shall be submitted by January 7, 2008. This application shall include specific operating data and supporting documentation including, but not limited to;

- 1) a detailed explanation of why the resource is subject to operating limitations;
- 2) historical data to show attainable MWhs for each 24-hour period during the preceding year, including, as applicable, environmental restrictions for NOx, SOx, or other factors; and
- 3) further data or other information as may be requested by the CAISO to understand the operating characteristics of the unit.

Within fifteen (15) Business Days after receipt of the application, the CAISO will respond to the Scheduling Coordinator as to whether or not the CAISO agrees that the facility is eligible to be a Use-Limited Resource. If the CAISO determines the facility is not a Use-Limited Resource, the Scheduling Coordinator may challenge that determination in accordance with the CAISO ADR Procedures.

# 40.6.4.2 Use Plan.

The Scheduling Coordinator shall provide for the 2008 Resource Adequacy Compliance Year a proposed annual use plan for each Use-Limited Resource that is a Resource Adequacy Resource. The proposed annual use plan will delineate on a month-by-month basis the total MWhs of Generation, total run hours, expected daily supply capability (if greater than four hours) and the daily Energy limit, operating constraints, and the timeframe for each constraint. The CAISO will have an opportunity to discuss the proposed annual use plan with the Scheduling Coordinator and suggest potential revisions to meet reliability needs of the system. The Scheduling Coordinator shall then submit its final annual use plan. Scheduling Coordinators for Use-Limited Resources must submit the proposed and final annual use plans in accordance with the schedule set forth in the Business Practice Manual. The Scheduling Coordinator will be able to update the projections made in the annual use plan in the monthly Resource Adequacy Plans. Hydroelectric Generating Units and Pumping Load will be able to update use plans intra-monthly as necessary to reflect evolving hydrological and meteorological conditions. The annual use plan must reflect the potential operation of the Use-Limited Resource at a level no less than the minimum criteria set forth by the Local Regulatory Authority for qualification of the resource.

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# 40.7 Compliance.

The CAISO will evaluate whether each annual and monthly Resource Adequacy Plan submitted by a Scheduling Coordinator on behalf of a Load Serving Entity under this appendix demonstrates Resource Adequacy Capacity sufficient to satisfy the Load Serving Entity's (i) allocated responsibility for Local Capacity Area Resources under Section 40.3.2 of this appendix and (ii) applicable Demand and Reserve Margin requirements. If the CAISO determines that a Resource Adequacy Plan does not demonstrate Local Capacity Area Resources sufficient to meet its allocated responsibility under Section 40.3.2 of this appendix, compliance with applicable Demand and Reserve Margin requirements, or compliance with any other resource adequacy requirement in this appendix or adopted by the CPUC, Local Regulatory Authority, or federal agency, as applicable, the CAISO will notify the relevant Scheduling Coordinator, CPUC, Local Regulatory Authority, or federal agency with jurisdiction over the relevant Load Serving Entity, or in the case of a mismatch between Resource Adequacy Plan(s) and Supply Plan(s), the

relevant Scheduling Coordinators, in an attempt to resolve any deficiency. The notification will include the reasons the CAISO believes a deficiency exists. If the deficiency relates to the demonstration of Local Capacity Area Resources in a Load Serving Entity's annual Resource Adequacy Plan, and the CAISO does not provide a written notice of resolution of the deficiency, the Scheduling Coordinator for the Load Serving Entity may demonstrate that the identified deficiency is cured by submitting a revised annual Resource Adequacy Plan within sixty (60) days after the annual Resource Adequacy Plan is due under Section 40.2.3.4 of this appendix. For all other identified deficiencies, at least ten (10) days prior the effective month of the relevant Resource Adequacy Plan, the Scheduling Coordinator for the Load Serving Entity shall (i) demonstrate that the identified deficiency is cured by submitting a revised Resource Adequacy Plan or (ii) advise the CAISO that the CPUC, Local Regulatory Authority, or federal agency, as appropriate, has determined that no deficiency exists. In the case of a mismatch between Resource Adequacy Plan(s) and Supply Plan(s), if resolved, the relevant Scheduling Coordinator(s) must provide the CAISO with revised Resource Adequacy Plan(s) or Supply Plans, as applicable, at least ten (10) days prior to the effective month. If the CAISO is not advised that the deficiency or mismatch is resolved at least ten (10) days prior to the effective month, the CAISO will use the information contained in the Supply Plan to set the obligations of Resource Adequacy Resources under Section 40 of this appendix.

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# 40.8 CAISO Default Qualifying Capacity Criteria.

#### 40.8.1 Applicability.

The criteria in Section 40.8 of this appendix shall apply only: (i) where the CPUC or Local Regulatory Authority has not established and provided to the CAISO criteria to determine the types of resources that may be eligible to provide Qualifying Capacity and for calculating Qualifying Capacity for such eligible resource types and (ii) until the CAISO has been notified in writing by the CPUC of its intent to overturn, reject or fundamentally modify the capacity-based framework in CPUC Decisions 04-01-050 (Jan. 10, 2004), 04-10-035 (Oct. 28, 2004), and 05-10-042 (Oct. 31, 2005). The types of resources specified in Section 40.8.1 of this appendix will be eligible to provide Qualifying Capacity to the extent they meet the criteria for each type of resource set forth in Section 40.8.1 of this appendix.

#### 40.8.1.2 Nuclear and Thermal.

Nuclear and thermal Generating Units, other than Qualifying Facilities with effective contracts under the Public Utility Regulatory Policies Act addressed in Section 40.8.1.8 of this appendix below, must be a Participating Generator or a System Unit. The Qualifying Capacity of nuclear and thermal units, other than Qualifying Facilities addressed in Section 40.8.1.8 of this appendix, will be based on net dependable capacity defined by NERC Generating Availability Data System information.

# <u>40.8.1.3 Hydro.</u>

Hydroelectric Generating Units, other than Qualifying Facilities with contracts under the Public Utility Regulatory Policies Act, must be either Participating Generators or System Units. The Qualifying Capacity of a pond or Pumped-Storage Hydro Unit, other than a QF, will be determined based on net dependable capacity defined by NERC GADS minus variable head derate based on an average dry year reservoir level. The Qualifying Capacity of a pond or Pumped-Storage Hydro Unit that is a QF will be determined based on historic performance during the hours of noon to 6:00 p.m., using a three-year rolling average.

The Qualifying Capacity of all run-of-river hydro units, including Qualifying Facilities, will be based on net dependable capacity defined by NERC GADS minus an average dry year conveyance flow, stream flow, or canal head derate. As used in this section, average dry year reflects a one-in-five year dry hydro scenario (for example, using the 4th driest year from the last 20 years on record).

# 40.8.1.4 Unit-Specific Contracts.

<u>Unit-specific contracts with Participating Generators or System Units will qualify as Resource Adequacy</u> <u>Capacity subject to the verification that the total MW quantity of all contracts from a specific unit do not</u> <u>exceed the total Net Qualifying Capacity (MW) consistent with the Net Qualifying Capacity determination</u> <u>for that unit.</u>

# 40.8.1.5 Contracts with Liquidated Damage Provisions.

Firm Energy contracts with liquidated damages provisions, as generally reflected in Service Schedule C of the Western Systems Power Pool Agreement or the Firm LD product of the Edison Electric Institute pro forma agreement, or any other similar firm Energy contract that does not require the seller to source the Energy from a particular unit, and specifies a delivery point internal to the CAISO Control Area entered into before October 27, 2005 shall be eligible to count as Qualifying Capacity until the end of 2008. A Scheduling Coordinator, however, cannot have more than 25% of its portfolio of Qualifying Capacity met by contracts with liquidated damage provisions for 2008.

### 40.8.1.6 Wind and Solar.

As used in this Section, wind units are those wind Generating Units without backup sources of Generation and solar units are those solar Generating Units without backup sources of Generation. Wind and solar units, other than Qualifying Facilities with effective contracts under the Public Utility Regulatory Policies Act, must be Participating Intermittent Resources or subject to availability provisions of Section 40.6.4.3.4 upon that section's effective date.

The Qualifying Capacity of all wind or solar units, including Qualifying Facilities, for each month will be based on their monthly historic performance during that same month during the hours of noon to 6:00 p.m., using a three-year rolling average. For wind or solar units with less than three years operating history, all months for which there is no historic performance data will utilize the monthly average production factor of all units (wind or solar, as applicable) within the TAC Area in which the Generating Unit is located.

