

**ORIGINAL**

**ALSTON & BIRD LLP**

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

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

Bradley R. Miliauskas

Direct Dial: 202-756-3405

Email: [bradley.miliauskas@alston.com](mailto:bradley.miliauskas@alston.com)

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FEDERAL ENERGY  
REGULATORY COMMISSION

December 20, 2007

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

**Re: California Independent System Operator Corporation  
Compliance Filing  
Docket Nos. ER04-835-009 and EL04-103-004 (consolidated)**

Dear Secretary Bose:

The California Independent System Operator ("CAISO" or "ISO")<sup>1</sup> hereby submits an original and five copies of the instant filing in compliance with the Commission's "Order on Rehearing," 121 FERC ¶ 61,193, issued in the above-identified proceeding on November 20, 2007 ("Order on Rehearing"). Two additional copies of this filing are enclosed to be date-stamped and returned to our messenger.

**I. Background**

This proceeding concerns issues related to the allocation of must-offer obligation<sup>2</sup> costs by the CAISO pursuant to Amendment No. 60 to the CAISO Tariff ("Amendment No. 60"). The history of the proceeding is described in detail at Paragraphs 2-9 of the Order on Rehearing. As relevant to the instant

<sup>1</sup> Capitalized terms not otherwise defined herein have the meanings set forth in the Master Definitions Supplement, Appendix A to the CAISO Tariff.

<sup>2</sup> "Pursuant to the must-offer obligation, most generators serving California markets are required to offer all of their capacity in real time during all hours if it is available and not already scheduled to run through bilateral agreements." Order on Rehearing at P 2.

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compliance filing, an initial decision was issued in the proceeding on October 31, 2005, 113 FERC ¶ 63,017 ("Initial Decision"). The Initial Decision was affirmed in part and reversed in part in the Commission's "Order and Opinion on Initial Decision," issued on December 27, 2006, 117 FERC ¶ 61,348 ("Opinion" or "Opinion No. 492"). On January 26, 2007, the CAISO filed a request for rehearing and clarification of certain directives in the Opinion ("Clarification/Rehearing Request"), and other parties filed their own requests for rehearing and clarification that same day. On February 26, 2007, the CAISO submitted a filing to comply with the Opinion ("February Compliance Filing"). Several parties submitted protests regarding the February Compliance Filing, and on April 3, 2007, the CAISO filed a motion for leave to answer and answer ("Answer") to address those protests. The Order on Rehearing granted rehearing in part, denied rehearing in part, and granted clarification with regard to the Opinion. The Commission has not yet issued an order regarding the February Compliance Filing.

## **II. CAISO Tariff Revisions**

### **A. Revisions to the CAISO Tariff Regarding the Use of the Must-Offer Obligation to Address an Anticipated Shortage in Operating Reserves**

The CAISO, in the Rehearing/Clarification Request, noted that Paragraph 111 of Opinion No. 492 acknowledged that the CAISO has the authority under the CAISO Tariff to grant must-offer waiver denials ("MOWDs") so as "to provide sufficient on-line generating capacity to meet operating reserve requirements," but then Paragraph 111 went on to state that the CAISO does not have the authority to deny MOWDs "in anticipation of a shortage of ancillary services." The CAISO explained that these findings in Paragraph 111 are inherently contradictory because Operating Reserves are Ancillary Services, and sought rehearing or in the alternative clarification on this issue. In the Order on Rehearing, the Commission stated that the CAISO proposed tariff language in the Rehearing/Clarification Request "which clarifies that the CAISO can use the must-offer obligation for an anticipated shortage in operating reserves." The Commission found that this proposal "is consistent with the objective set by the Commission when the obligation was established" and also with CAISO Operating Procedure No. M-432. Therefore, the Commission granted the CAISO's requested clarification on this issue and directed the CAISO to submit a compliance filing to include this clarifying language in its tariff.<sup>3</sup>

Although the CAISO sought clarification in the alternative from the Commission that the Opinion does not prevent the CAISO from taking into

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<sup>3</sup> *Id.* at PP 71-72.

