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February 26, 2007

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

**Re: *California Independent System Operator Corporation***  
**Docket No. ER04-835-\_\_\_\_\_**

***Pacific Gas and Electric Company v. California Independent***  
***System Operator Corporation***  
**Docket No. EL04-103-\_\_\_\_ (consolidated)**

Dear Secretary Salas:

Pursuant to the order issued by the Federal Energy Regulatory Commission ("Commission") in the above-captioned dockets on December 27, 2006, Order No. 492, *California Independent System Operator Corp.*, 117 FERC ¶ 61,348 (2006) ("the Order"), concerning revisions to the allocation of Minimum Load Cost Compensation ("MLCC") costs associated with the Must-Offer obligation, as proposed in Amendment No. 60 to the ISO Tariff, the California Independent System Operator Corporation ("CAISO") hereby submits an original and five copies of this filing in compliance with the Order.<sup>1</sup> The CAISO also is tendering two copies of this filing to be time and date stamped and returned to our courier.

## **I. BACKGROUND**

On May 11, 2004, the CAISO filed Amendment No. 60 to its tariff in Docket No. ER04-835-000. In Amendment No. 60, the CAISO proposed modifications to provisions of its tariff related to the implementation of the Must-Offer Obligation ("MOO"), including modifications to the CAISO's process for denying MOO waivers and allocating MOO costs and the establishment of conditions in which Condition 2 Reliability Must Run ("RMR") units could be dispatched by the CAISO under the ISO Tariff. On

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

May 18, 2004, Pacific Gas and Electric Company (“PG&E”) filed a complaint in Docket No. EL04-103-000 against the CAISO alleging that the CAISO’s methodology for allocating MOO costs to PG&E was unjust, unreasonable, and unduly discriminatory.

The Commission issued orders on July 8, 2004, consolidating the two dockets and setting the consolidated proceeding docket for hearing. *See California Independent System Operator Corp.*, 108 FERC ¶ 61,017 (2005) and *California Independent System Operator Corp.*, 108 FERC ¶ 61,022 (2005).

The hearing took place in the consolidated proceedings from June 28 through July 19, 2005. Presiding Administrative Law Judge H. Peter Young issued his Initial Decision on October 31, 2005,<sup>2</sup> and the Commission order on the initial decision was issued on December 27, 2006.

The CAISO makes this filing in compliance with the Order.

## II. CONTENTS OF FILING

This filing comprises:

This Transmittal Letter, together with

Attachment A	Tariff Mapping Table with Proposed Effective Dates
Attachment B	Clean Tariff Sheets effective July 17, 2004 through February 28, 2006
Attachment C	Blacklined Tariff Sheets effective July 17, 2004 through February 28, 2006
Attachment D	Clean Tariff Sheets effective March 1, 2006 through May 30, 2006
Attachment E	Blacklined Tariff Sheets effective March 1, 2006 through May 30, 2006
Attachment F	Clean Tariff Sheets effective May 31, 2006 forward.
Attachment G	Blacklined Tariff Sheets effective May 31, 2006 forward.

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<sup>2</sup> *California Independent System Operator Corp.*, 113 FERC ¶ 63,017 (2005).

### III. COMMUNICATIONS

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### IV. EXPLANATION OF THE TARIFF SHEETS INCLUDED IN THIS FILING

The effective date for the Amendment No. 60 changes being made in today's filing is July 17, 2004. Order at P 114. Since that time, many of the relevant sections of the ISO Tariff have been revised substantially, including the complete tariff overhaul resulting in 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, for most of the changes being made today to be effective for the entire period from July 17, 2004 forward, **three** separate sets of tariff sheets (both clean and redlined versions of each set), are being filed. The CAISO requests that **each** of these sets of tariff sheets be made effective in turn for the 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:

- The pre-Simplified and Reorganized Tariff, effective July 17, 2004 through February 28, 2006;
- The original Simplified and Reorganized Tariff, effective March 1, 2006 through May 30, 2006; and
- The current Simplified and Reorganized Tariff, effective May 31, 2006 through the current time.

Again, the CAISO respectfully requests that **each** of these sets of tariff sheets be made effective for their respective timeframes, in order to capture the July 17, 2004 effective date of the language of this compliance filing.

## **V. DESCRIPTION OF MODIFICATIONS TO THE TARIFF IN COMPLIANCE WITH THE ORDER**

### **A. Attachment E**

In the Order, the Commission directed the CAISO to incorporate the allocation criteria the CAISO had included in Attachment E to the May 11, 2004 filing of Amendment No. 60, as modified by the Order, into the CAISO Tariff. Order at P 25. To accomplish this, the CAISO includes in this filing revisions of and additions to Section 40.8.6 *et seq.* of the currently-effective ISO Tariff to be effective May 31, 2006 forward, and to the parallel sections of the previous versions of the tariff dating back to July 17, 2004.

### **B. Allocation of Start-Up and Emissions Costs<sup>3</sup>**

In the Order, the Commission directed the CAISO to allocate Start-Up and Emissions Costs associated with the MOO in the same manner in which MLCC costs are allocated. Order at P 98. To accomplish this, the CAISO includes in this filing revisions of and additions to Sections 40.11.1, 40.11.3, 40.11.4 (with regard to Emissions Costs) and to Sections 40.12.1, 40.12.3, and 40.12.4 (with regard to Start-Up Costs) of the currently effective ISO Tariff to be effective May 31, 2006 forward, and to the parallel sections of the previous versions of the tariff dating back to July 17, 2004.

### **C. Resource Adequacy**

In the Order, the Commission noted that “the CAISO’s Reliability Capacity Services Tariff in Docket No. EL05-146-000 and the Interim Reliability Requirements Program in Docket No. ER06-723-000, *et al.*, which both will terminate with MRTU implementation, will also follow this cost allocation methodology.” Order at P 6, note 10. To accomplish this, the CAISO includes in this filing revisions of and additions to

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<sup>3</sup> On January 26, 2007, the CAISO filed a Request for Rehearing and Clarification of the Order. As relevant here, the CAISO requested clarification, or in the alternative rehearing, that the CAISO may use estimated Start-Up and Emissions Costs related to must-offer waiver denials in allocating such costs to Market Participants. Indeed, the CAISO explained that it does not have actual data available for calculating Start-Up and Emissions Costs as it does for MLCC costs. Request for Clarification and Rehearing at 16-17. The tariff language included in this filing therefore calls for the use of estimates of such costs in performing the allocation.

Section 40.6B.5 *et seq.* of the currently effective ISO Tariff to be effective May 31, 2006 forward.<sup>4</sup>

#### **D. Wheel-Through Schedules**

The Commission found that it is not just and reasonable to allocate MLCC costs to wheel-through transactions to control areas within California. Order at P 90. To comply with the Commission's ruling, the CAISO in this filing adds language to Section 40.8.6(3)(b) of the currently-effective ISO Tariff (and the parallel sections in the previous versions of the ISO Tariff dating back to July 17, 2004) to clarify that such cost allocation is not permitted.

#### **E. Definition of Inter-Zonal Interface**

The Commission directs the CAISO "to modify the tariff definition of inter-zonal interface in order to more accurately describe the function of" the Miguel constraint. Order at P 31. The CAISO therefore includes in this filing a modified definition of Inter-Zonal Interface in the Master Definitions Supplement, Appendix A to versions of the ISO Tariff to be effective July 17, 2004 through February 28, 2006 and March 1, 2006 through the present time.<sup>5</sup>

### **VI. POSTING OF DATA FOR CALCULATING INCREMENTAL COST OF LOCAL**

The Commission affirmed the Presiding Judge's finding that the "net incremental cost of local" calculation was just and reasonable. It also supported his conclusion that

the CAISO should be required ...to post on its website adequate information to provide market participants with the ability to confirm the appropriateness/accuracy of its net incremental cost of local allocations.

Order at PP 42, 49. No tariff language is necessary to implement this directive. In fact, the CAISO has been posting the required data since trade date October 1, 2004. The data is available at: <http://oasis.caiso.com/>, under the Real-Time tab. The data is contained in two different reports since the implementation of Resource Adequacy on June 1, 2006. For trade dates October 1, 2004 through May 31, 2006, the data is located in the Must

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<sup>4</sup> The resource adequacy tariff language being revised today is a product of the Interim Reliability Requirements filing in Docket Nos. ER06-723, *et al.* There were no relevant tariff sections dealing with resource adequacy as it now exists in previous versions of the ISO Tariff. For this reason, only one set of revised tariff language pertaining to resource adequacy is included in this filing.

<sup>5</sup> Because the relevant page of Appendix A did not change between the March 1, 2006 and May 31, 2006 versions of the Simplified and Reorganized Tariff, there is no need to include a third iteration of the tariff section containing the definition in this filing.

Offer Obligation – MLC report. For trade dates June 1, 2006 to the present, the data is located in the Commitment Results report. The data contained in both reports include the following information: (1) number of units committed; (2) total minimum Load in megawatts; (3) total capacity ordered online; (4) total MLCC in dollars; and (5) total startup cost in dollars.

## VII. CONCLUSION

For the reasons set forth above, the CAISO respectfully requests that the Commission accept its proposed modifications to the ISO Tariff, in compliance with the Commission's December 27 Order.