# 40.8.1.7 Geothermal.

<u>Geothermal Generating Units, other than Qualifying Facilities addressed in Section 40.8.1.8 of this</u> <u>appendix, must be Participating Generators or System Units.</u> The Qualifying Capacity of geothermal <u>units, other than Qualifying Facilities addressed in Section 40.8.1.8 of this appendix, will be based on</u> <u>NERC GADS net dependable capacity minus a derate for steam field degradation.</u>

# 40.8.1.8 Treatment of Qualifying Capacity for Qualifying Facilities.

Qualifying Facilities must be subject to an effective Participating Generator Agreement or QF Participating Generator Agreement or must be System Units, unless they have a PURPA contract. Except for hydro, wind, and solar Qualifying Facilities addressed pursuant to Sections 40.8.1.3 and 40.8.1.6 of this appendix, the Qualifying Capacity of Qualifying Facilities under PURPA contracts, will be based on historic monthly Generation output during the hours of noon to 6:00 p.m. (net of Self-provided Load) during a three-year rolling average.

# 40.8.1.9 Participating Loads.

The Qualifying Capacity of Participating Loads shall be the average reduction in Demand over a threeyear period on a per Dispatch basis or, if the Participating Load does not have three years of performance history, based on comparable evaluation data using similar programs. Participating Loads must be available at least 48 hours, and if the Participating Loads can only be dispatched for a maximum of two hours per event, then only 0.89 percent of a Scheduling Coordinator's portfolio may be made up of such Loads.

40.8.1.10 Jointly-Owned Facilities.

<u>A jointly-owned facility must be either a Participating Generator or a System Unit.</u> The Qualifying <u>Capacity for the entire facility will be determined based on the type of resource as described elsewhere in</u> <u>this Section 40.8.1 of this appendix.</u> In addition, the Scheduling Coordinator must provide the CAISO with <u>a demonstration of its entitlement to the output of the jointly-owned facility's Qualified Capacity and an</u> <u>explanation of how that entitlement may change if the facility's output is restricted.</u>

# 40.8.1.11 Facilities under Construction.

The Qualifying Capacity for facilities under construction will be determined based on the type of resource as described elsewhere in Section 40.8 of this appendix. In addition, the facility must have been in commercial operation for no less than one month to be eligible to be included as a Resource Adequacy Resource in a Scheduling Coordinator's monthly Resource Adequacy Plan.

40.8.1.12 System Resources.

# 40.8.1.12.1 Dynamic System Resources.

Dynamic System Resources shall be treated similar to resources within the CAISO Control Area, except with respect to the deliverability screen under Section 40.5.2.1 of the CAISO Tariff. However, eligibility as a Resource Adequacy Resource is contingent upon a showing by the Scheduling Coordinator that the Dynamic System Resource has secured transmission through any intervening Control Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission and that the Load Serving Entity for which the Scheduling Coordinator is submitting Demand Bids has an allocation of import capacity at the import Scheduling Point under Section 40.5.2.2 of the CAISO Tariff that is not less than the Resource Adequacy Capacity provided by the Dynamic System Resource.

# 40.8.1.12.2 Non-Dynamic System Resources.

For Non-Dynamic System Resources, the Scheduling Coordinator must demonstrate that the Load Serving Entity for which the Scheduling Coordinator is scheduling Demand has an allocation of import capacity at the import Scheduling Point under Section 40.5.2.2 of the CAISO Tariff that is not less than the Resource Adequacy Capacity from the Non-Dynamic System Resource. The Scheduling Coordinator must also demonstrate that the Non-Dynamic System Resource is covered by Operating Reserves, unless unit contingent, in the sending Control Area. Eligibility as Resource Adequacy Capacity is contingent upon a showing by the Scheduling Coordinator of the System Resource that it has secured transmission through any intervening Control Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission. With respect to Non-Dynamic System Resources, any inter-temporal constraints, such as multi-hour run blocks, must be explicitly identified in the monthly Resource Adequacy Plan, and no constraints may be imposed beyond those explicitly stated in the plan.

# PART B - DEFINITIONS

Unless defined in this Appendix CC or the context otherwise requires, all capitalized terms and expressions used in this Appendix CC shall have the meaning as defined in the Master Definitions Supplement in Appendix A. The following capitalized terms and expressions used in this Appendix CC shall have the meanings set forth below unless otherwise stated or the context otherwise requires. If two or more capitalized terms are used together in a manner not uniquely defined in Appendix A or this Appendix CC, the meanings of each defined term apply.

CPUC Load Serving EntityAny entity serving retail Load in the CAISO Control Area under the<br/>jurisdiction of the CPUC, including an electrical corporation under<br/>section 218 of the California Public Utilities Code, an electric service

	provider under section 218.3 of the California Public Utilities Code, and	
	a community choice aggregator under section 331.1 of the California	
	Public Utilities Code.	
<u>Dynamic Resource-</u> Specific System Resource	A Dynamic System Resource that is a specific generation resource	
	outside the CAISO Control Area.	
Firm Liquidated Damages	A contract utilizing or consistent with Service Schedule C of the Western	
<u>Contract</u>	Systems Power Pool Agreement or the Firm Liquidated Damages	
	product of the Edison Electric Institute pro forma agreement, or any	
	other similar firm Energy contract that does not require the seller to	
	source the Energy from a particular unit, and specifies a delivery point	
	internal to the CAISO Control Area.	
Load Serving Entity (LSE)	Any entity (or the duly designated agent of such an entity, including, e.g.	
	a Scheduling Coordinator), including a load aggregator or power	
	marketer, that (a) (i) serves End Users within the CAISO Control Area	
	and (ii) has been granted authority or has an obligation pursuant to	
	California state or local law, regulation, or franchise to sell electric	
	energy to End Users located within the CAISO Control Area; (b) is a	
	federal power marketing authority that serves End Users; or (c) is the	
	State Water Resources Development System commonly known as the	
	State Water Project of the California Department of Water Resources.	
Local Capacity Technical	The study performed by the CAISO pursuant to Section 40.3.	
<u>Study</u> Modified Reserve Sharing	A Load Serving Entity whose Scheduling Coordinator has informed the	
LSE	CAISO in accordance with Section 40.1 of its election to be a Modified	
	Reserve Sharing LSE.	
Non-CPUC Load Serving	Any entity serving retail Demand in the CAISO Control Area not within	
Entity	the jurisdiction of the CPUC, including (i) a local publicly owned electric	
	utility under section 9604 of the California Public Utilities Code and (ii)	
	any federal entities, including but not limited to federal power marketing	
	authorities, that serve retail Load.	
Non-Dynamic Resource- Specific System Resource	A Non-Dynamic System Resource that is a specific generation resource	
	outside the CAISO Control Area.	
Pumped-Storage Hydro	A hydroelectric dam with the capability to produce electricity and the	
<u>Unit</u>	ability to pump water between reservoirs at different elevations to store	
	such water for the production of electricity.	
Pumping Load	A hydro pumping resource that is capable of responding to Dispatch	
	Instructions by ceasing to pump.	
Reserve Margin	The amount of Resource Adequacy Capacity that a Scheduling	

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Coordinator is required to maintain in accordance with Section 40.

# **Reserve Sharing LSE**

**Use-Limited Resource** 

Resource

A Load Serving Entity whose Scheduling Coordinator has informed the CAISO in accordance with Section 40.1 of its election to be a Reserve Sharing LSE.

Resource Adequacy A calendar year from January 1 through December 31. **Compliance Year** Resource-Specific System

A Dynamic or Non-Dynamic Resource-Specific System Resource.

\* \* \*

A resource that, due to design considerations, environmental restrictions on operations, cyclical requirements, such as the need to recharge or refill, or other non-economic reasons, is unable to operate continuously on a daily basis, but is able to operate for a minimum set of consecutive Trading Hours each Trading Day.