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account the need for generating capacity to meet Operating Reserve requirements in determining whether to grant must-offer waivers, the CAISO did not propose tariff language on the issue. As explained in the Rehearing/Clarification Request, the current language of Section 40.9 (formerly Section 5.11.6.2) of the CAISO Tariff regarding MOWDs is consistent with the CAISO's requested clarification. It states in relevant part that "[t]he ISO shall grant waivers so as to: (1) provide sufficient on-line generating capacity to meet operating reserve requirements . . . ." Rather, the CAISO sought clarification of Paragraph 111:

Paragraph 111 could have been intended to state that the CAISO does not have the authority under the must-offer provisions of the ISO Tariff: (1) to require any Generating Unit to bid into the CAISO's Ancillary Service markets; or (2) to deny a requested exemption from the must-offer obligation in anticipation of a shortage of ancillary services *other than an anticipated shortage of operating reserves*.

Such a clarification of Paragraph 111 would resolve the contradictions discussed above. . . Therefore, as an alternative to granting the CAISO's Rehearing Request on this issue, the Commission should provide the specific clarification described above.<sup>4</sup>

As a result, the CAISO cannot literally comply with Paragraph 72 of the Order on Rehearing. Because Section 40.9 already addresses the issue, the CAISO does not believe any tariff change is necessary to implement the intent of Paragraph 72.

Nonetheless, the Commission's decision will require other tariff revisions. As filed, Attachment E to Amendment No. 60 ("Attachment E") specified that "[a] unit will be classified as committed or operated for Zonal requirements when it is committed or operated to . . . provide Ancillary Services within a particular Zone, if the ISO is procuring Ancillary Services on a Zone-by-Zone basis." In the February Compliance Filing, the CAISO, in compliance with the directive in the Opinion to include the allocation criteria in the CAISO Tariff (see Opinion at P 25), included the Attachment E criteria other than the above-quoted Attachment E provision in a proposed Section 40.8.6.1.2. The CAISO omitted that above-quoted Attachment E provision because the Commission had ruled that the CAISO has no authority to deny MOWDs in anticipation of a shortage of Ancillary Services. While the Order on Rehearing has clarified that the CAISO can deny MOWDs in anticipation of a shortage of one category of Ancillary Service – *i.e.*,

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<sup>4</sup> Rehearing/Clarification Request at 14-15 (emphasis in original).

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Operating Reserves – the tariff language in the February Compliance Filing would leave the CAISO with no criteria for allocating the costs of MOWDs denied for that purpose.

The CAISO proposes, therefore, to revise proposed Section 40.8.6.1.2 to restore the original allocation criteria, but limited to Operating Reserves. Specifically, the CAISO proposes to modify Section 40.8.6.1.2 of its Tariff to state that the CAISO will classify a FERC Must-Offer Generator unit as committed or operated for zonal reliability requirements when (as relevant here) it is committed or operating to “ensure there is sufficient capacity available to meet Operating Reserve requirements within a particular Zone, if the ISO is procuring Operating Reserve on a zonal basis,” and the CAISO also proposes to modify Section 40.8.6.1.3 of its Tariff to state that the CAISO will classify a FERC Must-Offer Generator unit as committed or operated for ISO Control Area-wide reliability requirements when it is “committed to ensure sufficient capacity is available to meet Operating Reserve requirements, when the ISO is not procuring Operating Reserve on a zonal basis.”

#### **B. Revisions to the CAISO Tariff to Categorize South of Lugo as a Zonal Constraint**

In the Opinion, the Commission affirmed the finding in the Initial Decision that the Miguel Transformer Bank (“Miguel”) should be classified as a zonal constraint, and found that “Miguel satisfies the zonal criteria set forth in Attachment E and, therefore, that criteria would not need to be modified to accommodate Miguel.” The Commission nonetheless directed the CAISO to “modify the tariff definition of inter-zonal interface in order to more accurately describe the function of Miguel.”<sup>5</sup> The Commission also affirmed the finding in the Initial Decision that the South of Lugo Transformer Path (“South of Lugo”) should be categorized as a local rather than a zonal constraint.<sup>6</sup>

To comply with the Opinion, the CAISO proposed to modify the definition of the term Inter-Zonal Interface in the February Compliance Filing so that the definition would include the following:

(iv) a transmission path, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established that may require Congestion Management to mitigate Congestion due to flow scheduled from one or more Scheduling Points from adjacent Zones and/or due to generation within that Zone.