Respectfully submitted,

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# ATTACHMENT A

**Tariff Mapping Table For Amendment No. 60 Compliance Filing**

<b>Pre-Simplified and Reorganized (effective 7/17/04)</b>	<b>March 2006 Simplified and Reorganized (effective 3/1/06)</b>	<b>Current Simplified and Reorganized (effective 5/31/06)</b>
none	none	40.6B.5 et seq.
5.11.6.1.4	40.1.6.1.4	40.8.6
5.11.6.1.4.1	40.1.6.1.4.1	40.8.6.1
5.11.6.1.4.1.1	40.1.6.1.4.1.1	40.8.6.1.1
5.11.6.1.4.1.2	40.1.6.1.4.1.2	40.8.6.1.2
5.11.6.1.4.1.3	40.1.6.1.4.1.3	40.8.6.1.3
5.11.6.1.4.1.4	40.1.6.1.4.1.4	40.8.6.1.4
2.5.23.3.6	40.1.9	40.11
2.5.23.3.6.1	40.1.9.1	40.11.1
2.5.23.3.6.2	40.1.9.2	40.11.2
2.5.23.3.6.3	40.1.9.3	40.11.3
2.5.23.3.6.4	40.1.9.4	40.11.4
2.5.23.3.6.5	40.1.9.5	40.11.5
2.5.23.3.6.6	40.1.9.6	40.11.6
2.5.23.3.6.7	40.1.9.7	40.11.7
2.5.23.3.7	40.1.10	40.12
2.5.23.3.7.1	40.1.10.1	40.12.1
2.5.23.3.7.2	40.1.10.2	40.12.2
2.5.23.3.7.3	40.1.10.3	40.12.3
2.5.23.3.7.4	40.1.10.4	40.12.4
2.5.23.3.7.5	40.1.10.5	40.12.5
Attachment A	Attachment A	none

## ATTACHMENT B

**2.5.23.3.6 Emissions Costs**

**2.5.23.3.6.1 Obligation to Pay Emissions Cost Charges**

Each Scheduling Coordinator shall be obligated to pay a charge which will be used to pay the verified Emissions Costs incurred by a Must-Offer Generator as a direct result of an ISO Dispatch instruction, in accordance with this Section 2.5.23.3.6. The ISO shall levy this administrative charge (the "Emissions Cost Charge") each month, in two parts: 1) All Emission Costs attributed to minimum load Energy will be allocated to Scheduling Coordinators in proportion to and in a similar manner as each Scheduling Coordinator's Minimum Load Cost obligation per Section 5.11.6.1.4.1. The amount of Emissions Costs attributed to minimum load Energy will be determined by dividing the total megawatt hours eligible for Minimum Load Cost compensation for the month by the total megawatt hours of Instructed Imbalance Energy for the month. The resulting percentage is then multiplied by the Emissions Cost Charges for the month to determine the Emission Costs attributed to minimum load Energy. The proportion of Emissions Costs to Minimum Load Costs will be determined by dividing the total Emissions Costs attributed to minimum load Energy for the month by the total Minimum Load Costs for the month. 2) All Emission Costs resulting from an ISO dispatch but not attributable to minimum load Energy will be allocated to all Scheduling Coordinators based upon each Scheduling Coordinator's Control Area Gross Load and Demand within California outside of the ISO Control Area that is served by exports from the ISO Control Area. Scheduling Coordinators shall make payment for all Emissions Cost Charges in accordance with the ISO Payments Calendar.

**2.5.23.3.6.2 Emissions Cost Trust Account**

All Emissions Cost Charges received by the ISO shall be deposited in the Emissions Cost Trust Account. The Emissions Cost Trust Account shall be an interest-bearing account separate from all other accounts maintained by the ISO, and no other funds shall be commingled in it at any time.

**2.5.23.3.6.3 Emissions Cost Charge**

The amount the ISO will assess for the Emissions Cost Charge shall be the projected annual total of all Emissions Costs incurred by Must-Offer Generators as a direct result of ISO

Dispatch instruction, adjusted for interest projected to be earned on the monies in the Emissions Cost Trust Account, divided by twelve (12) months. The initial amount for the Emissions Cost Charge, and all subsequent amounts for the Emissions Cost Charge, shall be posted on the ISO Home Page.

**2.5.23.3.6.4 Adjustment of the Emissions Cost Charge**

The ISO may adjust the amount the ISO will assess for the Emissions Cost Charge on a monthly basis, as necessary, to reflect the net effect of the following:

- (a) the difference, if any, between actual Emissions Cost Demand and projected Emissions Cost Demand;
- (b) the difference, if any, between the projections of the Emissions Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instructions and the actual Emissions Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instructions as invoiced to the ISO and verified in accordance with this Section 2.5.23.3.6; and
- (c) the difference, if any, between actual and projected interest earned on funds in the Emissions Cost Trust Account.

The adjusted amount the ISO will assess for the Emissions Cost Charge shall take effect on a prospective basis on the first day of the next calendar month. The ISO shall publish all data and calculations used by the ISO as a basis for such an adjustment on the ISO Home Page at least five (5) days in advance of the date on which the new amount shall be assessed.

**2.5.23.3.6.5 Credits and Debits of Emissions Cost Charges Collected from Scheduling Coordinators**

In addition to the surcharges or credits permitted under Section 11.6.3.3 of this ISO Tariff, the

the ISO will assess the Emissions Cost Charge in accordance with Section 2.5.23.3.6.4. Any outstanding Emissions Costs owed from previous months will be paid in the order of the month in which such costs were invoiced to the ISO. The ISO's obligation to pay Emissions Costs is limited to the obligation to pay Emissions Cost Charges received. All disputes concerning payment of Emissions Cost Invoices shall be subject to ISO ADR Procedures, in accordance with Section 13 of this ISO Tariff.

**2.5.23.3.7 Start-Up Costs**

**2.5.23.3.7.1 Obligation to Pay Start-Up Cost Charges**

Each Scheduling Coordinator shall be obligated to pay a charge which will be used to pay the verified Start-Up Costs incurred by a Must-Offer Generator as a direct result of an ISO Dispatch instruction, in accordance with this Section 2.5.23.3.7. Such Start-Up Costs shall include (1) fuel and (2) auxiliary power. The ISO shall levy this charge (the "Start-Up Cost Charge"), each month, against all Scheduling Coordinators in proportion to and in a similar manner as each Scheduling Coordinator's Minimum Load Cost obligation under Section 5.11.6.1.4.1. The proportion of Start-Up Costs to Minimum Load Costs will be determined by dividing the total Start-Up Cost Charge for the month by the total Minimum Load Costs for the month. The proportion of Start-Up Costs will then be multiplied by the individual Scheduling Coordinator's Minimum Load Costs for the month to determine the Scheduling Coordinator's Start-Up Cost Charge. Scheduling Coordinators shall make payment for all Start-Up Cost Charges in accordance with the ISO Payments Calendar.

**2.5.23.3.7.2 Start-Up Cost Trust Account**

All Start-Up Cost Charges received by the ISO shall be deposited in the Start-Up Cost Trust Account. The Start-Up Cost Trust Account shall be an interest-bearing account separate from all other accounts maintained by the ISO, and no other funds shall be commingled in it at any time.

**2.5.23.3.7.3 Start-Up Cost Charge**

The amount the ISO will assess for the Start-Up Cost Charge shall be the projected annual total of all Start-Up Costs incurred by Must-Offer Generators as a direct result of

ISO Dispatch instruction, adjusted for interest projected to be earned on the monies in the Start-Up Cost Trust Account, divided by twelve (12) months. The initial amount for the Start-Up Cost Charge, and all subsequent amounts for the Start-Up Cost Charge, shall be posted on the ISO Home Page.

**2.5.23.3.7.4 Adjustment of the Start-Up Cost Charge**

The ISO may adjust the amount the ISO will assess for the Start-Up Cost Charge on a monthly basis, as necessary, to reflect the net effect of the following:

- (a) the difference, if any, between the projections of the Start-Up Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instructions and the actual Start-Up Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instructions as invoiced to the ISO and verified in accordance with this Section 2.5.23.3.7; and
- (b) the difference, if any, between actual and projected interest earned on funds in the Start-Up Cost Trust Account.

The adjusted amount the ISO will assess for the Start-Up Cost Charge shall take effect on a prospective basis on the first day of the next calendar month. The ISO shall publish all data and calculations used by the ISO as a basis for such an adjustment on the ISO Home Page at least five (5) days in advance of the date on which the new amount shall be assessed.

**2.5.23.3.7.5 Credits and Debits of Start-Up Cost Charges Collected from Scheduling Coordinators**

In addition to the surcharges or credits permitted under Section 11.6.3.3 of this ISO Tariff, the

submit to the ISO data detailing the hours for which they are eligible to recover Minimum Load Costs. Scheduling Coordinators who elect to submit data on hours they are eligible to recover Minimum Load Costs must: 1) use the Minimum Load Cost invoice template posted on the ISO Home Page, and 2) submit the invoice on or before fifteen (15) Business Days following the last Trading Day in the month in which such costs were incurred, except that Scheduling Coordinators seeking reimbursement for Minimum Load Costs incurred between May 29, 2001, and June 30, 2002 must submit their data to the ISO by August 5, 2002.

**5.11.6.1.4 Allocation of Minimum Load Costs**

For each Settlement Interval, the ISO shall determine whether the Minimum Load Costs for each unit operating during a Waiver Denial Period are due to (1) local reliability requirements, (2) zonal reliability requirements, or (3) ISO Control Area-wide reliability requirements pursuant to Section 5.11.6.1.4.1. On a monthly basis, the ISO shall sum the Settlement Interval Minimum Load Costs and shall allocate those costs as follows:

- 1) if the Generating Unit was operating to meet local reliability requirements, the cost shall be allocated to the Participating TO in whose PTO Service Territory the Generating Unit is located, or, where the Generating Unit is located outside the PTO Service Territory of any Participating TO, to the Participating TO or Participating TOs whose PTO Service Territory or Territories are contiguous to the Service Area in which the Generating Unit is located, in proportion to the benefits that each such Participating TO receives, as determined by the ISO. Where the costs allocated under this section are allocated to two or more Participating TOs, the ISO shall file the allocation under Section 205 of the Federal Power Act. Costs allocated under this part (1) shall be considered Reliability Services Costs.

- 2) if the Generating Unit was operating to meet zonal reliability requirements, the Minimum Load Costs shall be allocated on a monthly basis to each Scheduling Coordinator in the constrained Zone based on the ratio of that Scheduling Coordinator's monthly Demand to the sum of all Scheduling Coordinators' monthly Demand in that Zone;
- 3) if the Generating Unit was operating to meet ISO Control Area-wide reliability requirements, the ISO shall allocate the Minimum Load Costs in the following way:
  - a. first, to the monthly absolute total of all Net Negative Uninstructed Deviation (determined for each Settlement Interval based on Final Hour-Ahead Schedules) at a per-MWh rate that shall not exceed a figure that is determined by dividing the total Minimum Load Cost in that month by the sum of the minimum loads for Generating Units operating under Waiver Denial Periods in that month;
  - b. finally, all remaining costs not allocated per (a) shall be allocated to each Scheduling Coordinator in proportion to the sum of that Scheduling Coordinator's monthly Control Area Gross Load and Demand within California outside the ISO Control Area that is served by exports to the monthly sum of the ISO Control Area Gross Load and the projected Demand within California outside the ISO Control Area that is served by exports from the ISO Control Area of all Scheduling Coordinators, except that Demand outside the ISO Control Area that is served by exports that are scheduled as part of a Wheeling Through transaction shall be excluded from the calculation of such allocations.