# Attachment C

# Blacklines to MRTU Tariff – Informational

# Early Effectiveness of Resource Adequacy Requirements Amendment Filing

October 16, 2007

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#### ARTICLE V – RESOURCE ADEQUACY

# 40 RESOURCE ADEQUACY DEMONSTRATION FOR ALL SCHEDULING COORDINATORS SCHEDULING DEMAND IN THE CAISO CONTROL AREA.

40.1 Applicability.

A Load Serving Entity, and its Scheduling Coordinator, shall be exempt from this-Section 40 of this <u>appendix</u>during the next Resource Adequacy Compliance Year, if the metered peak Demand of the Load Serving Entity did not exceed one (1) MW during the twelve months preceding the last date on which the Load Serving Entity can make the election in Section 40.1.1 of this appendix for the next2008 Resource Adequacy Compliance Year. This-Section 40 of this appendix shall apply to all other Load Serving Entities and their respective Scheduling Coordinators. For purposes of Section 40 of this appendix, a Load Serving Entity shall not include any entity satisfying the terms of California Public Utilities Code Section 380(j)(3).

#### 40.1.1 Election of Load Serving Entity Status.

By December 18, 2007, via e-mail to reliabilityrequirements@caiso.com, On an annual basis, in the manner and schedule set forth in the Business Practice Manual, the Scheduling Coordinator for a Load Serving Entity, not exempt under Section 40.1 of this appendix, shall inform the CAISO whether each such LSE elects to be either: (i) a Reserve Sharing LSE or (ii) a Modified Reserve Sharing LSE for the 2008 Resource Adequacy Compliance Year. A Scheduling Coordinator for a Load-following MSS is not required to make an election under this Section. Scheduling Coordinators for Load-following MSSs are subject solely to Sections 40.2.4 and 40.3 of this appendix.

The CAISO may confirm with the CPUC, Local Regulatory Authority, or federal agency, as applicable, the accuracy of the election by the Scheduling Coordinator for any LSE under its respective jurisdiction, or, in the absence of any election by the Scheduling Coordinator, the desired election for any LSE under its jurisdiction. The determination of the CPUC, Local Regulatory Authority, or federal agency will be deemed binding by the CAISO on the Scheduling Coordinator and the LSE. If the Scheduling Coordinator and CPUC, Local Regulatory Authority, or federal agency, fails to make the

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election on behalf of an LSE in accordance with the Business Practice Manual, the LSE shall be deemed a Reserve Sharing LSE.

40.2 Information Requirements Regarding Resource Adequacy Programs.

40.2.1. Reserve Sharing LSEs.

40.2.1.1 Requirements for CPUC Load Serving Entities Electing Reserve Sharing LSE Status.

The information required by Section 40.2.1.1 of this appendix shall be provided to the CAISO within five (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

- (a) The Scheduling Coordinator for a CPUC Load Serving Entity electing Reserve Sharing LSE status must provide the CAISO with all information or data to be provided to the CAISO as required by the CPUC and pursuant to the schedule adopted by the CPUC.
- (b) Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include Reserve Margin(s), then the provisions of Section 40.2.2.1(b) of this appendix shall apply.
- (c) Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include criteria for determining qualifying resource types and their Qualifying Capacity, then the provisions of Section 40.8 of this appendix shall apply.
- (d) Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include annual and monthly Demand Forecast requirements, then the provisions of Section 40.2.2.3 of this appendix shall apply.
- Where the information or data provided to the CAISO under Section 40.2.1.1(a) of this appendix does not include annual and monthly Resource Adequacy Plan requirements, then Section 40.2.2.4 of this appendix shall apply.
- 40.2.2 Requirements for Non-CPUC Load Serving Entities Electing Reserve Sharing LSE Status, Including Default Provisions for CPUC Load Serving Entities.
- 40.2.2.1 Reserve Margin.

<u>The information required by Section 40.2.2.1 of this appendix shall be provided to the CAISO within five</u> (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

- (a) The Scheduling Coordinator for a Non-CPUC Load Serving Entity electing Reserve Sharing LSE status must provide the CAISO with the Reserve Margin(s) adopted by the appropriate Local Regulatory Authority or federal agency for use in the annual Resource Adequacy Plan and monthly Resource Adequacy Plans listed as a percentage of the Demand Forecasts developed in accordance with Section 40.2.2.3 of this appendix.
- (b) For the Scheduling Coordinator for a Non-CPUC Load Serving Entity for which the appropriate Local Regulatory Authority or federal agency has not established a Reserve Margin(s) or a CPUC Load Serving Entity subject to Section 40.2.1.1(b) of this appendix that has elected Reserve Sharing LSE status, the Reserve Margin for each month shall be no less than 15% of the LSE's peak hourly Demand for the applicable month, as determined by the Demand Forecasts developed in accordance with Section 40.2.2.3 of this appendix.

### 40.2.2.2 Qualifying Capacity Criteria.

The information required by Section 40.2.2.2 of this appendix shall be provided to the CAISO within five (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

The Scheduling Coordinator for a Non-CPUC Load Serving Entity electing Reserve Sharing LSE status must provide the CAISO with a description of the criteria adopted by the Local Regulatory Authority or federal agency for determining qualifying resource types and the Qualifying Capacity from such resources and any modifications thereto as they are implemented from time to time. The Reserve Sharing LSE may elect to utilize the criteria set forth in Section 40.8 of this appendix.

40.2.2.3 Demand Forecasts.

<u>The information required by Section 40.2.2.3 of this appendix shall be provided to the CAISO within five</u> (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

The Scheduling Coordinator for a Non-CPUC Load Serving Entity or CPUC Load Serving Entity subject to Section 40.2.1.1(b) of this appendix electing Reserve Sharing LSE status must provide annual and monthly Demand Forecasts as part of the annual and monthly Resource Adequacy Plans under this appendix on the schedule and in the reporting format(s) set forth in the Business Practices Manual. The annual and monthly Demand Forecasts shall utilize the annual and monthly coincident peak Demand determinations provided by the California Energy Commission for such Load Serving Entity, which will be calculated from the Demand Forecast information submitted to the California Energy Commission by each Reserve Sharing LSE; or (ii) if the California Energy Commission does not produce coincident peak Demand Forecasts produced by the CAISO for such Load Serving Entity in accordance with its Business Practice Manual. Scheduling Coordinators must provide data and information, as may be requested by the CAISO, necessary to develop or support the Demand Forecasts required by this Section.

#### 40.2.2.4 Annual and Monthly Resource Adequacy Plans.

The Scheduling Coordinator for a Non-CPUC Load Serving Entity or a CPUC Load Serving Entity subject to Section 40.2.1.1(b) electing Reserve Sharing LSE status must provide annual and monthly Resource Adequacy Plans for such Load Serving Entity, For 2008 Resource Adequacy Compliance Year, the annual Resource Adequacy Plan shall be submitted to the CAISO on January 31, 2008 in the form set forth on the CAISO Website. The initial monthly Resource Adequacy Plan under this appendix shall be submitted to the CAISO on the first Business Day after 30 calendar days from the date the CAISO files its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006) in the form set forth on the CAISO Website. Thereafter, monthly Resource Adequacy Plans shall be submitted to the CAISO by the last Business Day of the second month prior to the compliance month and in the form set forth on the CAISO Website on a schedule and in the reporting format(s) set forth in the Business Practice Manual. Prior to the requirement to submit monthly Resource Adequacy Plans to the CAISO in accordance with Section 40.2.2.4 of this appendix, monthly Resource Adequacy Plans must

continue to be submitted in accordance with Section 40.2.2 of the ISO Tariff. The annual Resource Adequacy Plan must, at a minimum, set forth the Local Capacity Area Resources, if any, procured by the Load Serving Entity as described in Section 40.3 of this appendix. The monthly Resource Adequacy Plan should identify all resources, including Local Capacity Area Resources, the Load Serving Entity will rely upon to satisfy the applicable month's peak hour Demand of the Load Serving Entity as determined by the Demand Forecasts developed in accordance with Section 40.2.2.3 of this appendix and applicable Reserve Margin. Resource Adequacy Plans must utilize the Net Qualifying Capacity requirements of Section 40.5.24 of the ISO Tariff.