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<sup>5</sup> Opinion at P 31.

<sup>6</sup> *Id.* at P 39.

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Southern California Edison Company ("SCE") and the Southern Cities<sup>7</sup> protested this modified definition on the ground that the definition provided no basis for distinguishing between Miguel (which the Opinion found was a zonal constraint) and South of Lugo (which the Opinion found was a local constraint). In the Answer, the CAISO proposed to address these protests by making further revisions to the above-quoted portion of the definition of Inter-Zonal Interface to refer specifically to Miguel, as follows:

(iv) ~~a transmission path, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established that may require the Miguel Constraint, whenever Congestion Management is necessary to mitigate Miguel~~ Congestion due to flow scheduled from one or more Scheduling Points from adjacent Zones and/or due to generation within that Zone.

The CAISO stated that it was prepared to include these revisions "in a further compliance filing if ordered to do so by the Commission."<sup>8</sup>

SCE filed a request for rehearing of the Opinion in which it argued that the Commission erred by not directing the CAISO to classify South of Lugo as a zonal constraint. In the Order on Rehearing, the Commission granted SCE's request for rehearing, found that South of Lugo – like Miguel – should be categorized as a zonal constraint, and directed the CAISO to "modify[ ] the Attachment E zonal criteria to accommodate South of Lugo."<sup>9</sup>

To comply with the Commission's directive, the CAISO proposes to modify further the revised definition of Inter-Zonal Interface contained in the Answer so that the definition refers specifically to both Miguel and South of Lugo. No further changes to the CAISO Tariff are required in order to implement the categorization of South of Lugo as a zonal constraint.

### III. Explanation of the CAISO Tariff Sheets Included in This Filing

As the CAISO explained in the February Compliance Filing, the effective date for the CAISO Tariff changes contained in that filing was July 17, 2004.<sup>10</sup>

<sup>7</sup> *i.e.*, the Cities of Anaheim, Azusa, Banning, Colton, and Riverside, California.

<sup>8</sup> Answer at 7-8.

<sup>9</sup> Order on Rehearing at PP 25-26.

<sup>10</sup> Transmittal Letter for February Compliance Filing at 3 (citing Opinion at P 114). The CAISO provided an explanation similar to that provided in Section III, above, in the February Compliance Filing. Also, Attachment A to the February Compliance Filing contained a "tariff mapping table" that is also applicable to the tariff changes contained in the instant filing.

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Since that time, many of the relevant sections of the CAISO Tariff have been revised substantially, including the complete tariff overhaul resulting from the CAISO's Simplified and Reorganized Tariff, made effective by the Commission as of March 1, 2006 by letter order issued in Docket No. ER05-1501 on July 10, 2006. In light of this, three separate sets of tariff sheets (both clean and black-lined versions of each set) were being submitted in the February Compliance Filing and three separate sets of tariff sheets are also being submitted in the instant compliance filing. The CAISO requests that each of these three sets of tariff sheets be made effective in turn for the time periods to which they apply, culminating in the final set of sheets being effective from May 31, 2006 through the present time and going forward. The tariff iterations and requested effective periods are as follows:

- With regard to the time period from July 17, 2004 through February 28, 2006, when the pre-Simplified and Reorganized Tariff was in effect, clean tariff sheets showing the proposed tariff revisions described in Section II, above, are provided in Attachment A-1 to the instant filing, and these revisions are shown in black-line format in Attachment A-2 to the instant filing.
- With regard to the time period from March 1, 2006 through May 30, 2006, when the original Simplified and Reorganized Tariff was in effect, clean tariff sheets showing the proposed tariff revisions described in Section II, above, are provided in Attachment B-1 to the instant filing, and these revisions are shown in black-line format in Attachment B-2 to the instant filing.
- With regard to the time period from May 31, 2006 through current time, when the current Simplified and Reorganized Tariff has been in effect, clean tariff sheets showing the proposed tariff revisions described in Section II, above, are provided in Attachment C-1 to the instant filing, and these revisions are shown in black-line format in Attachment C-2 to the instant filing.