**5.11.6.1.4.1 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.

**5.11.6.1.4.1.1 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; or
- (3) accommodate the forced or scheduled outage of a network component that is not part of a transmission path between Congestion Zones.

**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.

**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.

**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.

**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

**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 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.

**Interconnection**

Transmission facilities, other than additions or replacements to existing facilities that: i) connect one system to another system where the facilities emerge from one and only one substation of the two systems and are functionally separate from the ISO Controlled Grid facilities such that the facilities are, or can be, operated and planned as a single facility; or ii) are identified as radial transmission lines pursuant to contract; or iii) produce Generation at a single point on the ISO Controlled Grid; provided that such interconnection does not include facilities that, if not owned by the Participating TO, would result in a reduction in the ISO's Operational Control of the Participating TO's portion of the ISO Controlled Grid.

## ATTACHMENT C

### **2.5.23.3.6 Emissions Costs**

#### **2.5.23.3.6.1 Obligation to Pay Emissions Cost Charges**

Each Scheduling Coordinator shall be obligated to pay a charge which will be used to pay the verified Emissions Costs incurred by a Must-Offer Generator as a direct result of an ISO Dispatch instruction, in accordance with this Section 2.5.23.3.6. The ISO shall levy this administrative charge (the "Emissions Cost Charge") each month, in two parts: 1) All Emission Costs attributed to minimum load Energy will be allocated to Scheduling Coordinators in proportion to and in a similar manner as each Scheduling Coordinator's Minimum Load Cost obligation per Section 5.11.6.1.4.1. The amount of Emissions Costs attributed to minimum load Energy will be determined by dividing the total megawatt hours eligible for Minimum Load Cost compensation for the month by the total megawatt hours of Instructed Imbalance Energy for the month. The resulting percentage is then multiplied by the Emissions Cost Charges for the month to determine the Emission Costs attributed to minimum load Energy. The proportion of Emissions Costs to Minimum Load Costs will be determined by dividing the total Emissions Costs attributed to minimum load Energy for the month by the total Minimum Load Costs for the month. 2) All Emission Costs resulting from an ISO dispatch but not attributable to minimum load Energy will be allocated to against all Scheduling Coordinators based upon each Scheduling Coordinator's Control Area Gross Load and Demand within California outside of the ISO Control Area that is served by exports from the ISO Control Area. Scheduling Coordinators shall make payment for all Emissions Cost Charges in accordance with the ISO Payments Calendar.

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#### **2.5.23.3.6.3 ~~Rate For the Emissions Cost Charge~~**

The ~~rate at which~~ amount the ISO will assess for the Emissions Cost Charge shall be ~~at the~~ projected annual total of all Emissions Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instruction, adjusted for interest projected to be earned on the monies in the Emissions Cost Trust Account, divided by twelve (12) months. ~~the sum of the Control Area Gross Load and the projected~~

~~Demand within California outside of the ISO Control Area that is served by exports from the ISO Control Area of all Scheduling Coordinators for the applicable year (“Emissions Cost Demand”).~~ The initial rate~~amount~~ for the Emissions Cost Charge, and all subsequent rates~~amounts~~ for the Emissions Cost Charge, shall be posted on the ISO Home Page.

#### **2.5.23.3.6.4 Adjustment of the ~~Rate For the Emissions Cost Charge~~**

The ISO may adjust the ~~rate at which~~amount the ISO will assess for the Emissions Cost Charge on a monthly basis, as necessary, to reflect the net effect of the following:

- (a) the difference, if any, between actual Emissions Cost Demand and projected Emissions Cost Demand;
- (b) the difference, if any, between the projections of the Emissions Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instructions and the actual Emissions Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instructions as invoiced to the ISO and verified in accordance with this Section 2.5.23.3.6; and
- (c) the difference, if any, between actual and projected interest earned on funds in the Emissions Cost Trust Account.

The adjusted amount~~rate at which~~ the ISO will assess for the Emissions Cost Charge shall take effect on a prospective basis on the first day of the next calendar month. The ISO shall publish all data and calculations used by the ISO as a basis for such an adjustment on the ISO Home Page at least five (5) days in advance of the date on which the new ~~rate shall go into effect~~amount shall be assessed.

\* \* \* \* \*

#### **2.5.23.3.7 Start-Up Costs**

##### **2.5.23.3.7.1 Obligation to Pay Start-Up Cost Charges**

Each Scheduling Coordinator shall be obligated to pay a charge which will be used to pay the verified Start-Up Costs incurred by a Must-Offer Generator as a direct result of an ISO Dispatch instruction, in accordance with this Section 2.5.23.3.7. Such Start-Up Costs shall include (1) fuel and (2) auxiliary power. The ISO shall levy this charge (the “Start-Up Cost Charge”), each month, against all Scheduling

Coordinators in proportion to and in a similar manner as based upon each Scheduling Coordinator's Minimum Load Cost obligation under Section 5.11.6.1.4.1, Control Area Gross Load and Demand within California outside of the ISO Control Area that is served by exports from the ISO Control Area. The proportion of Start-Up Costs to Minimum Load Costs will be determined by dividing the total Start-Up Cost Charge for the month by the total Minimum Load Costs for the month. The proportion of Start-Up Costs will then be multiplied by the individual Scheduling Coordinator's Minimum Load Costs for the month to determine the Scheduling Coordinator's Start-Up Cost Charge. Scheduling Coordinators shall make payment for all Start-Up Cost Charges in accordance with the ISO Payments Calendar.

\* \* \* \* \*

#### **2.5.23.3.7.3 Rate For the Start-Up Cost Charge**

The ~~rate at which~~ amount the ISO will assess for the Start-Up Cost Charge shall be at the projected annual total of all Start-Up Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instruction, adjusted for interest projected to be earned on the monies in the Start-Up Cost Trust Account, divided by twelve (12) months, ~~the sum of the Control Area Gross Load and the projected Demand within California outside of the ISO Control Area that is served by exports from the ISO Control Area ("Start-Up Cost Demand")~~. The initial amount rate for the Start-Up Cost Charge, and all subsequent amounts rates for the Start-Up Cost Charge, shall be posted on the ISO Home Page.

#### **2.5.23.3.7.4 Adjustment of the Rate For the Start-Up Cost Charge**

The ISO may adjust the amount rate at which the ISO will assess for the Start-Up Cost Charge on a monthly basis, as necessary, to reflect the net effect of the following:

- (a) ~~the difference, if any, between actual Start-Up Cost Demand and projected Start-Up Cost Demand;~~
- (~~a~~b) the difference, if any, between the projections of the Start-Up Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instructions and the actual Start-Up Costs incurred

by Must-Offer Generators as a direct result of ISO Dispatch instructions as invoiced to the ISO and verified in accordance with this Section 2.5.23.3.7; and

(be) the difference, if any, between actual and projected interest earned on funds in the Start-Up Cost Trust Account.

The adjusted ~~amount~~rate at which the ISO will assess for the Start-Up Cost Charge shall take effect on a prospective basis on the first day of the next calendar month. The ISO shall publish all data and calculations used by the ISO as a basis for such an adjustment on the ISO Home Page at least five (5) days in advance of the date on which the new ~~rate shall go into effect~~amount shall be assessed.

\* \* \* \* \*

#### 5.11.6.1.4 Allocation of Minimum Load Costs

For each Settlement Interval, the ISO shall determine ~~that whether~~ the Minimum Load Costs for each unit operating during a Waiver Denial Period are due to (1) local reliability requirements, (2) zonal reliability requirements, or (3) ISO Control Area-wide reliability requirements pursuant to Section 5.11.6.1.4.1. On a monthly basis~~For each such month~~, the ISO shall sum the Settlement Interval Minimum Load Costs and shall allocate those costs as follows:

- 1) if the Generating Unit was operating to meet local reliability requirements, the ~~incremental locational~~ cost shall be allocated to the Participating TO in whose PTO Service Territory the Generating Unit is located, or, where the Generating Unit is located outside the PTO Service Territory of any Participating TO, to the Participating TO or Participating TOs whose PTO Service Territory or Territories are contiguous to the Service Area in which the Generating Unit is located, in proportion to the benefits that each such Participating TO receives, as determined by the ISO. Where the costs allocated under this section are allocated to two or more Participating TOs, the ISO shall file the allocation under Section 205 of the Federal Power Act. ~~For the purposes of this section, the incremental locational cost shall be the additional costs associated with committing and operating a particular unit or units to meet a local reliability requirement over the costs of a less expensive unit or units that would have been committed and operated absent the local reliability requirement. If a unit~~

~~is committed in real-time for local reliability, its Minimum Load costs shall be considered incremental locational costs.~~ Costs allocated under this part (1) shall be considered Reliability Services Costs.

- 2) if the Generating Unit was operating to ~~meet~~due to Inter-Zonal Congestion zonal reliability requirements, the Minimum Load Costs shall be allocated on a monthly basis to each Scheduling Coordinator in the constrained Zone based on the ratio of that Scheduling Coordinator's monthly Demand to the sum of all Scheduling Coordinator's' monthly Demand in that Zone;
- 3) if the Generating Unit was operating to ~~meet~~satisfy an ISO Control Area-wide need reliability requirements, the ISO shall allocate the Minimum Load Costs in the following way:
  - a. first, to the monthly absolute total of all Net Negative Uninstructed Deviation (determined for each Settlement Interval based on Final Hour-Ahead Schedules) at a per-MWh rate that shall not exceed a figure that is determined by dividing the total Minimum Load Cost in that month by the sum of the minimum loads for Generating Units operating under Waiver Denial Periods in that month;
  - b. finally, all remaining costs not allocated per (a) shall be allocated to each Scheduling Coordinator in proportion to the sum of that Scheduling Coordinator's monthly Control Area Gross Load and Demand within California outside the ISO Control Area that is served by exports to the monthly sum of the ISO Control Area Gross Load and the projected Demand within California outside the ISO Control Area that is served by exports from the ISO Control Area of all Scheduling Coordinators, except that Demand outside the ISO Control Area that is served by exports that are scheduled as part of a Wheeling Through transaction shall be excluded from the calculation of such allocations.