40.2.3 Modified Reserve Sharing LSEs.

40.2.3.1 Reserve Margin.

<u>The information required by Section 40.2.3.1 of this appendix shall be provided to the CAISO within five</u> (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

- (a) The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide the CAISO with the Reserve Margin(s) adopted by the CPUC,
   Local Regulatory Authority, or federal agency, as appropriate, for use in the annual Resource Adequacy Plan and monthly Resource Adequacy Plans listed as a percentage of the Demand Forecasts developed in accordance with Section 40.2.3.3 of this appendix.
- (b) For the Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status for which the CPUC, Local Regulatory Authority, or federal agency, as appropriate, has not established a Reserve Margin, the Reserve Margin shall be no less than fifteen percent (15%) of the applicable month's peak hour Demand of the Load Serving Entity, as determined by the Demand Forecasts developed in accordance with Section 40.2.3.3 of this appendix.

#### 40.2.3.2 Qualifying Capacity.

<u>The information required by Section 40.2.3.2 of this appendix shall be provided to the CAISO within five</u> (5) Business Days of the CAISO filing its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006).

The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide the CAISO with a description of the criteria for determining qualifying resource types and the Qualifying Capacity from such resources and any modifications thereto as they are implemented from time to time. The Modified Reserve Sharing LSE may elect to utilize the criteria set forth in Section 40.8 of this appendix.

#### 40.2.3.3 Demand Forecasts.

(a) The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide annual and monthly Demand Forecasts <u>as part of the annual</u> <u>and monthly Resource Adequacy Plans under this appendixen the schedule and in the</u> <u>reporting format(s) set forth in the Business Practice Manual</u>. The annual and monthly Demand Forecasts shall utilize the annual and monthly coincident peak Demand determinations provided by the California Energy Commission for such Load Serving Entity, which will be calculated from Demand Forecast data submitted to the California Energy Commission by each Modified Reserve Sharing LSE; or (ii) if the California Energy Commission does not produce coincident peak Demand Forecasts for the Load Serving Entity, the annual and monthly coincident peak Demand Forecasts produced by the CAISO for such Load Serving Entity-in accordance with its Business Practice Manual. Scheduling Coordinators must provide data and information, as may be requested by the CAISO, to develop or support the Demand Forecast required by this Section 40.2.3.3 of this appendix.

#### 40.2.3.4 Annual and Monthly Resource Adequacy Plans.

The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide annual and monthly Resource Adequacy Plans, For 2008 Resource Adequacy Compliance Year, the annual Resource Adequacy Plan shall be submitted to the CAISO on January 31, 2008 in the form set forth on the CAISO Website. The monthly Resource Adequacy Plan shall be submitted to the

CAISO on the first Business Day after 30 calendar days from the date the CAISO files its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006) in the form set forth on the CAISO Website. Thereafter, monthly Resource Adequacy Plans shall be submitted to the CAISO by the last Business Day of the second month prior to the compliance month and in the form set forth on the CAISO Website on a schedule and in the reporting format(s) set forth in the Business Practice Manual, for each Modified Reserve Sharing LSE served by the Scheduling Coordinator. Prior to the requirement to submit monthly Resource Adequacy Plans to the CAISO in accordance with Section 40.2.3.4 of this appendix, monthly Resource Adequacy Plans must continue to be submitted in accordance with Section 40.2.2 of the ISO Tariff. The annual Resource Adequacy Plan must, at a minimum, set forth the Local Capacity Area Resources, if any, procured by the Modified Reserve Sharing LSE as described in Section 40.3 of this appendix. The monthly Resource Adequacy Plan must identify the resources the Modified Reserve Sharing LSE will rely upon to satisfy its forecasted monthly Demand and Reserve Margin as set forth in Section 40.2.3.1 of this appendix, for the relevant reporting period and must utilize the Net Qualifying Capacity requirements of Section 40.5.24 of the ISO Tariff.

# 40.2.4 Load-Following MSS.

A Scheduling Coordinator for a Load-following MSS must provide an annual Resource Adequacy Plan<u>on</u> January 31, 2008 for 2008 Resource Adequacy Compliance Year that sets forth, at a minimum, the Local Capacity Area Resources, if any, procured by the Load-following MSS as described in Section 40.3 of this <u>appendix</u>. The annual Resource Adequacy Plan shall utilize the annual coincident peak Demand determination provided by the California Energy Commission for such Load-following MSS using Demand Forecast data submitted to the California Energy Commission by the Load-following MSS, or, if the California Energy Commission does not produce coincident peak Demand Forecasts for the Loadfollowing MSS, the annual coincident peak Demand Forecast produced by the CAISO for such Loadfollowing MSS in accordance with its Business Practice Manual using Demand Forecast data submitted to the CAISO by the Load-following MSS.

40.3 Local Capacity Area Resource Requirements Applicable to Scheduling Coordinators for All Load Serving Entities.

40.3.1 Local Capacity Technical Study.

For 2008 Resource Adequacy Compliance Year, the CAISO's 2008 Local Capacity Technical Analysis, dated April 3, 2007, located at http://www.caiso.com/1bb5/1bb5ed3d46430.pdf on the CAISO Website shall constitute the Local Capacity Technical Study for purposes of Section 40 of this appendix. For the 2009 Resource Adequacy Compliance Year, Oon an annual basis, pursuant to the schedule set forth in the Business Practice Manual, the CAISO will, perform, and publish on the CAISO Website the Local Capacity Technical Study. The Local Capacity Technical Study shall identify Local Capacity Areas, determine the minimum amount of Local Capacity Area Resources in MW that must be available to the CAISO within each identified Local Capacity Area, and identify the Generating Units within each identified Local Capacity Area. The CAISO shall collaborate with the CPUC, Local Regulatory Authorities within the CAISO Control Area, federal agencies, and Market Participants to ensure that the Local Capacity Technical Study is performed in accordance with this Section 40.3 and to establish for inclusion in the Business Practice Manual other parameters and assumptions applicable to the Local Capacity Technical Study and a schedule that provides for: (i) reasonable time for review of a draft Local Capacity Technical Study, (ii) reasonable time for Participating TOs to propose operating solutions, and (iii) release of the final Local Capacity Technical Study no later than 120 days prior to the date annual Resource Adequacy Plans must be submitted under this Section 40.

#### 40.3.1.1 Local Capacity Technical Study Criteria.

The Local Capacity Technical Study will determine the minimum amount of Local Capacity Area Resources needed to address the Contingencies identified in Section 40.3.1.2 of this appendix. In performing the Local Capacity Technical Study, the CAISO will apply those methods for resolving Contingencies considered appropriate for the performance level that corresponds to a particular studied Contingency, as provided for in <u>NERC Reliability Standards TPL-001-0</u>, <u>TPL-002-0</u>, <u>TPL-003-0</u> and <u>TPL-004-0</u> the version of the WECC Reliability Criteria, <u>NERC/WECC Planning Standard I.A.</u> in effect as of the date that the Local Capacity Technical Study is commenced, as augmented by CAISO Reliability Criteria to the extent such application will not result in a violation of Reliability Criteria adopted by the CAISO in accordance with Section 5.1.5 of the Transmission Control Agreement and Section 24.1.2 of the ISO <u>Tariff. The CAISO Reliability Criteria shall include:</u>- (1) Time Allowed for Manual Readjustment: This is the amount of time required for the operatior to take

all actions necessary to prepare the system for the next contingency. This time should not be less than

30 minutes.

(2) No voltage collapse or dynamic instability shall be allowed for the Category D event any B1-4 system

readjusted (Common Mode) L-2, as listed in Section 40.3.1.2.

# 40.3.1.2 Local Capacity Technical Study Contingencies.

The Local Capacity Technical Study shall assess the following Contingencies:

Contingency Component(s)	Reference Notes
NERC/WECC Performance Level A – No Contingencies	** ***********************************
NERC/WECC Performance Level B – Loss of a single element	
1. Generator (G-1)	1
2. Transmission Circuit (L-1)	1
3. Transformer (T-1)	<del>1,2</del>
4. Single Pole (dc) Line	1
5. G-1 system readjusted L-1	
NERC/WECC Performance Level C – Loss of two or more elements	
3. L-1 system readjusted G-1	
3. G-1 system readjusted T-1 or T-1 system readjusted G-1	
3. L-1 system readjusted T-1 or T-1 system readjusted L-1	
3. G-1 system readjusted G-1	
3. L-1 system readjusted L-1	
4. Bipolar (dc) Line	
5. Two circuits (Common Mode) L-2	
9. SLG fault (stuck breaker or protection failure) for Bus section	
WECC-S3. Two generators (Common Mode) G-2	
D – Extreme event – loss of two or more elements	
Any B1-4 system readjusted (Common Mode) L-2	3
All other extreme combinations D1-14.	
NOTES	
1 System must be able to readjust to a safe operating zone in order to	
be able to support the loss of the next system element that would	
constitute a Contingency. Manual readjustment is the time required for	
an operator to take all actions necessary to prepare the system for the	
next Contingency. Under CAISO Grid Planning Standards, this time	
must be less than 30 minutes. However, if remote capability does not	
exist and a person must be dispatched in the field to perform switching,	
an exemption may be approved for small Local Capacity Areas as	
described in approved operating procedures and the approved	
operating procedure will be assumed in the performance of the studies	
under this Section.	
The involuntary interruption of Load shall not constitute an action for	
readjustment after a Category B event.	
2-A thermal or voltage criterion violation resulting from a transformer	
Outage may not be cause for a Local Capacity Area reliability	
requirement if the violation is considered marginal (e.g., acceptable loss	
of facility life or low voltage), otherwise, such a violation will necessitate	
creation of a requirement.	