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Please contact the undersigned with any questions.

Respectfully submitted,



Kenneth G. Jaffe  
Michael E. Ward  
Bradley R. Miliauskas  
Alston & Bird LLP  
The Atlantic Building  
950 F Street, N.W.  
Washington, DC 20004-1404  
Tel: (202) 756-3405  
Fax: (202) 756-3333

Nancy Saracino, General Counsel  
Sidney M. Davies, Assistant General  
Counsel  
The California Independent System  
Operator Corporation  
151 Blue Ravine Road  
Folsom, CA 95630  
Tel: (916) 351-4400  
Fax: (916) 351-4436

Counsel for the California Independent  
System Operator Corporation

**ATTACHMENT A**



**Attachment A-1**

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION  
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FIRST REPLACEMENT VOLUME NO. I

Substitute Original Sheet No. 184F.01B

- (1) maintain power flows on a transmission line that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface;
- (2) maintain acceptable voltage levels at a location that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface;
- (3) accommodate the forced or scheduled outage of a network component that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface; or
- (4) ensure there is sufficient capacity available to meet Operating Reserve requirements within a particular Zone, if the ISO is procuring Operating Reserve on a zonal basis.

**5.11.6.1.4.1.3 ISO Control Area-wide System Reliability Requirements**

The ISO shall classify a Must Offer Generator unit as committed or operated for ISO Control Area-wide reliability requirements when it is committed or operating to meet forecast Control Area Demand or committed to ensure sufficient capacity is available to meet Operating Reserve requirements, when the ISO is not procuring Operating Reserve on a zonal basis.

**5.11.6.1.4.1.4 Incremental Cost of Local**

Beginning October 1, 2004, when a Must Offer Generator unit is committed for local reliability requirements, and that unit also meets an overall ISO Control Area-wide need, the ISO shall allocate only the incremental cost of committing that unit above the cost of committing the least-cost unit that would have been committed to resolve the ISO Control-Area-wide reliability need absent the local reliability need, to the Participating TO.

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Original Sheet No. 184F.01C

**5.11.6.1.5 Payment Of Available Capacity Under The Must-Offer Obligation**

Available capacity that is required to be offered to the Real Time Market, if dispatched by the ISO, shall be settled as follows: the actual amount of the dispatched Energy shall be settled at the applicable Instructed Imbalance Energy Market Clearing Price. Minimum Load Cost compensation shall be paid for all otherwise eligible hours within the Waiver Denial Period, as

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Substitute Third Revised Sheet No. 324  
Superseding Second Revised Sheet No. 324

**Inter-Zonal Interface**

The (i) group of transmission paths between two adjacent Zones of the ISO Controlled Grid, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established or will be established prior to the use of the interface for Congestion Management; (ii) the group of transmission paths between an ISO Zone and an adjacent Scheduling Point, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established or will be established prior to the use of the interface for Congestion Management; (iii) the group of transmission paths between two adjacent Scheduling Points, where the group of paths has an established transfer capability and established transmission rights; or (iv) the Miguel or South of Lugo constraints whenever Congestion Management is necessary to mitigate Congestion due to flow from one or more Scheduling Points from adjacent Zones and/or due to generation within that Zone.

**Attachment A-2**

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#### 5.11.6.1.4.1.2 Zonal Reliability Requirements

The ISO shall classify a Must Offer Generator unit as committed or operated for zonal reliability requirements when it is committed or operating to:

- (1) maintain operations within the requirements of any nomogram that governs the operations of an Inter-Zonal Interface;
- (2) maintain power flows on a transmission line that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface;
- (3) maintain acceptable voltage levels at a location that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface; ~~or~~
- (4) accommodate the forced or scheduled outage of a network component that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface; or
- (5) ensure there is sufficient capacity available to meet Operating Reserve requirements within a particular Zone, if the ISO is procuring Operating Reserve on a zonal basis.