#### **5.11.6.1.4.1 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.

**5.11.6.1.4.1.1 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; or
- (3) accommodate the forced or scheduled outage of a network component that is not part of a transmission path between Congestion Zones.

**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.

**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.

#### **5.11.6.1.4.1.4 Incremental Cost of Local**

Beginning October 1, 2004, when a 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.

\* \* \* \* \*

### **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; ~~or~~ (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 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.

## ATTACHMENT D

product of the unit's average heat rate (as determined by the ISO from the data provided in accordance with Section 40.1.7) at the unit's relevant minimum operating level or Dispatchable minimum operating level as set forth in the ISO Master File or as amended through notification to the ISO via SLIC and the gas price determined by Equation C1-8 (Gas) of the Schedules to the Reliability Must-Run Contract for the relevant Service Area (San Diego Gas & Electric Company, Southern California Gas Company, or Pacific Gas and Electric Company), or, if the Must-Offer Generator is not served from one of those three Service Areas; and 2) the product of the unit's relevant minimum operating level or Dispatchable minimum operating level as set forth in the ISO Master File or as amended through notification to the ISO via SLIC; and \$6.00/MWh.

**40.1.6.1.3 Invoicing Minimum Load Costs.**

The ISO shall determine each Scheduling Coordinator's Minimum Load Costs and make payments for these costs as part of the ISO's market settlement process. Scheduling Coordinators may submit to the ISO data detailing the hours for which they are eligible to recover Minimum Load Costs. Scheduling Coordinators who elect to submit data on hours they are eligible to recover Minimum Load Costs must: 1) use the Minimum Load Cost invoice template posted on the ISO Home Page, and 2) submit the invoice on or before fifteen (15) Business Days following the last Trading Day in the month in which such costs were incurred, except that Scheduling Coordinators seeking reimbursement for Minimum Load Costs incurred between May 29, 2001, and June 30, 2002 must submit their data to the ISO by August 5, 2002.

**40.1.6.1.4 Allocation of Minimum Load Costs.**

For each Settlement Interval, the ISO shall determine whether the Minimum Load Costs for each unit operating during a Waiver Denial Period are due to (1) local reliability requirements, (2) zonal reliability requirements, or (3) ISO Control Area-wide reliability requirements pursuant to Section 40.1.6.1.4.1. On a monthly basis, the ISO shall sum the Settlement Interval Minimum Load Costs and shall allocate those costs as follows:

- (1) if the Generating Unit was operating to meet local reliability requirements, the cost shall be allocated to the Participating TO in whose PTO Service Territory the Generating Unit is located, or, where the Generating Unit is located outside the PTO Service Territory of

any Participating TO, to the Participating TO or Participating TOs whose PTO Service Territory or Territories are contiguous to the Service Area in which the Generating Unit is located, in proportion to the benefits that each such Participating TO receives, as determined by the ISO. Where the costs allocated under this section are allocated to two or more Participating TOs, the ISO shall file the allocation under Section 205 of the Federal Power Act. Costs allocated under this part (1) shall be considered Reliability Services Costs.

- (2) if the Generating Unit was operating to meet zonal reliability requirements, the Minimum Load Costs shall be allocated on a monthly basis to each Scheduling Coordinator in the constrained Zone based on the ratio of that Scheduling Coordinator's monthly Demand to the sum of all Scheduling Coordinators' monthly Demand in that Zone;
- (3) if the Generating Unit was operating to meet ISO Control Area-wide reliability requirements, the ISO shall allocate the Minimum Load Costs in the following way:
  - a. first, to the monthly absolute total of all Net Negative Uninstructed Deviation (determined for each Settlement Interval based on Final Hour-Ahead Schedules) at a per-MWh rate that shall not exceed a figure that is determined by dividing the total Minimum Load Cost in that month by the sum of the minimum loads for Generating Units operating under Waiver Denial Periods in that month;
  - b. finally, all remaining costs not allocated per (a) shall be allocated to each Scheduling Coordinator in proportion to the sum of that Scheduling Coordinator's monthly Control Area Gross Load and Demand within California outside the ISO Control Area that is served by exports to the monthly sum of the ISO Control Area Gross Load and the projected Demand within California outside the ISO Control Area that is served by exports from the ISO Control Area of all Scheduling Coordinators; except that Demand outside the ISO Control Area that is served by exports that are scheduled as part of a Wheeling Through transaction shall be excluded from the calculation of such allocations.

**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; or
- (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; 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.

**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.

**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.

**40.1.7 Requirement of Must-Offer Generators to File Heat Rate and Emissions Rate Data.**

Must-Offer Generators, as defined in Section 40.1 of this ISO Tariff, that own or control gas-fired Generating Units must file with the ISO and the FERC, on a confidential basis, the heat rates and emissions rates for each gas-fired Generating Unit that they own or control. Heat rate and emissions rate data shall be provided in the format specified by the ISO as posted on the ISO Home Page. Heat rate data provided to comply with this requirement shall not include start-up or minimum load fuel costs. Must-Offer Generators must also file periodic updates of this data upon the direction of either FERC or the ISO. The ISO will treat the information provided to the ISO in accordance with this Section 40.1.7 as confidential and will apply the procedures in Section 20.4 of this ISO Tariff with regard to requests for disclosure of such information.

**40.1.8 Calculation of the Proxy Price.**

The ISO shall calculate each day separate Proxy Prices for each gas-fired Generating Unit owned or controlled by a Must-Offer Generator by applying the filed heat rates for those Generating Units to a daily proxy figure for natural gas costs with an additional \$6/MWh allowed for operations and maintenance expenses. The proxy figures for natural gas costs shall be based on the most recent data available and shall be posted on the ISO Home Page by 8:00 AM on the day prior to which the figures will be used for calculation of the Proxy Price.

**40.1.9 Emissions Costs.**

**40.1.9.1 Obligation to Pay Emissions Cost Charges.**

Each Scheduling Coordinator shall be obligated to pay a charge which will be used to pay the verified Emissions Costs incurred by a Must-Offer Generator as a direct result of an ISO Dispatch instruction, in accordance with this Section 40.1.9. The ISO shall levy this administrative charge (the "Emissions Cost Charge") each month, in two parts: 1) All Emission Costs attributed to minimum load Energy will be allocated to Scheduling Coordinators in proportion to and in a similar manner as each Scheduling

Coordinator's Minimum Load Cost obligation per Section 40.1.6.1.4. The amount of Emissions Costs attributed to minimum load Energy will be determined by dividing the total megawatt hours eligible for Minimum Load Cost compensation for the month by the total megawatt hours of Instructed Imbalance Energy for the month. The resulting percentage is then multiplied by the Emissions Cost Charges for the month to determine the Emission Costs attributed to minimum load Energy. The proportion of Emissions Costs to Minimum Load Costs will be determined by dividing the total Emissions Costs attributed to minimum load Energy for the month by the total Minimum Load Costs for the month. 2) All Emission Costs resulting from an ISO dispatch but not attributable to minimum load Energy will be allocated to all Scheduling Coordinators based upon each Scheduling Coordinator's Control Area Gross Load and Demand within California outside of the ISO Control Area that is served by exports from the ISO Control Area. Scheduling Coordinators shall make payment for all Emissions Cost Charges in accordance with the ISO Payments Calendar.

**40.1.9.2 Emissions Cost Trust Account.**

All Emissions Cost Charges received by the ISO shall be deposited in the Emissions Cost Trust Account. The Emissions Cost Trust Account shall be an interest-bearing account separate from all other accounts maintained by the ISO, and no other funds shall be commingled in it at any time.

**40.1.9.3 Emissions Cost Charge.**

The amount the ISO will assess for the Emissions Cost Charge shall be the projected annual total of all Emissions Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instruction, adjusted for interest projected to be earned on the monies in the Emissions Cost Trust Account, divided by twelve (12) months. The initial amount for the Emissions Cost Charge, and all subsequent amounts for the Emissions Cost Charge, shall be posted on the ISO Home Page.

**40.1.9.4 Adjustment of the Emissions Cost Charge.**

The ISO may adjust the amount the ISO will assess for the Emissions Cost Charge on a monthly basis, as necessary, to reflect the net effect of the following:

- (a) the difference, if any, between actual Emissions Cost Demand and projected Emissions Cost Demand;
- (b) the difference, if any, between the projections of the Emissions Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instructions and the actual Emissions Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instructions as invoiced to the ISO and verified in accordance with this Section 40.1.9; and
- (c) the difference, if any, between actual and projected interest earned on funds in the Emissions Cost Trust Account.

The adjusted amount the ISO will assess for the Emissions Cost Charge shall take effect on a prospective basis on the first day of the next calendar month. The ISO shall publish all data and

calculations used by the ISO as a basis for such an adjustment on the ISO Home Page at least five (5) days in advance of the date on which the new amount shall be assessed.

**40.1.9.5 Credits and Debits of Emissions Cost Charges Collected from Scheduling Coordinators.**

In addition to the surcharges or credits permitted under Section 11.6.3.3 of this ISO Tariff, the ISO may credit or debit, as appropriate, the account of a Scheduling Coordinator for any over- or under-assessment of Emissions Cost Charges that the ISO determines occurred due to the error, omission, or miscalculation by the ISO or the Scheduling Coordinator.

**40.1.9.6 Submission of Emissions Cost Invoices.**

Scheduling Coordinators for Must-Offer Generators that incur Emissions Costs as a direct result of an ISO Dispatch instruction may submit to the ISO an invoice in the form specified on the ISO Home Page (the "Emissions Cost Invoice") for the recovery of such Emissions Costs. Emissions Cost Invoices shall not include any Emissions Costs specified in an RMR Contract for a unit owned or controlled by a Must-Offer Generator. All Emissions Cost Invoices must include a copy of all final invoice statements from air quality districts demonstrating the Emissions Costs incurred by the applicable Generating Unit, and such other information as the ISO may reasonably require to verify the Emissions Costs incurred as a direct result of an ISO Dispatch instruction.