#### 40.3.2 Allocation of Local Capacity Area Resource Obligations.

The CAISO will allocate responsibility for Local Capacity Area Resources to Scheduling Coordinators for Load Serving Entities in the following sequential manner:

(a) The responsibility for the aggregate Local Capacity Area Resources required for all Local Capacity Areas within each TAC Area as determined by the Local Capacity Technical Study will be allocated to all Scheduling Coordinators for Load Serving Entities that serve Load in the TAC Area in accordance with the Load Serving Entity's proportionate share of the LSE's TAC Area Load at the time of the CAISO's annual coincident peak Demand set forth in the annual peak Demand Forecast for the next Resource Adequacy Compliance Year as determined by the California Energy Commission. Expressed as a formula, the allocation of Local Area Capacity Resource obligations will be as follows: ( $\Sigma$  Local Capacity Area MW in TAC Area from the Local Capacity Technical Study) \* (LSE Demand in TAC Area at CAISO annual coincident peak Demand).(Total TAC Area Demand at the time of CAISO annual coincident peak Demand). This will result in a MW responsibility for each Local Serving Entity for each TAC Area in which the LSE serves Load. The LSE may meet its MW responsibility, as assigned under this Section, for each TAC Area in which the LSE serves Load by procurement of that MW quantity in any Local Capacity Area in the TAC Area.

(b) For Scheduling Coordinators for Non-CPUC Load Serving Entities, the Local Capacity Area Resource obligation will be allocated based on Section 40.3.2(a) <u>of this appendixabove</u>.

(c) For Scheduling Coordinators for CPUC Load Serving Entities, the CAISO will allocate the Local Capacity Area Resource obligation based on an allocation methodology, if any, adopted by the CPUC. However, if the allocation methodology adopted by the CPUC does not fully allocate the total sum of each CPUC Load Serving Entity's proportionate share calculated under Section 40.3.2(a) of this appendix, the CAISO will allocate the difference to all Scheduling Coordinators for CPUC Load Serving Entities in accordance with their proportionate share calculated under 40.3.2(a) of this appendix. If the CPUC does not adopt an allocation methodology, the CAISO will allocate Local

Capacity Area Resources to Scheduling Coordinators for CPUC Load Serving Entities based on Section 40.3.2(a) of this appendix.

Once the CAISO has allocated the total responsibility for Local Capacity Area Resources, the CAISO will inform the Scheduling Coordinator for each LSE of the LSE's specific allocated responsibility for Local Capacity Area Resources in each TAC Area in which the LSE serves Load.

40.3.3 Procurement of Local Capacity Area Resource Obligations by Load Serving Entities.

Nothing in this-Section 40<u>of this appendix</u> obligates any Scheduling Coordinator to demonstrate on behalf of a Load Serving Entity that the <u>a</u> Load Serving Entity <u>has to</u> procured Local Capacity Area Resources to satisfy capacity requirements for each Local Capacity Area identified in the <u>Local Capacity</u> t<u>T</u>echnical s<u>S</u>tudy. Scheduling Coordinators for Load Serving Entities may aggregate responsibilities for procurement of Local Capacity Area Resources. If a Load Serving Entity has procured Local Capacity Area Resources that satisfy generation capacity requirements for Local Capacity Areas, the Scheduling Coordinator for such Load Serving Entity shall include this information in its annual and monthly Resource Adequacy Plan(s).

\* \* \*

#### 40.4.7 Submission of Supply Plans.

Scheduling Coordinators representing Resource Adequacy Resources supplying Resource Adequacy Capacity shall provide the CAISO with annual and monthly Supply Plans, on the schedule set forth in the Business Practices Manual verifying their agreement to provide Resource Adequacy Capacity during the next 2008 Resource Adequacy Compliance Year or relevant month, as applicable. For 2008 Resource Adequacy Compliance Year, the annual Supply Plan shall be submitted to the CAISO on January 31, 2008 in the form set forth on the CAISO Website, and the initial monthly Supply Plan shall be submitted to the CAISO on the first Business Day after 30 calendar days from the date the CAISO files its statement certifying market readiness in accordance with Paragraph 1414 of 116 FERC ¶61,274 (2006). Thereafter, Supply Plans shall be submitted to the CAISO by the last Business Day of the second month prior to the compliance month. The Supply Plan must be in the form of the template provided on the CAISO Website, which shall include an affirmative representation by the Scheduling Coordinator submitting the Supply Plan that the CAISO is entitled to rely on the accuracy of the information provided in the Supply Plan to perform those functions set forth in this Section 40. The CAISO shall be entitled to take reasonable measures to validate the accuracy of the information submitted in Supply Plans under this Section <u>of the appendix</u>. Prior to the requirement to submit Supply Plans to the CAISO in accordance with Section 40.4.7 of this appendix, monthly Supply Plans must be submitted in accordance with Section 40.6 of the ISO Tariff.

\* \* \*

#### 40.6.4 Additional Availability Requirements for Use-Limited Resources.

#### 40.6.4.1 Registration of Use-Limited Resources.

Scheduling Coordinators for Use-Limited Resources, other than for hydroelectric Generating Units and Participating Load, including Pumping Load, must provide the CAISO an application in the form specified on the CAISO Website requesting registration of a specifically identified resource as a Use-Limited Resource. For any Use-Limited Resource that anticipates being included in an annual or monthly Resource Adequacy Plan and/or Supply Plan under this appendix, the registration shall be submitted by January 7, 2008. This application shall include specific operating data and supporting documentation including, but not limited to;

- 1) a detailed explanation of why the resource is subject to operating limitations;
- 2) historical data to show attainable MWhs for each 24-hour period during the preceding year, including, as applicable, environmental restrictions for NOx, SOx, or other factors; and
- further data or other information as may be requested by the CAISO to understand the operating characteristics of the unit.

Within five<u>fifteen</u> (<u>1</u>5) Business Days after receipt of the application, the CAISO will respond to the Scheduling Coordinator as to whether or not the CAISO agrees that the facility is eligible to be a Use-Limited Resource. If the CAISO determines the facility is not a Use-Limited Resource, the Scheduling Coordinator may challenge that determination in accordance with the CAISO ADR Procedures.

40.6.4.2 Use Plan.

The Scheduling Coordinator shall provide for the fellowing <u>2008</u> Resource Adequacy Compliance Year a proposed annual use plan for each Use-Limited Resource that is a Resource Adequacy Resource. The proposed annual use plan will delineate on a month-by-month basis the total MWhs of Generation, total run hours, expected daily supply capability (if greater than four hours) and the daily Energy limit, operating constraints, and the timeframe for each constraint. The CAISO will have an opportunity to discuss the proposed annual use plan with the Scheduling Coordinator and suggest potential revisions to meet reliability needs of the system. The Scheduling Coordinator shall then submit its final annual use plan. Scheduling Coordinators for Use-Limited Resources must submit the proposed and final annual use plans in accordance with the schedule set forth in the Business Practice Manual. The Scheduling Coordinator will be able to update the projections made in the annual use plan in the monthly Resource Adequacy Plans. Hydroelectric Generating Units and Pumping Load will be able to update use plans intra-monthly as necessary to reflect evolving hydrological and meteorological conditions. The annual use plan must reflect the potential operation of the Use-Limited Resource at a level no less than the minimum criteria set forth by the Local Regulatory Authority for gualification of the resource.