#### 5.11.6.1.4.1.3 ISO Control Area-wide Reliability Requirements

The ISO shall classify a Must Offer Generator unit as committed or operated for ISO Control Area-wide reliability requirements when it is committed or operating to meet forecast Control Area Demand or committed to ensure sufficient capacity is available to meet Operating Reserve requirements, when the ISO is not procuring Operating Reserve on a zonal basis.

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## Appendix A

### Inter-Zonal Interface

The (i) group of transmission paths between two adjacent Zones of the ISO Controlled Grid, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established or will be established prior to the use of the interface for Congestion Management; (ii) the group of transmission paths between an ISO Zone and an adjacent Scheduling Point, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established or will be established prior to the use of the interface for Congestion Management; (iii) the group of transmission paths between two adjacent Scheduling Points, where the group of paths has an established transfer capability and established transmission rights; or (iv) a the Miguel or South of Lugo constraints whenever transmission path, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established that may require Congestion Management is necessary to mitigate Congestion due to flow scheduled from one or more Scheduling Points from adjacent Zones and/or due to generation within that Zone.

**ATTACHMENT B**



**Attachment B-1**

**40.1.6.1.4.1 Must Offer Generator Unit Criteria for Allocation of Minimum Load Costs**

The ISO shall use the following criteria for determining whether a Must Offer Generator unit falls within the local reliability, zonal reliability or ISO Control Area-wide reliability categories for allocation of Minimum Load Costs.

**40.1.6.1.4.1.1 Local Reliability Requirements**

The ISO shall classify a Must Offer Generator unit as committed or operated for local reliability requirements when it is committed or operating to:

- (1) maintain power flows on a transmission component that is not part of a transmission path between Congestion Zones;
- (2) maintain acceptable voltage levels at a network location that is not part of a transmission path between Congestion Zones;
- (3) accommodate the forced or scheduled outage of a network component that is not part of a transmission path between Congestion Zones.

**40.1.6.1.4.1.2 Zonal Reliability Requirements**

The ISO shall classify a Must Offer Generator unit as committed or operated for zonal reliability requirements when it is committed or operating to:

- (1) maintain operations within the requirements of any nomogram that governs the operations of an Inter-Zonal Interface;
- (2) maintain power flows on a transmission line that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface;
- (3) maintain acceptable voltage levels at a location that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface;

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Substitute Original Sheet No. 470.00

- (4) accommodate the forced or scheduled outage of a network component that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface; or
- (5) ensure there is sufficient capacity available to meet Operating Reserve requirements within a particular Zone is , if the ISO is procuring Operating Reserve on a zonal basis

**40.1.6.1.4.1.3 ISO Control Area-wide Reliability Requirements**

The ISO shall classify a Must Offer Generator unit as committed or operated for ISO Control Area-wide reliability requirements when it is committed or operating to meet forecast Control Area Demand or committed to ensure sufficient capacity is available to meet Operating Reserve requirements, when the ISO is not procuring Operating Reserve on a zonal basis.

**40.1.6.1.4.1.4 Incremental Cost of Local**

Beginning October 1, 2004, when a Must Offer Generator unit is committed for local reliability requirements, and that unit also meets an overall ISO Control Area-wide need, the ISO shall allocate only the incremental cost of committing that unit above the cost of committing the least-cost unit that would have been committed to resolve the ISO Control Area-wide reliability need absent the local reliability need, to the Participating TO.

**40.1.6.1.5 Payment Of Available Capacity Under The Must-Offer Obligation.**

Available capacity that is required to be offered to the Real Time Market, if dispatched by the ISO, shall be settled as follows: the actual amount of the dispatched Energy shall be settled at the applicable Instructed Imbalance Energy Market Clearing Price. Minimum Load Cost compensation shall be paid for all otherwise eligible hours within the Waiver Denial Period, as defined in Section 40.1.6.1.1, that the unit generated above minimum load in compliance with ISO Dispatch Instructions.

**40.1.6.2 Criteria for Issuing Must-Offer Waivers.**

The ISO shall grant waivers so as to: 1) provide sufficient on-line generating capacity to meet operating reserve requirements; and 2) account for other physical operating constraints, including Generating Unit minimum up and down times. The ISO shall grant, deny or revoke waivers using a security-constrained unit commitment software application to minimize start-up and Minimum Load Costs.