**40.1.9.7 Payment of Emissions Cost Invoices.**

The ISO shall pay Scheduling Coordinators for all Emissions Costs submitted in an Emissions Cost Invoice and demonstrated to be a direct result of an ISO Dispatch instruction. If the Emissions Costs indicated in the applicable air quality districts' final invoice statements include emissions produced by operation not resulting from ISO Dispatch instructions, the ISO shall pay an amount equal to Emissions Costs multiplied by the ratio of the MWh associated with ISO Dispatch instruction to the total MWh associated with such Emissions Costs. The ISO shall pay Emissions Cost Invoices each month in accordance with the ISO Payments Calendar from the funds available in the Emissions Cost Trust Account. To the extent there are insufficient funds available in Emissions Cost Trust Account in any

month to pay all Emissions Costs submitted in an Emissions Cost Invoice and demonstrated to be a direct result of an ISO Dispatch instruction, the ISO shall make pro rata payment of such Emissions Costs and shall adjust the rate at which the ISO will assess the Emissions Cost Charge in accordance with Section 40.1.9.4. Any outstanding Emissions Costs owed from previous months will be paid in the order of the month in which such costs were invoiced to the ISO. The ISO's obligation to pay Emissions Costs is limited to the obligation to pay Emissions Cost Charges received. All disputes concerning payment of Emissions Cost Invoices shall be subject to ISO ADR Procedures, in accordance with Section 13 of this ISO Tariff.

**40.1.10 Start-Up Costs.**

**40.1.10.1 Obligation to Pay Start-Up Cost Charges.**

Each Scheduling Coordinator shall be obligated to pay a charge which will be used to pay the verified Start-Up Costs incurred by a Must-Offer Generator as a direct result of an ISO Dispatch instruction, in accordance with this Section 40.1.10. Such Start-Up Costs shall include (1) fuel and (2) auxiliary power. The ISO shall levy this charge (the "Start-Up Cost Charge"), each month, against all Scheduling Coordinators in proportion to and in a similar manner as each Scheduling Coordinator's Minimum Load Cost obligation under Section 40.1.6.1.4. The proportion of Start-Up Costs to Minimum Load Costs will be determined by dividing the total Start-Up Cost Charge for the month by the total Minimum Load Costs for the month. The proportion of Start-Up Costs will then be multiplied by the individual Scheduling Coordinator's Minimum Load Costs for the month to determine the Scheduling Coordinator's Start-Up Cost Charge. Scheduling Coordinators shall make payment for all Start-Up Cost Charges in accordance with the ISO Payments Calendar.

**40.1.10.2 Start-Up Cost Trust Account.**

All Start-Up Cost Charges received by the ISO shall be deposited in the Start-Up Cost Trust Account. The Start-Up Cost Trust Account shall be an interest-bearing account separate from all other accounts maintained by the ISO, and no other funds shall be commingled in it at any time.

**40.1.10.3 Start-Up Cost Charge.**

The amount the ISO will assess for the Start-Up Cost Charge shall be the projected annual total of all Start-Up Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instruction, adjusted for interest projected to be earned on the monies in the Start-Up Cost Trust Account, divided by twelve (12) months.

The initial amount for the Start-Up Cost Charge, and all subsequent amounts for the Start-Up Cost Charge, shall be posted on the ISO Home Page.

**40.1.10.4 Adjustment of the Start-Up Cost Charge.**

The ISO may adjust the amount the ISO will assess for the Start-Up Cost Charge on a monthly basis, as necessary, to reflect the net effect of the following:

- (a) the difference, if any, between the projections of the Start-Up Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instructions and the actual Start-Up Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instructions as invoiced to the ISO and verified in accordance with this Section 40.1.10; and
- (b) the difference, if any, between actual and projected interest earned on funds in the Start-Up Cost Trust Account.

The adjusted amount the ISO will assess for the Start-Up Cost Charge shall take effect on a prospective basis on the first day of the next calendar month. The ISO shall publish all data and calculations used by the ISO as a basis for such an adjustment on the ISO Home Page at least five (5) days in advance of the date on which the new amount shall be assessed.

**40.1.10.5 Credits and Debits of Start-Up Cost Charges Collected from Scheduling Coordinators.**

In addition to the surcharges or credits permitted under Section 11.6.3.3 of this ISO Tariff, the ISO may credit or debit, as appropriate, the account of a Scheduling Coordinator for any over- or under-assessment of Start-Up Cost Charges that the ISO determines occurred due to the error, omission, or miscalculation by the ISO or the Scheduling Coordinator.

**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) 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.

**Interconnection**

Transmission facilities, other than additions or replacements to existing facilities that: i) connect one system to another system where the facilities emerge from one and only one substation of the two systems and are functionally separate from the ISO Controlled Grid facilities such that the facilities are, or can be, operated and planned as a single facility; or ii) are identified as radial transmission lines pursuant to contract; or iii) produce Generation at a single point on the ISO Controlled Grid; provided that such interconnection does not include facilities that, if not owned by the Participating TO, would result in a reduction in the ISO's Operational Control of the Participating TO's portion of the ISO Controlled Grid.

**Interconnection**  
**Agreement**

A contract between a party requesting interconnection and the Participating TO that owns the transmission facility with which the requesting party wishes to interconnect.

# ATTACHMENT E

#### 40.1.6.1.4 Allocation of Minimum Load Costs.

For each Settlement Interval, the ISO shall determine ~~that~~whether the Minimum Load Costs for each unit operating during a Waiver Denial Period are due to (1) local reliability requirements, (2) zonal reliability requirements, or (3) ISO Control Area-wide reliability requirements pursuant to Section 40.1.6.1.4.1. On a monthly basis~~For each such month~~, the ISO shall sum the Settlement Interval Minimum Load Costs and shall allocate those costs as follows:

- (1) if the Generating Unit was operating to meet local reliability requirements, the ~~incremental locational-cost~~ shall be allocated to the Participating TO in whose PTO Service Territory the Generating Unit is located, or, where the Generating Unit is located outside the PTO Service Territory of any Participating TO, to the Participating TO or Participating TOs whose PTO Service Territory or Territories are contiguous to the Service Area in which the Generating Unit is located, in proportion to the benefits that each such Participating TO receives, as determined by the ISO. Where the costs allocated under this section are allocated to two or more Participating TOs, the ISO shall file the allocation under Section 205 of the Federal Power Act. ~~For the purposes of this section, the incremental locational cost shall be the additional costs associated with committing and operating a particular unit or units to meet a local reliability requirement over the costs of a less expensive unit or units that would have been committed and operated absent the local reliability requirement. If a unit is committed in real-time for local reliability, its Minimum Load costs shall be considered incremental locational costs.~~ Costs allocated under this part (1) shall be considered Reliability Services Costs.
- (2) if the Generating Unit was operating ~~to meet~~due to Inter-Zonal Congestion zonal reliability requirements, the Minimum Load Costs shall be allocated on a monthly basis to each Scheduling Coordinator in the constrained Zone based on the ratio of that Scheduling Coordinator's monthly Demand to the sum of all Scheduling Coordinator's' monthly Demand in that Zone;

(3) if the Generating Unit was operating to ~~meetsatisfy an~~ ISO Control Area-wide need reliability requirements, the ISO shall allocate the Minimum Load Costs in the following way:

- a. first, to the monthly absolute total of all Net Negative Uninstructed Deviation (determined for each Settlement Interval based on Final Hour-Ahead Schedules) at a per-MWh rate that shall not exceed a figure that is determined by dividing the total Minimum Load Cost in that month by the sum of the minimum loads for Generating Units operating under Waiver Denial Periods in that month;
- b. finally, all remaining costs not allocated per (a) shall be allocated to each Scheduling Coordinator in proportion to the sum of that Scheduling Coordinator's monthly Control Area Gross Load and Demand within California outside the ISO Control Area that is served by exports to the monthly sum of the ISO Control Area Gross Load and the projected Demand within California outside the ISO Control Area that is served by exports from the ISO Control Area of all Scheduling Coordinators; except that Demand outside the ISO Control Area that is served by exports that are scheduled as part of a Wheeling Through transaction shall be excluded from the calculation of such allocations.

#### **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; or

- (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; 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.

#### **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.

#### **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.

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**40.1.9 Emissions Costs.**

**40.1.9.1 Obligation to Pay Emissions Cost Charges.**

Each Scheduling Coordinator shall be obligated to pay a charge which will be used to pay the verified Emissions Costs incurred by a Must-Offer Generator as a direct result of an ISO Dispatch instruction, in accordance with this Section 40.1.9. The ISO shall levy this administrative charge (the "Emissions Cost Charge") each month, in two parts: 1) All Emission Costs attributed to minimum load Energy will be allocated to Scheduling Coordinators in proportion to and in a similar manner as each Scheduling Coordinator's Minimum Load Cost obligation per Section 40.1.6.1.4. The amount of Emissions Costs attributed to minimum load Energy will be determined by dividing the total megawatt hours eligible for Minimum Load Cost compensation for the month by the total megawatt hours of Instructed Imbalance Energy for the month. The resulting percentage is then multiplied by the Emissions Cost Charges for the month to determine the Emission Costs attributed to minimum load Energy. The proportion of Emissions Costs to Minimum Load Costs will be determined by dividing the total Emissions Costs attributed to minimum load Energy for the month by the total Minimum Load Costs for the month. 2) All Emission Costs resulting from an ISO dispatch but not attributable to minimum load Energy will be allocated to ~~against~~ all Scheduling Coordinators based upon each Scheduling Coordinator's Control Area Gross Load and Demand within California outside of the ISO Control Area that is served by exports from the ISO Control Area. Scheduling Coordinators shall make payment for all Emissions Cost Charges in accordance with the ISO Payments Calendar.

\* \* \* \* \*

**40.1.9.3 ~~Rate For the Emissions Cost Charge.~~**

The ~~rate at which~~ amount the ISO will assess for the Emissions Cost Charge shall be at the projected annual total of all Emissions Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instruction, adjusted for interest projected to be earned on the monies in the Emissions Cost Trust

Account, divided by twelve (12) months, ~~the sum of the Control Area Gross Load and the projected Demand within California outside of the ISO Control Area that is served by exports from the ISO Control Area of all Scheduling Coordinators for the applicable year ("Emissions Cost Demand")~~. The initial rate~~amount~~ for the Emissions Cost Charge, and all subsequent rates~~amounts~~ for the Emissions Cost Charge, shall be posted on the ISO Home Page.