\* \* \*

#### 40.7 Compliance.

The CAISO will evaluate whether each annual and monthly Resource Adequacy Plan submitted by a Scheduling Coordinator on behalf of a Load Serving Entity <u>under this appendix</u> demonstrates Resource Adequacy Capacity sufficient to satisfy the Load Serving Entity's (i) allocated responsibility for Local Capacity Area Resources under Section 40.3.2 <u>of this appendix</u> and (ii) applicable Demand and Reserve Margin requirements. If the CAISO determines that a Resource Adequacy Plan does not demonstrate Local Capacity Area Resources sufficient to meet its allocated responsibility under Section 40.3.2 <u>of this appendix</u>, compliance with applicable Demand and Reserve Margin requirements, or compliance with any other resource adequacy requirement in this Section 40appendix or adopted by the CPUC, Local Regulatory Authority, or federal agency, as applicable, the CAISO will notify the relevant Scheduling Coordinator, CPUC, Local Regulatory Authority, or federal agency with jurisdiction over the relevant Load Serving Entity, or in the case of a mismatch between Resource Adequacy Plan(s) and Supply Plan(s), the relevant Scheduling Coordinators, in an attempt to resolve any deficiency-in-accordance with the

procedures set forth in the Business Practice Manual. The notification will include the reasons the CAISO believes a deficiency exists. If the deficiency relates to the demonstration of Local Capacity Area Resources in a Load Serving Entity's annual Resource Adequacy Plan, and the CAISO does not provide a written notice of resolution of the deficiency as set forth in the Business Practices Manual, the Scheduling Coordinator for the Load Serving Entity may demonstrate that the identified deficiency is cured by submitting a revised annual Resource Adequacy Plan within thirsixty (360) days after the annual Resource Adequacy Plan is due under Section 40.2.3.4 of this appendix of the beginning of the Resource Adequacy Compliance Year. For all other identified deficiencies, at least ten (10) days prior the effective month of the relevant Resource Adequacy Plan, the Scheduling Coordinator for the Load Serving Entity shall (i) demonstrate that the identified deficiency is cured by submitting a revised Resource Adequacy Plan or (ii) advise the CAISO that the CPUC, Local Regulatory Authority, or federal agency, as appropriate, has determined that no deficiency exists. In the case of a mismatch between Resource Adequacy Plan(s) and Supply Plan(s), if resolved, the relevant Scheduling Coordinator(s) must provide the CAISO with revised Resource Adequacy Plan(s) or Supply Plans, as applicable, at least ten (10) days prior to the effective month. If the CAISO is not advised that the deficiency or mismatch is resolved at least ten (10) days prior to the effective month, the CAISO will use the information contained in the Supply Plan to set the obligations of Resource Adequacy Resources under this-Section 40 of this appendixand/or to assign any costs incurred under this Section 40.

#### 40.8 CAISO Default Qualifying Capacity Criteria.

#### 40.8.1 Applicability.

The criteria in this-Section 40.8 of this appendix shall apply only: (i) where the CPUC or Local Regulatory Authority has not established and provided to the CAISO criteria to determine the types of resources that may be eligible to provide Qualifying Capacity and for calculating Qualifying Capacity for such eligible resource types and (ii) until the CAISO has been notified in writing by the CPUC of its intent to overturn, reject or fundamentally modify the capacity-based framework in CPUC Decisions 04-01-050 (Jan. 10, 2004), 04-10-035 (Oct. 28, 2004), and 05-10-042 (Oct. 31, 2005). The types of resources specified in this

Section 40.8.1 <u>of this appendix</u> will be eligible to provide Qualifying Capacity to the extent they meet the criteria for each type of resource set forth in this Section 40.8.1 <u>of this appendix</u>.

#### 40.8.1.2 Nuclear and Thermal.

Nuclear and thermal Generating Units, other than Qualifying Facilities with effective contracts under the Public Utility Regulatory Policies Act addressed in Section 40.8.1.8 <u>of this appendix</u> below, must be a Participating Generator or a System Unit. The Qualifying Capacity of nuclear and thermal units, other than Qualifying Facilities addressed in Section 40.8.1.8 <u>of this appendix</u>, will be based on net dependable capacity defined by NERC Generating Availability Data System information.

\* \* \*

#### 40.8.1.6 Wind and Solar.

As used in this Section, wind units are those wind Generating Units without backup sources of Generation and solar units are those solar Generating Units without backup sources of Generation. Wind and solar units, other than Qualifying Facilities with effective contracts under the Public Utility Regulatory Policies Act, must be Participating Intermittent Resources or subject to availability provisions of Section 40.6.4.3.4 <u>upon that section's effective date</u>.

The Qualifying Capacity of all wind or solar units, including Qualifying Facilities, for each month will be based on their monthly historic performance during that same month during the hours of noon to 6:00 p.m., using a three-year rolling average. For wind or solar units with less than three years operating history, all months for which there is no historic performance data will utilize the monthly average production factor of all units (wind or solar, as applicable) within the TAC Area in which the Generating Unit is located.

#### 40.8.1.7 Geothermal.

Geothermal Generating Units, other than Qualifying Facilities addressed in Section 40.8.1.8 of this appendix, must be Participating Generators or System Units. The Qualifying Capacity of geothermal units, other than Qualifying Facilities addressed in Section 40.8.1.8 of this appendix, will be based on NERC GADS net dependable capacity minus a derate for steam field degradation.

40.8.1.8 Treatment of Qualifying Capacity for Qualifying Facilities.

Qualifying Facilities must be subject to an effective Participating Generator Agreement or QF Participating Generator Agreement or must be System Units, unless they have a PURPA contract. Except for hydro, wind, and solar Qualifying Facilities addressed pursuant to Sections 40.8.1.3 and 40.8.1.6 of this appendix, the Qualifying Capacity of Qualifying Facilities under PURPA contracts, will be based on historic monthly Generation output during the hours of noon to 6:00 p.m. (net of Self-provided Load) during a three-year rolling average.

\* \* \*

#### 40.8.1.10 Jointly-Owned Facilities.

A jointly-owned facility must be either a Participating Generator or a System Unit. The Qualifying Capacity for the entire facility will be determined based on the type of resource as described elsewhere in this Section 40.8.1 of this appendix. In addition, the Scheduling Coordinator must provide the CAISO with a demonstration of its entitlement to the output of the jointly-owned facility's Qualified Capacity and an explanation of how that entitlement may change if the facility's output is restricted.

### 40.8.1.11 Facilities under Construction.

The Qualifying Capacity for facilities under construction will be determined based on the type of resource as described elsewhere in this-Section 40.8 of this appendix. In addition, the facility must have been in commercial operation for no less than one month to be eligible to be included as a Resource Adequacy Resource in a Scheduling Coordinator's monthly Resource Adequacy Plan.

#### 40.8.1.12 System Resources.

#### 40.8.1.12.1 Dynamic System Resources.

Dynamic System Resources shall be treated similar to resources within the CAISO Control Area, except with respect to the deliverability screen under Section <u>40.5.2.1 of the CAISO Tariff</u><u>40.4.6.1</u>. However, eligibility as a Resource Adequacy Resource is contingent upon a showing by the Scheduling Coordinator that the Dynamic System Resource has secured transmission through any intervening Control Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission and that the Load Serving Entity for which the Scheduling Coordinator is submitting Demand Bids has an allocation of import capacity at the import Scheduling Point under Section <u>40.5.2.2</u> of the

<u>CAISO Tariff</u>40.4.6.2 that is not less than the Resource Adequacy Capacity provided by the Dynamic System Resource.

#### 40.8.1.12.2 Non-Dynamic System Resources.

For Non-Dynamic System Resources, the Scheduling Coordinator must demonstrate that the Load Serving Entity for which the Scheduling Coordinator is scheduling Demand has an allocation of import capacity at the import Scheduling Point under Section <u>40.5.2.2 of the CAISO Tariff</u>40.4.6.2 that is not less than the Resource Adequacy Capacity from the Non-Dynamic System Resource. The Scheduling Coordinator must also demonstrate that the Non-Dynamic System Resource is covered by Operating Reserves, unless unit contingent, in the sending Coordinator of the System Resource Adequacy Capacity is contingent upon a showing by the Scheduling Coordinator of the System Resource that it has secured transmission through any intervening Control Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission. With respect to Non-Dynamic System Resources, any inter-temporal constraints, such as multi-hour run blocks, must be explicitly identified in the monthly Resource Adequacy Plan, and no constraints may be imposed beyond those explicitly stated in the plan.