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THIRD REPLACEMENT VOLUME NO. II

Substitute First Revised Sheet No. 502  
Superseding Original Sheet No. 502

Coordinator Ancillary

Service Trades

Inter-Scheduling

Energy transactions between Scheduling Coordinators.

Coordinator Energy

Trades

Inter-Zonal Congestion

Congestion across an Inter-Zonal Interface.

Inter-Zonal Interface

The (i) group of transmission paths between two adjacent Zones of the ISO Controlled Grid, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established or will be established prior to the use of the interface for Congestion Management; (ii) the group of transmission paths between an ISO Zone and an adjacent Scheduling Point, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established or will be established prior to the use of the interface for Congestion Management; (iii) the group of transmission paths between two adjacent Scheduling Points, where the group of paths has an established transfer capability and established transmission rights; or (iv) the Miguel or South of Lugo constraints whenever Congestion Management is necessary to mitigate Congestion due to flow from one or more Scheduling Points from adjacent Zones and/or due to generation within that Zone.

**Attachment B-2**

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**40.1.6.1.4.1.2 Zonal Reliability Requirements**

The ISO shall classify a Must Offer Generator unit as committed or operated for zonal reliability requirements when it is committed or operating to:

- (1) maintain operations within the requirements of any nomogram that governs the operations of an Inter-Zonal Interface;
- (2) maintain power flows on a transmission line that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface;
- (3) maintain acceptable voltage levels at a location that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface; or
- (4) accommodate the forced or scheduled outage of a network component that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface; or
- (5) ensure there is sufficient capacity available to meet Operating Reserve requirements within a particular Zone, if the ISO is procuring Operating Reserve on a zonal basis.

**40.1.6.1.4.1.3 ISO Control Area-wide Reliability Requirements**

The ISO shall classify a Must Offer Generator unit as committed or operated for ISO Control Area-wide reliability requirements when it is committed or operating to meet forecast Control Area Demand or committed to ensure sufficient capacity is available to meet Operating Reserve requirements, when the ISO is not procuring Operating Reserve on a zonal basis.

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## Appendix A

### Inter-Zonal Interface

The (i) group of transmission paths between two adjacent Zones of the ISO Controlled Grid, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established or will be established prior to the use of the interface for Congestion Management; (ii) the group of transmission paths between an ISO Zone and an adjacent Scheduling Point, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established or will be established prior to the use of the interface for Congestion Management; (iii) the group of transmission paths between two adjacent Scheduling Points, where the group of paths has an established transfer capability and established transmission rights; or (iv) a the Miguel or South of Lugo constraints whenever transmission path, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established that may require Congestion Management is necessary to mitigate Congestion due to flow scheduled from one or more Scheduling Points from adjacent Zones and/or due to generation within that Zone.

**ATTACHMENT C**



**Attachment C-1**

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION  
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THIRD REPLACEMENT VOLUME NO. I

Substitute Original Sheet No. 463S

**40.6B.5.1.1 Local Reliability Requirements**

The ISO shall classify a Generating Unit or System Unit for which the MSS Operator has contracted to supply Resource Adequacy Capacity to another entity as committed or operated for local reliability requirements when it is committed or operating to:

- (1) maintain power flows on a transmission component that is not part of a transmission path between Congestion Zones;
- (2) maintain acceptable voltage levels at a network location that is not part of a transmission path between Congestion Zones;
- (3) accommodate the forced or scheduled outage of a network component that is not part of a transmission path between Congestion Zones.

**40.6B.5.1.2 Zonal Reliability Requirements**

The ISO shall classify a Generating Unit or System Unit for which the MSS Operator has contracted to supply Resource Adequacy Capacity to another entity as committed or operated for zonal reliability requirements when it is committed or operating to:

- (1) maintain operations within the requirements of any nomogram that governs the operations of an Inter-Zonal Interface;
- (2) maintain power flows on a transmission line that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface;
- (3) maintain acceptable voltage levels at a location that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface;
- (4) accommodate the forced or scheduled outage of a network component that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface; or
- (5) ensure there is sufficient capacity available to meet Operating Reserve requirements within a particular Zone, if the ISO is procuring Operating Reserve on a zonal basis.