#### **40.1.9.4 Adjustment of the Rate ~~For the Emissions Cost Charge~~.**

The ISO may adjust the rate at which~~amount~~ the ISO will assess for the Emissions Cost Charge on a monthly basis, as necessary, to reflect the net effect of the following:

- (a) the difference, if any, between actual Emissions Cost Demand and projected Emissions Cost Demand;
- (b) the difference, if any, between the projections of the Emissions Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instructions and the actual Emissions Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instructions as invoiced to the ISO and verified in accordance with this Section 40.1.9; and
- (c) the difference, if any, between actual and projected interest earned on funds in the Emissions Cost Trust Account.

The adjusted rate at which~~amount~~ the ISO will assess for the Emissions Cost Charge shall take effect on a prospective basis on the first day of the next calendar month. The ISO shall publish all data and calculations used by the ISO as a basis for such an adjustment on the ISO Home Page at least five (5) days in advance of the date on which the new ~~rate shall go into effect~~ amount shall be assessed.

\* \* \* \* \*

#### **40.1.10 Start-Up Costs.**

##### **40.1.10.1 Obligation to Pay Start-Up Cost Charges.**

Each Scheduling Coordinator shall be obligated to pay a charge which will be used to pay the verified

Start-Up Costs incurred by a Must-Offer Generator as a direct result of an ISO Dispatch instruction, in accordance with this Section 40.1.10. Such Start-Up Costs shall include (1) fuel and (2) auxiliary power. The ISO shall levy this charge (the "Start-Up Cost Charge"), each month, against all Scheduling Coordinators in proportion to and in a similar manner as based upon each Scheduling Coordinator's Minimum Load Cost obligation under Section 40.1.6.1.4 Control Area Gross Load and Demand within California outside of the ISO Control Area that is served by exports from the ISO Control Area. The proportion of Start-Up Costs to Minimum Load Costs will be determined by dividing the total Start-Up Cost Charge for the month by the total Minimum Load Costs for the month. The proportion of Start-Up Costs will then be multiplied by the individual Scheduling Coordinator's Minimum Load Costs for the month to determine the Scheduling Coordinator's Start-Up Cost Charge. Scheduling Coordinators shall make payment for all Start-Up Cost Charges in accordance with the ISO Payments Calendar.

\* \* \* \* \*

#### **40.1.10.3 Rate For the Start-Up Cost Charge.**

The ~~rate at which amount~~ the ISO will assess for the Start-Up Cost Charge shall be at the projected annual total of all Start-Up Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instruction, adjusted for interest projected to be earned on the monies in the Start-Up Cost Trust Account, divided by twelve (12) months, the sum of the Control Area Gross Load and the projected Demand within California outside of the ISO Control Area that is served by exports from the ISO Control Area ("Start-Up Cost Demand"). The initial amount rate for the Start-Up Cost Charge, and all subsequent amounts rates for the Start-Up Cost Charge, shall be posted on the ISO Home Page.

#### **40.1.10.4 Adjustment of the Rate For the Start-Up Cost Charge.**

The ISO may adjust the amount ~~rate at which~~ the ISO will assess for the Start-Up Cost Charge on a monthly basis, as necessary, to reflect the net effect of the following:

- ~~(a)~~ — the difference, if any, between actual Start-Up Cost Demand and projected Start-Up Cost Demand;

(a) the difference, if any, between the projections of the Start-Up Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instructions and the actual Start-Up Costs incurred by Must-Offer Generators as a direct result of ISO Dispatch instructions as invoiced to the ISO and verified in accordance with this Section 40.1.10; and

(b) the difference, if any, between actual and projected interest earned on funds in the Start-Up Cost Trust Account.

The adjusted ~~amount~~ rate at which the ISO will assess for the Start-Up Cost Charge shall take effect on a prospective basis on the first day of the next calendar month. The ISO shall publish all data and calculations used by the ISO as a basis for such an adjustment on the ISO Home Page at least five (5) days in advance of the date on which the new ~~rate shall go into effect~~ amount shall be assessed.

\* \* \* \* \*

## 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; ~~or~~ (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 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.

# ATTACHMENT F

**40.6B.3            Payments for Imbalance Energy for the Minimum Operating Level for Generating Units Eligible to Be Paid Minimum Load Costs.**

Resource Adequacy Resources operating at or near its operating level during a Waiver Denial Period either: (1) without a forward Schedule for its minimum operating level Energy or (2) with a Schedule to a special-purpose Demand ID for the sole purpose of Scheduling the minimum operating level Energy shall be paid its Un-Recovered Minimum Load Costs subject to eligibility as set forth in Section 40.6B.1 and not be paid an additional amount by the ISO for Energy actually delivered.

**40.6B.4            Un-Recovered Minimum Load Costs.**

The Un-Recovered Minimum Load Costs for each hour of Waiver Denial Period shall be calculated as the difference between: (1) a resource's Minimum Load Costs as calculated in this Section for the same Settlement Interval and (2) the Imbalance Energy payment for a resource's minimum load energy in the Settlement Interval. If the Imbalance Energy payment for minimum load energy exceeds the Minimum Load Costs, then there are no Un-Recovered Minimum Load Costs. The Minimum Load Costs shall be calculated as the sum, for all eligible hours in the Waiver Denial Period and Settlement Periods in which the unit generated in response to an ISO Dispatch Instruction, of: (1) the product of the unit's average heat rate (as determined by the ISO from the data provided in accordance with Section 40.10) at the unit's relevant minimum operating level or Dispatchable minimum operating level as set forth in the ISO Master File or as amended through notification to the ISO via SLIC and the gas price determined by Equation C1-8 (Gas) of the Schedules to the Reliability Must-Run Contract for the relevant Service Area (San Diego Gas & Electric Company, Southern California Gas Company, or Pacific Gas and Electric Company), or, if the Resource Adequacy Resource is not served from one of those three Service Areas; and (2) the product of the unit's relevant minimum operating level or Dispatchable minimum operating level as set forth in the ISO Master File or as amended through notification to the ISO via SLIC; and \$6.00/MWh.

**40.6B.5            Allocation of Un-Recovered Minimum Load Costs.**

For each Settlement Interval, the ISO shall determine whether the Un-Recovered Minimum Load Costs for

Resource Adequacy Resources, as applicable, for each unit operating during a Waiver Denial Period are due to (1) local reliability requirements, (2) zonal reliability requirements, or (3) ISO Control Area-wide reliability requirements pursuant to Section 40.6B.5.1. On a monthly basis, the ISO shall sum the Un-Recovered Minimum Load Costs and shall allocate those costs as follows:

- (1) if the Generating Unit or System Unit for which the MSS Operator has contracted to supply Resource Adequacy Capacity to another entity was operating to meet local reliability requirements, the cost shall be allocated to the Participating TO in whose PTO Service Territory the unit is located, or, where the unit is located outside the PTO Service Territory of any Participating TO, to the Participating TO or Participating TOs whose PTO Service Territory or Territories are contiguous to the Service Area in which the Generating Unit or System Unit is located, in proportion to the benefits that each such Participating TO receives, as determined by the ISO. Where the costs allocated under this section are allocated to two or more Participating TOs, the ISO shall file the allocation under Section 205 of the Federal Power Act. Costs allocated under this part (1) shall be considered Reliability Services Costs.
- (2) if the Generating Unit or System Unit for which the MSS Operator has contracted to supply Resource Adequacy Capacity to another entity was operating to meet zonal reliability requirements, the Un-Recovered Minimum Load Costs shall be allocated on a monthly basis to each Scheduling Coordinator in the constrained Zone based on the ratio of that Scheduling Coordinator's monthly Demand to the sum of all Scheduling Coordinators' monthly Demand in that Zone;

- (3) if the Generating Unit or System Unit for which the MSS Operator has contracted to supply Resource Adequacy Capacity to another entity was operating to meet ISO Control Area-wide reliability requirements, the ISO shall allocate the Un-Recovered Minimum Load Costs in the following way:
- a. first, to the monthly absolute total of all Net Negative Uninstructed Deviation (determined for each Settlement Interval based on Final Hour-Ahead Schedules) at a per-MWh rate that shall not exceed a figure that is determined by dividing the total Un-Recovered Minimum Load Cost in that month by the sum of the minimum loads for Generating Units operating under Waiver Denial Periods in that month;
  - b. finally, all remaining costs not allocated per (a) shall be allocated to each Scheduling Coordinator in proportion to the sum of that Scheduling Coordinator's monthly Control Area Gross Load and Demand within California outside the ISO Control Area that is served by exports to the monthly sum of the ISO Control Area Gross Load and the projected Demand within California outside the ISO Control Area that is served by exports from the ISO Control Area of all Scheduling Coordinators, except that Demand outside the ISO Control Area that is served by exports that are scheduled as part of a Wheeling Through transaction shall be excluded from the calculation of such allocations.

**40.6B.5.1 Criteria for Allocation of Un-Recovered Minimum Load Costs**

The ISO shall use the following criteria for determining whether a Generating Unit or System Unit for which the MSS Operator has contracted to supply Resource Adequacy Capacity to another entity falls within the local reliability, zonal reliability, or ISO Control Area-wide reliability categories for allocation of Un-Recovered Minimum Load Costs.

**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; or
- (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; 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.