\* \* \*

Attachment D

**Declaration of Catalin M. Micsa** 

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

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California Independent System Operator Corporation Docket No. ER08-\_\_\_-

#### **DECLARATION OF CATALIN M. MICSA**

I, Catalin Micsa, declare as follows:

#### I. BACKGROUND

1. My name is Catalin Micsa. I am a Senior Grid Planning Engineer within the Planning and Infrastructure Development Division of the California Independent System Operator Corporation ("CAISO"). In that capacity, I conduct various technical studies supporting the CAISO's responsibility to reliably operate and plan the CAISO Controlled Grid, including analyses necessary to assess Reliability-Must Run ("RMR") needs and Local Capacity Area Resource requirements (alternatively "LCR"). I also review and approve transmission project proposals, operating solutions, and generation Interconnection System Impact Studies. I have been with the CAISO since 1999, having started as a Grid Planning Engineer.

2. I hold a Master of Science in Electrical Engineering from California State University Sacramento and a Bachelor of Science in Electrical Engineering from the Electrotechnical Faculty in Timisoara, Romania. Prior to joining the CAISO, I worked as a Transmission Planning Engineer with Pacific Gas.

3. My declaration addresses:

• The purpose of LCRs.

• The process employed by the CAISO to develop the 2008 LCRs.

- How the CAISO performed the 2008 Local Capacity Technical Analysis ("2008 LC Analysis") and presented the results to stakeholders.
- How the CAISO's 2008 LC Analysis has been reviewed and approved by the California Public Utilities Commission ("CPUC") after consideration of comments by numerous market participants.

## II. DESCRIPTION OF THE LOCAL CAPACITY REQUIREMENTS

4. LCRs reflect the minimum quantity of capacity needed by the CAISO to operate the CAISO Controlled Grid safely and reliably, even if certain contingencies occur. The Commission properly and succinctly explained the underlying circumstance giving rise to the need for capacity in load pockets or Local Capacity Areas in its April 20, 2007 order on MRTU (119 FERC ¶ 61,076) ("April Order"):

Local capacity area resources are needed within load pockets in order to ensure reliability of the CAISO-controlled grid, because transmission capability available to import energy to meet load in the load pocket is limited. A local capacity area resource requirement is calculated as the amount of capacity that cannot be met with capacity outside the load pocket due to transmission limitations.

The Commission went on to state that,

Grid reliability benefits all participants and no LSE should be excluded from the responsibility to procure these local capacity area resources. Accordingly, all LSEs will be responsible for their allocated amount of local capacity area resource requirements in order to maintain the reliability of the CAISO-controlled grid.

April Order at P 580. The identification of LCRs therefore serves two inter-related purposes.

First, they facilitate the ability of the CAISO to operate the grid in accordance with identified

Reliability Criteria, including WECC/NERC Reliability Standards (part of Applicable Reliability

Criteria) and CAISO Grid Planning Standards. Second, within the context of the authority

sought by the CAISO from the Commission under its MRTU Tariff, the identification of LCRs

allow the CAISO to mitigate the consequences of one Load Serving Entity ("LSE") "leaning on" the purchases of other LSEs to provide the grid benefits expected from Local Capacity Area Resources. For example, one LSE could disproportionately rely on remote resources that otherwise satisfy Reserve Margin requirements, but fail to ensure grid reliability, not only within the Local Capacity Area, but also potentially for the grid more generally under the system contingencies evaluated by the LCR analysis.

5. Applicable Reliability Criteria are the reliability standards established by NERC, WECC and Local Reliability Criteria as amended from time to time. Local Reliability Criteria, in turn, are the Reliability Criteria unique to the transmission systems of each of the Participating Transmission Owners established at the later of: (1) CAISO Operations Date, or (2) the date upon which a New Participating Transmission Owner places its facilities under the control of the CAISO. Moreover, pursuant to its authority to "develop a consistent set of Reliability Criteria for the ISO Controlled Grid," the CAISO, in consultation with its Participating Transmission Owners, has adopted Grid Planning Standards that incorporate Applicable Reliability Criteria as well as address specifics not covered by NERC/WECC standards, provide interpretations of NERC/WECC standards, and specify whether discrete criteria should be more stringent than the NERC/WECC standards for the CAISO Controlled Grid.

6. Under the current market design, the CAISO meets Applicable Reliability Criteria for Local Capacity Areas with respect to capacity requirements first by means of a combination of LSE procurement to meet LCR under resource adequacy obligations and RMR units. At present, only the CPUC has explicitly imposed a procurement obligation for local capacity resources on its jurisdictional LSEs to meet CAISO identified LCR. Publicly Owned Utilities ("POUs") also provide local capacity, but there is no explicit state regulatory obligation that they

procure local capacity. For 2008 and under MRTU, it is the CAISO Tariff, including the proposed RA Early Effectiveness Amendments, that will link the CAISO's LC Analysis to a potential cost implication on the POUs should additional local capacity be needed to meet accepted Reliability Criteria.

7. For 2008 and under MRTU, the CAISO is attempting to move further away from the use of RMR and its own backstop purchases and rely more on the purchasing decisions of LSEs. It is expected that LSEs will continue to be subject to the Reserve Margin requirements set by the CPUC or applicable Local Regulatory Authorities ("LRA"). However, in order to encourage that the resources procured to meet Reserve Margin requirements are not only available when needed, but also are available where needed, all Scheduling Coordinators serving Load in the CAISO Control Area will be subject to the Local Capacity Area Resource provisions of Section 40.3 of the MRTU Tariff. That section authorizes the CAISO to perform an annual technical study to calculate the minimum amount of generation capacity that must be available within each Local Capacity Area. For 2008, the RA Early Effectiveness Amendments clarify that the technical study will be the 2008 LC Analysis. No LSE is required by the MRTU Tariff or the RA Early Effectiveness Amendments to procure capacity to meet the identified LCR. Rather, the CAISO will assign to each LSE, based on its relative share of load, a proportionate share of the LCR. It is contemplated that this assignment will be used to ensure that the cost of any CAISO "backstop" procurement, whether under the Interim Capacity Procurement Mechanism ("ICPM") or some other means, to meet any residual LCR after accounting for the resource adequacy portfolios of LSEs is allocated to those LSEs that did not procure their proportionate share of capacity in Local Capacity Areas. In this manner, the RA Early

Effectiveness Amendments and the MRTU Tariff seek to ensure that the LCR obligation is spread in a consistent and non-discriminatory manner.

# III. DEVELOPMENT OF THE 2008 LOCAL CAPACITY TECHNICAL ANALYSIS

8. In Decision 06-06-064 (June 29, 2006), the CPUC found that "it was reasonable to rely on the CAISO to perform the 2007 LC Analysis and that the study process provided adequate opportunity for parties to participate" and "that it is reasonable to use the study results as the basis for implementing [local resource adequacy requirements] for the 2007 compliance period." Similarly, this Commission also concluded in its September Order that the reliability criteria utilized by the CAISO to determine Local Capacity Area requirements constituted "good utility practice" and was not "overly conservative." September 21 Order, 116 FERC ¶ 61,274 (2006) at P 1169. Notwithstanding these findings, market participants questioned, both before the CPUC and the Commission, the manner in which the CAISO applied its reliability criteria. The Commission responded to these stakeholder concerns by directing the CAISO to incorporate into the MRTU Tariff the set of reliability criteria the CAISO will use in developing the LCRs. September 21 Order at P 1167. The CAISO filed its reliability criteria as part of its August 3, 2007 filing in Docket No. ER06-615.