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Substitute Original Sheet No. 463T

**40.6B.5.1.3 ISO Control Area-wide Reliability Requirements**

The ISO shall classify a Generating Unit or System Unit for which the MSS Operator has contracted to supply Resource Adequacy Capacity to another entity as committed or operated for ISO Control Area-wide reliability requirements when it is committed or operating to meet forecast Control Area Demand or committed to ensure sufficient capacity is available to meet Operating Reserve requirements, when the ISO is not procuring Operating Reserve on a zonal basis.

**40.6B.5.1.4 Incremental Cost of Local**

Beginning October 1, 2004, when a Generating Unit or System Unit for which the MSS Operator has contracted to supply Resource Adequacy Capacity to another entity is committed for local reliability requirements, and that unit also meets an overall ISO Control Area-wide need, the ISO shall allocate only the incremental cost of committing that unit above the cost of committing the least-cost unit that would have been committed to resolve the ISO Control Area-wide reliability need absent the local reliability need, to the Participating TO.

**40.6B.6 Payment of Available Capacity under the Resource Adequacy Obligation.**

Available Generation of Resource Adequacy Resources that is required to be offered to the Real Time Market, if dispatched by the ISO, shall be settled as follows: the actual amount of the dispatched Energy shall be settled at the applicable Instructed Imbalance Energy Market Clearing Price. Un-Recovered Minimum Load Cost compensation shall be paid for all otherwise eligible hours within the Waiver Denial Period that the unit generated above minimum load in compliance with ISO Dispatch Instructions.

**40.7 FERC Must-Offer Obligations.**

**40.7.1 Applicability.**

The requirements of Section 40.7 shall apply to (a) all Participating Generators, and (b) all persons,

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Substitute First Revised Sheet No. 470.00  
Superseding Original Sheet No. 470.00

- (1) maintain operations within the requirements of any nomogram that governs the operations of an Inter-Zonal Interface;
- (2) maintain power flows on a transmission line that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface;
- (3) maintain acceptable voltage levels at a location that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface;
- (4) accommodate the forced or scheduled outage of a network component that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface; or
- (5) ensure there is sufficient capacity available to meet Operating Reserve requirements within a particular Zone, if the ISO is procuring Operating Reserve on a zonal basis.

**40.8.6.1.3 ISO Control Area-wide Reliability Requirements**

The ISO shall classify a FERC Must Offer Generator unit as committed or operated for ISO Control Area-wide reliability requirements when it is committed or operating to meet forecast Control Area Demand or committed to ensure sufficient capacity is available to meet Operating Reserve requirements, when the ISO is not procuring Operating Reserve on a zonal basis.

**40.8.6.1.4 Incremental Cost of Local**

Beginning October 1, 2004, when a FERC Must Offer Generator unit is committed for local reliability requirements, and that unit also meets an overall ISO Control Area-wide need, the ISO shall allocate only the incremental cost of committing that unit above the cost of committing the least-cost unit that would have been committed to resolve the ISO Control Area-wide reliability need absent the local reliability need, to the Participating TO.

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**40.8.7 Payment Of Available Generation Under The FERC Must-Offer Obligation.**

Available Generation that is required to be offered to the Real-Time Market, if dispatched by the ISO, shall be settled as follows: the actual amount of the dispatched Energy shall be settled at the applicable Instructed Imbalance Energy Market Clearing Price. Minimum Load Cost compensation shall be paid for all otherwise eligible hours within the Waiver Denial Period, as defined in Section 40.8.1, that the unit generated Energy above minimum operating level in compliance with ISO Dispatch Instructions.

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THIRD REPLACEMENT VOLUME NO. II

Substitute First Revised Sheet No. 502  
Superseding Original Sheet No. 502

**Coordinator Ancillary**

**Service Trades**

**Inter-Scheduling**

Energy transactions between Scheduling Coordinators.

**Coordinator Energy**

**Trades**

**Inter-Zonal Congestion**

Congestion across an Inter-Zonal Interface.