**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.

**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,

**40.8.6 Allocation of Minimum Load Costs.**

For each Settlement Interval, the ISO shall determine whether the Minimum Load Costs for each FERC Must Offer Generator unit operating during a Waiver Denial Period are due to (1) local reliability requirements, (2) zonal reliability requirements, or (3) ISO Control Area-wide reliability requirements pursuant to Section 40.8.6.1. On a monthly basis, the ISO shall sum the Settlement Interval Minimum Load Costs and shall allocate those costs as follows:

- (1) if the Generating Unit was operating to meet local reliability requirements, the cost shall be allocated to the Participating TO in whose PTO Service Territory the Generating Unit is located, or, where the Generating Unit is located outside the PTO Service Territory of any Participating TO, to the Participating TO or Participating TOs whose PTO Service Territory or Territories are contiguous to the Service Area in which the Generating Unit is located, in proportion to the benefits that each such Participating TO receives, as determined by the ISO. Where the costs allocated under this section are allocated to two or more Participating TOs, the ISO shall file the allocation under Section 205 of the Federal Power Act. Costs allocated under this part (1) shall be considered Reliability Services Costs.
- (2) if the Generating Unit was operating to meet zonal reliability requirements, the Minimum Load Costs shall be allocated on a monthly basis to each Scheduling Coordinator in the constrained Zone based on the ratio of that Scheduling Coordinator's monthly Demand to the sum of all Scheduling Coordinators' monthly Demand in that Zone;
- (3) if the Generating Unit was operating to meet ISO Control Area-wide reliability requirements, the ISO shall allocate the Minimum Load Costs in the following way:
  - a. first, to the monthly absolute total of all Net Negative Uninstructed Deviation (determined for each Settlement Interval based on Final Hour-Ahead Schedules) at a per-MWh rate that shall not exceed a figure that is determined by dividing the total Minimum Load Cost in that month by the sum of the minimum loads for Generating Units operating under Waiver Denial Periods in that month;

- b. finally, all remaining costs not allocated per (a) shall be allocated to each Scheduling Coordinator in proportion to the sum of that Scheduling Coordinator's monthly Control Area Gross Load and Demand within California outside the ISO Control Area that is served by exports to the monthly sum of the ISO Control Area Gross Load and the projected Demand within California outside the ISO Control Area that is served by exports from the ISO Control Area of all Scheduling Coordinators, except that Demand outside the ISO Control Area that is served by exports that are scheduled as part of a Wheeling Through transaction shall be excluded from the calculation of such allocations.

#### **40.8.6.1 FERC Must Offer Generator Unit Criteria for Allocation of Minimum Load Costs**

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

##### **40.8.6.1.1 Local Reliability Requirements**

The ISO shall classify a FERC 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; or
- (3) accommodate the forced or scheduled outage of a network component that is not part of a transmission path between Congestion Zones.

##### **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:

- (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.

#### **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.

#### **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.

#### **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.

**40.10 Requirement of FERC Must-Offer Generators to File Heat Rate and Emissions Rate**

**Data.**

Resource Adequacy Resources and FERC Must-Offer Generators, as defined in this ISO Tariff, that own or control gas-fired Generating Units or System Units must file with the ISO and the FERC, on a confidential basis, the heat rates and emissions rates for each gas-fired Generating Unit or System Unit that they own or control. Heat rate and emissions rate data shall be provided in the format specified by the ISO as posted on the ISO Website. Heat rate data provided to comply with this requirement shall not include start-up or minimum load fuel costs. Resource Adequacy Resources and FERC Must-Offer Generators must also file periodic updates of this data upon the direction of either FERC or the ISO. The ISO will treat the information provided to the ISO in accordance with this section as confidential and will apply the procedures in Section 20.4 of this ISO Tariff with regard to requests for disclosure of such information.

**40.10.1 Calculation of the Proxy Price.**

The ISO shall calculate each day separate Proxy Prices for each gas-fired Generating Unit or System Unit owned or controlled by a Resource Adequacy Resource or FERC Must-Offer Generator by applying the filed heat rates for those Generating Units or System Units to a daily proxy figure for natural gas costs with an additional \$6.00/MWh allowed for operations and maintenance expenses. The proxy figures for natural gas costs shall be based on the most recent data available and shall be posted on the ISO Website by 8:00 AM on the day prior to which the figures will be used for calculation of the Proxy Price.

**40.11 Emissions Costs.**

**40.11.1 Obligation to Pay Emissions Cost Charges.**

Each Scheduling Coordinator shall be obligated to pay a charge which will be used to pay the verified Emissions Costs incurred by a Resource Adequacy Resource or FERC Must-Offer Generator as a direct result of an ISO Dispatch Instruction, in accordance with this Section 40. The ISO shall levy this administrative charge (the "Emissions Cost Charge") each month, in two parts: 1) All Emission Costs

attributed to minimum load Energy will be allocated to Scheduling Coordinators in proportion to and in a similar manner as each Scheduling Coordinator's Minimum Load Cost obligation per Section 40.8.6.1 or Un-Recovered Minimum Load Cost obligation under Section 40.6B.5.1. The amount of Emissions Costs attributed to minimum load Energy will be determined by dividing the total megawatt hours eligible for Minimum Load Cost compensation for the month by the total megawatt hours of Instructed Imbalance Energy for the month. The resulting percentage is then multiplied by the Emissions Cost Charges for the month to determine the Emission Costs attributed to minimum load Energy. The proportion of Emissions Costs to Minimum Load Costs will be determined by dividing the total Emissions Costs attributed to minimum load Energy for the month by the total Minimum Load Costs for the month. 2) All Emission Costs resulting from an ISO dispatch but not attributable to minimum load Energy will be allocated to all Scheduling Coordinators based upon each Scheduling Coordinator's Control Area Gross Load and Demand within California

**40.11.2 Emissions Cost Trust Account.**

All Emissions Cost Charges received by the ISO shall be deposited in the Emissions Cost Trust Account. The Emissions Cost Trust Account shall be an interest-bearing account separate from all other accounts maintained by the ISO, and no other funds shall be commingled in it at any time.

**40.11.3 Emissions Cost Charge.**

The amount the ISO will assess for the Emissions Cost Charge shall be the projected annual total of all Emissions Costs incurred by Resource Adequacy Resources and FERC Must-Offer Generators as a direct result of ISO Dispatch Instruction, adjusted for interest projected to be earned on the monies in the Emissions Cost Trust Account, divided by twelve (12) months. The initial amount for the Emissions Cost Charge, and all subsequent amounts for the Emissions Cost Charge, shall be posted on the ISO Website.

**40.11.4 Adjustment of the Emissions Cost Charge.**

The ISO may adjust the amount the ISO will assess for the Emissions Cost Charge on a monthly basis, as necessary, to reflect the net effect of the following:

- (a) the difference, if any, between actual Emissions Cost Demand and projected Emissions Cost Demand;
- (b) the difference, if any, between the projections of the Emissions Costs incurred by Resource Adequacy Resources or FERC Must-Offer Generators as a direct result of ISO Dispatch Instructions and the actual Emissions Costs incurred by Resource Adequacy Resources or FERC Must-Offer Generators as a direct result of ISO Dispatch Instructions as invoiced to the ISO and verified in accordance with this Section 40.11; and
- (c) the difference, if any, between actual and projected interest earned on funds in the Emissions Cost Trust Account.

The adjusted amount the ISO will assess for the Emissions Cost Charge shall take effect on a prospective basis on the first day of the next calendar month. The ISO shall publish all data and

calculations used by the ISO as a basis for such an adjustment on the ISO Website at least five (5) days in advance of the date on which the new amount shall be assessed.

**40.11.5 Credits and Debits of Emissions Cost Charges Collected from Scheduling**

**Coordinators.**

In addition to the surcharges or credits permitted under Section 11.6.3.3 of this ISO Tariff, the ISO may credit or debit, as appropriate, the account of a Scheduling Coordinator for any over- or under-assessment of Emissions Cost Charges that the ISO determines occurred due to the error, omission, or miscalculation by the ISO or the Scheduling Coordinator.

**40.11.6 Submission of Emissions Cost Invoices.**

Scheduling Coordinators for Resource Adequacy Resources or FERC Must-Offer Generators that incur Emissions Costs as a direct result of an ISO Dispatch Instruction may submit to the ISO an invoice in the form specified on the ISO Website (the "Emissions Cost Invoice") for the recovery of such Emissions Costs. Emissions Cost Invoices shall not include any Emissions Costs specified in an RMR Contract for a unit owned or controlled by a FERC Must-Offer Generator. All Emissions Cost Invoices must include a copy of all final invoice statements from air quality districts demonstrating the Emissions Costs incurred by the applicable Generating Unit or System Unit, and such other information as the ISO may reasonably require to verify the Emissions Costs incurred as a direct result of an ISO Dispatch Instruction.

**40.11.7 Payment of Emissions Cost Invoices.**

The ISO shall pay Scheduling Coordinators for all Emissions Costs submitted in an Emissions Cost Invoice and demonstrated to be a direct result of an ISO Dispatch Instruction. If the Emissions Costs indicated in the applicable air quality districts' final invoice statements include emissions produced by operation not resulting from ISO Dispatch Instructions, the ISO shall pay an amount equal to Emissions Costs multiplied by the ratio of the MWh associated with ISO Dispatch Instruction to the total MWh associated with such Emissions Costs. The ISO shall pay Emissions Cost Invoices each month in accordance with the ISO Payments Calendar from the funds available in the Emissions Cost Trust Account. To the extent there are insufficient funds available in Emissions Cost Trust Account in any

month to pay all Emissions Costs submitted in an Emissions Cost Invoice and demonstrated to be a direct result of an ISO Dispatch Instruction, the ISO shall make pro rata payment of such Emissions Costs and shall adjust the rate at which the ISO will assess the Emissions Cost Charge in accordance with Section 40.11.4. Any outstanding Emissions Costs owed from previous months will be paid in the order of the month in which such costs were invoiced to the ISO. The ISO's obligation to pay Emissions Costs is limited to the obligation to pay Emissions Cost Charges received. All disputes concerning payment of Emissions Cost Invoices shall be subject to ISO ADR Procedures, in accordance with Section 13 of this ISO Tariff.

**40.12 Start-Up Costs.**

**40.12.1 Obligation to Pay Start-Up Cost Charges.**

Each Scheduling Coordinator shall be obligated to pay a charge which will be used to pay the verified Start-Up Costs incurred by a Resource Adequacy Resource or FERC Must-Offer Generator as a direct result of an ISO Dispatch Instruction, in accordance with this Section 40.12. Such Start-Up Costs shall include (1) fuel and (2) auxiliary power. The ISO shall levy this charge (the "Start-Up Cost Charge"), each month, against all Scheduling Coordinators in proportion to and in a similar manner as each Scheduling Coordinator's Minimum Load Cost obligation under Section 40.8.6.1 or Un-Recovered Minimum Load Cost obligation under Section 40.6B.5.1. The proportion of Start-Up Costs to Minimum Load Costs will be determined by dividing the total Start-Up Cost Charge for the month by the total Minimum Load Costs for the month. The proportion of Start-Up Costs then will be multiplied by the individual Scheduling Coordinator's Minimum Load Costs for the month to determine the Scheduling Coordinator's Start-Up Cost Charge. Scheduling Coordinators shall make payment for all Start-Up Cost Charges in accordance with the ISO Payments Calendar.