9. Even prior to this Commission directive and the effectiveness of the CAISO's MRTU Tariff provisions regarding a collaborate Local Capacity Area study process, the CAISO took steps to promote better stakeholder involvement in, and understanding of, the CASIO LCR study assumptions and criteria. The CAISO did so by forming the Locational Study Advisory Group ("LSAG") in the fall of 2006. The LSAG was intended not to include all potential stakeholders. Rather, LSAG was to be a group of subject matter experts that represented a cross-section of the stakeholder community who would take an in-depth look at the CAISO's 2007

LCR study assumptions, processes, and criteria and make recommendations for assumptions, processes, and criteria to be used in the 2008 LC Analysis. While an open invitation was not actively extended to the stakeholder community at large, the CAISO did not preclude anyone with the necessary expert qualifications from participating in LSAG if they so requested. Gary DeShazo, Director of Regional Transmission North for the CAISO, chaired the group, which included representation from the CPUC, California Energy Commission ("CEC"), Energy Service Providers ("ESPs"), generators, municipal utilities from southern and northern California, Southern California Edison Company ("SCE"), Pacific Gas and Electric Company ("PG&E"), and San Diego Gas & Electric Company ("SDG&E").

10. The desire for more narrow participation in LSAG was driven by pragmatic considerations regarding the need to resolve highly technical issues in an expedited time frame that would allow the CAISO to meet the regulatory schedule applicable to CPUC jurisdictional LSEs. Specifically, the CPUC regulatory schedule called for Participating Transmission Owners ("PTOs") to provide the CAISO with study base cases and Load forecasts by January 5, 2007. In order to meet this deadline, it was viewed as helpful to have the LSAG's initial efforts done by approximately the end of November or early December 2006 to allow sufficient time for the PTOs to build their base cases by the January cut-off date.

11. Although LSAG was comprised of experts from a cross-section of market participants, all stakeholders were informed of the existence of the group and its activities. The LSAG met several times to review the assumptions and criteria associated with the 2007 LCR Study and consider revisions for the 2008 LC Analysis. On November 3, 2006, the CAISO published the "CAISO LCR Study Advisory Group Memorandum"

(http://www.caiso.com/18a3/18a3d74233820.pdf). This posting of more than 250 pages of

materials identified LSAG's composition and charter. It provided information on the 2007 LCR Study and attached applicable reliability criteria.

12. The CAISO also publicly posted on its website the notes from the LSAG meetings. The notes from the October 20, 2006 meeting were posted on December 11, 2006 (<u>http://www.caiso.com/18c9/18c9760a30810.pdf</u>) and the notes from the November 6, 2006 meeting were posted on January 12, 2007 (<u>http://www.caiso.com/1b64/1b648befa240.pdf</u>) with a summary of major issues posted that same day at

(http://www.caiso.com/1b64/1b648c87aa40.pdf). The summary states,

Commensurate with NERC/WECC standards, there is consensus that load cannot be dropped after a single contingency and that load can be dropped in a "planned and controlled" manner after the second contingency. If there is no controlled solution (SPS or operating procedure with short term emergency ratings) of dropping load after the second contingency, the CAISO is required to dispatch generation or drop load before the second contingency (effectively at a short time after a single contingency, through system readjustment) in an N-1-1 case and (under normal conditions) in an N-2 (common mode) case in order to make sure all system elements are within Applicable Ratings immediately following the second contingency. "System readjustment" is to be used after any single contingency and include operating procedures as well as generation reduction. Consensus has been reached in the interpretation of the performance standards and their application to the 2008 LCR studies.

The summary also recognizes that "[t]he LSAG is intended to resolve, or at least narrow the scope of disagreements regarding, technical issues related to the conduct of LCR studies for the benefit of all stakeholders and other decision-makers (such as CAISO management and the CPUC). The LSAG is not intended to resolve broader policy issues. CAISO has scheduled a stakeholder meeting."

13. That broader, general stakeholder meeting was held on December 6, 2006, pursuant to the CAISO's regular notice procedures. At this meeting, the CAISO stated the LSAG was a "sounding board" to advise the CAISO on technical issues and that the LSAG

"does not supplant stakeholder review of the LSAG's findings and/or recommendations of the final LCR study assumptions, criteria and methodology." Stakeholders were informed that the methodology for the 2008 LC Analysis would be initially determined by mid-December, subject to any necessary refinement up to the completion of the preliminary LCR study in March.

14. Also at the general stakeholder meeting on December 6, 2006, the CAISO fully discussed with stakeholders the outcome of the LSAG meetings with respect to the proposed assumptions and basis of the 2008 LC Analysis and sought stakeholder views on the proposed approach. In particular, the CAISO advised that the 2008 LC Analysis would apply Reliability Criteria to a transmission system configuration based on all transmission and generation projects expected to be in service by June 1, 2008 and a Load forecast based on the CEC's 1 in 10 local area peak. As the Commission recognized in the April Order,

coincident peak demand determinations should be made by one entity and that the California Energy Commission is best situated to provide this service, both for CPUC and non-CPUC jurisdictional LSEs. Accordingly, all non-CPUC LSE peak demand forecast data should come from the California Energy Commission. Alternatively, if the California Energy Commission is somehow not able to provide this service, we direct the CAISO to serve and to file amended tariff sheets, in conjunction with the compliance filings it will make on or before August 3, 2007, to implement such change as the provider of demand forecast information for such non-CPUC LSEs.

April Order at P 638.

15. The CAISO intended the December 6, 2006 stakeholder meeting to be the forum for broad stakeholder review of the data inputs to be used to produce the preliminary 2008 LC Analysis for March 2007. Following the meeting, the CAISO issued a market notice requesting comments on the proposed study format be provided by December 11, 2006.

16. In accordance with the schedule discussed at the December 6, 2006 stakeholder meeting, the CAISO released its draft 2008 LC Analysis on March 9, 2007. The draft 2008 LC

Analysis was reviewed in detail with stakeholders at a meeting on March 21, 2007, with presentation materials posted on the CAISO Website

(http://www.caiso.com/1ba8/1ba87f1a3f6a0.pdf). As explained at the meeting and based on the endorsement of LSAG, the CAISO incorporated into its draft 2008 LC Analysis the same criteria, input assumptions and methodology that were incorporated into its 2007 LCR Study. While several new methodologies were briefly discussed in the LSAG, the group concluded that there was insufficient time to introduce a new methodology change and still meet the 2008 regulatory schedule. Of significant importance to the CAISO was the unanimous agreement among LSAG members that its application of the N-1, N-1-1, and N-2 contingencies in the 2007 LCR Study was done correctly. N-0 refers to normal operating conditions. N-1 is a single contingency. N-1-1 is a double contingency (specifically a single contingency followed by a manual readjustment and then followed by another single contingency).

17. Stakeholder comments on the study were received by the CAISO on March 29, 2007. Comments were received from eight entities - PG&E, SCE (LSE), SCE (PTO), CPUC, City of Azuza, Northern California Power Agency, Dynegy, and SWP. While the CAISO has not placed the comments up on its website, the final study released on April 3, 2007 contained both clean (<u>http://www.caiso.com/1bb5/1bb5ed3d46430.pdf</u>) and redlined (http://www.caiso.com/1bb5/1bb5edc5475b0.pdf) versions identifying changes made by the CAISO from the March draft by incorporating certain stakeholder comments.

18. On June 21, 2007, the CPUC issued its Opinion on Phase 2 – Track 1 Issues (Decision 07-06-029) adopting the CAISO's 2008 LC Analysis as the basis for local capacity procurement obligations for CPUC jurisdictional LSEs for 2008. This decision was made after providing entities with an opportunity to comment on a draft opinion, which also concluded that

the CAISO's 2008 LC Analysis was reasonable. In addition, the decision adopted the CAISO's recommendation to permit PTOs and others to submit additional operating procedures for CAISO review in an effort to further reduce the LCR for particular Local Capacity Areas. Although further efforts by the CAISO and the PTOs were taken to identify feasible operating solutions in accordance with the CPUC's directive, the CAISO was unable to conclude that any of the proposed solutions were feasible for 2008.

19. On July 23, 2007, for informational purposes, the CAISO sent to the Scheduling Coordinator for each LSE serving load in the CAISO Control Area, the LSE's proportionate allocation of Local Capacity Area Resources using the 2008 LC Analysis and the formula set forth in Section 40.3.2 of the RA Early Effectiveness Amendments.

20. Finally, while the CAISO understands the need to continue to improve the stakeholder process with respect to development of the LCRs, the CAISO believes that the processes and procedures utilized in developing the 2008 LC Analysis was reasonable and provided stakeholders with substantial opportunities for meaningful input.

I declare under penalty of perjury that the foregoing is true and correct and that this declaration was executed in Folsom, California on October 15, 2007.

Calalar Il

Catalin M. Micsa