**Inter-Zonal Interface**

The (i) group of transmission paths between two adjacent Zones of the ISO Controlled Grid, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established or will be established prior to the use of the interface for Congestion Management; (ii) the group of transmission paths between an ISO Zone and an adjacent Scheduling Point, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established or will be established prior to the use of the interface for Congestion Management; (iii) the group of transmission paths between two adjacent Scheduling Points, where the group of paths has an established transfer capability and established transmission rights; or (iv) the Miguel or South of Lugo constraints whenever Congestion Management is necessary to mitigate Congestion due to flow from one or more Scheduling Points from adjacent Zones and/or due to generation within that Zone.

**Attachment C-2**

#### 40.6B.5.1.2 Zonal Reliability Requirements

The ISO shall classify a Generating Unit or System Unit for which the MSS Operator has contracted to supply Resource Adequacy Capacity to another entity as committed or operated for zonal reliability requirements when it is committed or operating to:

- (1) maintain operations within the requirements of any nomogram that governs the operations of an Inter-Zonal Interface;
- (2) maintain power flows on a transmission line that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface;
- (3) maintain acceptable voltage levels at a location that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface; or
- (4) accommodate the forced or scheduled outage of a network component that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface; or
- (5) ensure there is sufficient capacity available to meet Operating Reserve requirements within a particular Zone, if the ISO is procuring Operating Reserve on a zonal basis.

#### 40.6B.5.1.3 ISO Control Area-wide Reliability Requirements

The ISO shall classify a Generating Unit or System Unit for which the MSS Operator has contracted to supply Resource Adequacy Capacity to another entity as committed or operated for ISO Control Area-wide reliability requirements when it is committed or operating to meet forecast Control Area Demand or committed to ensure sufficient capacity is available to meet Operating Reserve requirements, when the ISO is not procuring Operating Reserve on a zonal basis.

\* \* \* \* \*



#### 40.8.6.1.2 Zonal Reliability Requirements

The ISO shall classify a FERC Must Offer Generator unit as committed or operated for zonal reliability requirements when it is committed or operating to:

- (6) maintain operations within the requirements of any nomogram that governs the operations of an Inter-Zonal Interface;
- (7) maintain power flows on a transmission line that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface;
- (8) maintain acceptable voltage levels at a location that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface; or
- (9) accommodate the forced or scheduled outage of a network component that is part of a transmission path between Congestion Zones or an Inter-Zonal Interface; or
- (10) ensure there is sufficient capacity available to meet Operating Reserve requirements within a particular Zone, if the ISO is procuring Operating Reserve on a zonal basis.

#### 40.8.6.1.3 ISO Control Area-wide Reliability Requirements

The ISO shall classify a FERC Must Offer Generator unit as committed or operated for ISO Control Area-wide reliability requirements when it is committed or operating to meet forecast Control Area Demand or committed to ensure sufficient capacity is available to meet Operating Reserve requirements, when the ISO is not procuring Operating Reserve on a zonal basis.

\* \* \* \* \*

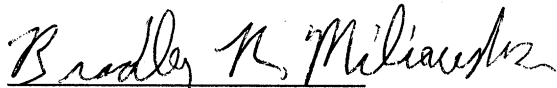
Inter-Zonal Interface

The (i) group of transmission paths between two adjacent Zones of the ISO Controlled Grid, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established or will be established prior to the use of the interface for Congestion Management; (ii) the group of transmission paths between an ISO Zone and an adjacent Scheduling Point, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established or will be established prior to the use of the interface for Congestion Management; (iii) the group of transmission paths between two adjacent Scheduling Points, where the group of paths has an established transfer capability and established transmission rights; or (iv) a the Miguel or South of Lugo constraints whenever transmission path, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established that may require Congestion Management is necessary to mitigate Congestion due to flow scheduled from one or more Scheduling Points from adjacent Zones and/or due to generation within that Zone.

### CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list for the captioned proceedings, in accordance with Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Washington, DC, on this 20<sup>th</sup> day of December, 2007.

  
Bradley R. Miliauskas  
Bradley R. Miliauskas