**40.12.2 Start-Up Cost Trust Account.**

All Start-Up Cost Charges received by the ISO shall be deposited in the Start-Up Cost Trust Account. The Start-Up Cost Trust Account shall be an interest-bearing account separate from all other accounts maintained by the ISO, and no other funds shall be commingled in it at any time.

**40.12.3 Start-Up Cost Charge.**

The amount the ISO will assess for the Start-Up Cost Charge shall be the projected annual total of all Start-Up Costs incurred by Resource Adequacy Resources or FERC Must-Offer Generators as a direct result of ISO Dispatch Instruction, adjusted for interest projected to be earned on the monies in the Start-Up Cost Trust Account, divided by twelve (12) months.

The initial amount for the Start-Up Cost Charge, and all subsequent amounts for the Start-Up Cost Charge, shall be posted on the ISO Website.

**40.12.4 Adjustment of the Start-Up Cost Charge.**

The ISO may adjust the amount the ISO will assess for the Start-Up Cost Charge on a monthly basis, as necessary, to reflect the net effect of the following:

- (a) the difference, if any, between the projections of the Start-Up Costs incurred by Resource Adequacy Resources or FERC Must-Offer Generators as a direct result of ISO Dispatch Instructions and the actual Start-Up Costs incurred by Resource Adequacy Resources or FERC Must-Offer Generators as a direct result of ISO Dispatch Instructions as invoiced to the ISO and verified in accordance with this Section 40.12; and
- (b) the difference, if any, between actual and projected interest earned on funds in the Start-Up Cost Trust Account.

The adjusted amount the ISO will assess for the Start-Up Cost Charge shall take effect on a prospective basis on the first day of the next calendar month. The ISO shall publish all data and calculations used by the ISO as a basis for such an adjustment on the ISO Website at least five (5) days in advance of the date on which the new amount shall be assessed.

**40.12.5 Credits and Debits of Start-Up Cost Charges Collected from Scheduling Coordinators.**

In addition to the surcharges or credits permitted under Section 11.6.3.3 of this ISO Tariff, the ISO may credit or debit, as appropriate, the account of a Scheduling Coordinator for any over- or under-assessment of Start-Up Cost Charges that the ISO determines occurred due to the error, omission, or miscalculation by the ISO or the Scheduling Coordinator.

# ATTACHMENT G

#### 40.6B.5 Allocation of Un-Recovered Minimum Load Costs.

For each Settlement Interval, the ISO shall determine ~~whether~~ that the Un-Recovered Minimum Load Costs for Resource Adequacy Resources, as applicable, for each unit operating during a Waiver Denial Period are due to (1) local reliability requirements, (2) zonal reliability requirements, or (3) ISO Control Area-wide reliability requirements pursuant to Section 40.6B.5.1. On a monthly basis~~For each such month~~, the ISO shall sum the Un-Recovered Minimum Load Costs and shall allocate those costs as follows:

- (1) if the Generating Unit or System Unit for which the MSS Operator has contracted to supply Resource Adequacy Capacity to another entity was operating to meet local reliability requirements, the ~~incremental locational~~ cost shall be allocated to the Participating TO in whose PTO Service Territory the unit is located, or, where the unit is located outside the PTO Service Territory of any Participating TO, to the Participating TO or Participating TOs whose PTO Service Territory or Territories are contiguous to the Service Area in which the Generating Unit or System Unit is located, in proportion to the benefits that each such Participating TO receives, as determined by the ISO. Where the costs allocated under this section are allocated to two or more Participating TOs, the ISO shall file the allocation under Section 205 of the Federal Power Act. ~~For the purposes of this section, the incremental locational cost shall be the additional costs associated with committing and operating a particular unit or units to meet a local reliability requirement over the costs of a less expensive unit or units that would have been committed and operated absent the local reliability requirement. If a unit is committed in real-time for local reliability, its Un-Recovered Minimum Load costs shall be considered incremental locational costs.~~ Costs allocated under this part (1) shall be considered Reliability Services Costs.
- (2) if the Generating Unit or System Unit for which the MSS Operator has contracted to supply Resource Adequacy Capacity to another entity was operating to meet~~due to Inter-~~ zonal reliability requirements~~Congestion~~, the Un-Recovered Minimum Load Costs shall

be allocated on a monthly basis to each Scheduling Coordinator in the constrained Zone based on the ratio of that Scheduling Coordinator's monthly Demand to the sum of all Scheduling Coordinator's' monthly Demand in that Zone;

- (3) if the Generating Unit or System Unit for which the MSS Operator has contracted to supply Resource Adequacy Capacity to another entity was operating to ~~meet~~satisfy an ISO Control Area-wide need reliability requirements, the ISO shall allocate the Un-Recovered Minimum Load Costs in the following way:
- a. first, to the monthly absolute total of all Net Negative Uninstructed Deviation (determined for each Settlement Interval based on Final Hour-Ahead Schedules) at a per-MWh rate that shall not exceed a figure that is determined by dividing the total Un-Recovered Minimum Load Cost in that month by the sum of the minimum loads for Generating Units operating under Waiver Denial Periods in that month;
  - b. finally, all remaining costs not allocated per (a) shall be allocated to each Scheduling Coordinator in proportion to the sum of that Scheduling Coordinator's monthly Control Area Gross Load and Demand within California outside the ISO Control Area that is served by exports to the monthly sum of the ISO Control Area Gross Load and the projected Demand within California outside the ISO Control Area that is served by exports from the ISO Control Area of all Scheduling Coordinators, except that Demand outside the ISO Control Area that is served by exports that are scheduled as part of a Wheeling Through transaction shall be excluded from the calculation of such allocations.

**40.6B.5.1 Criteria for Allocation of Un-Recovered Minimum Load Costs**

The ISO shall use the following criteria for determining whether a Generating Unit or System Unit for which the MSS Operator has contracted to supply Resource Adequacy Capacity to another entity falls within the local reliability, zonal reliability, or ISO Control Area-wide reliability categories for allocation of

Un-Recovered Minimum Load Costs.

**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; or
- (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; 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.

**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.

**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.

#### 40.8.6 Allocation of Minimum Load Costs.

For each Settlement Interval, the ISO shall determine ~~that whether~~ the Minimum Load Costs for each FERC Must Offer Generator unit operating during a Waiver Denial Period are due to (1) local reliability requirements, (2) zonal reliability requirements, or (3) ISO Control Area-wide reliability requirements pursuant to Section 40.8.6.1. On a monthly basis~~For each such month~~, the ISO shall sum the Settlement Interval Minimum Load Costs and shall allocate those costs as follows:

- (1) if the Generating Unit was operating to meet local reliability requirements, the ~~incremental locational-cost~~ shall be allocated to the Participating TO in whose PTO Service Territory the Generating Unit is located, or, where the Generating Unit is located outside the PTO Service Territory of any Participating TO, to the Participating TO or Participating TOs whose PTO Service Territory or Territories are contiguous to the Service Area in which the Generating Unit is located, in proportion to the benefits that each such Participating TO receives, as determined by the ISO. Where the costs allocated under this section are allocated to two or more Participating TOs, the ISO shall file the allocation under Section 205 of the Federal Power Act. ~~For the purposes of this section, the incremental locational cost shall be the additional costs associated with committing and operating a particular unit or units to meet a local reliability requirement over the costs of a less expensive unit or units that would have been committed and operated absent the local reliability requirement. If a unit is committed in real-time for local reliability, its Minimum Load costs shall be considered incremental locational costs. Costs allocated under this part (1) shall be considered Reliability Services Costs.~~
- (2) if the Generating Unit was operating ~~to meet~~~~due to~~ Zzonal reliability requirements, the Minimum Load Costs shall be allocated on a monthly basis to each Scheduling Coordinator in the constrained Zone based on the ratio of that Scheduling Coordinator's monthly Demand to the sum of all Scheduling Coordinator's' monthly Demand in that Zone;

(3) if the Generating Unit was operating to ~~meet~~<sup>satisfy</sup> an ISO Control Area-wide need reliability requirements, the ISO shall allocate the Minimum Load Costs in the following way:

- a. first, to the monthly absolute total of all Net Negative Uninstructed Deviation (determined for each Settlement Interval based on Final Hour-Ahead Schedules) at a per-MWh rate that shall not exceed a figure that is determined by dividing the total Minimum Load Cost in that month by the sum of the minimum loads for Generating Units operating under Waiver Denial Periods in that month;
- b. finally, all remaining costs not allocated per (a) shall be allocated to each Scheduling Coordinator in proportion to the sum of that Scheduling Coordinator's monthly Control Area Gross Load and Demand within California outside the ISO Control Area that is served by exports to the monthly sum of the ISO Control Area Gross Load and the projected Demand within California outside the ISO Control Area that is served by exports from the ISO Control Area of all Scheduling Coordinators, except that Demand outside the ISO Control Area that is served by exports that are scheduled as part of a Wheeling Through transaction shall be excluded from the calculation of such allocations.

#### **40.8.6.1 FERC Must Offer Generator Unit Criteria for Allocation of Minimum Load Costs**

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

##### **40.8.6.1.1 Local Reliability Requirements**

The ISO shall classify a FERC 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; or

(3) accommodate the forced or scheduled outage of a network component that is not part of a transmission path between Congestion Zones.

#### **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:

(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.

#### **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.

#### **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.

\* \* \* \* \*

**40.11 Emissions Costs.**

**40.11.1 Obligation to Pay Emissions Cost Charges.**

Each Scheduling Coordinator shall be obligated to pay a charge which will be used to pay the verified Emissions Costs incurred by a Resource Adequacy Resource or FERC Must-Offer Generator as a direct result of an ISO Dispatch Instruction, in accordance with this Section 40. The ISO shall levy this administrative charge (the "Emissions Cost Charge") each month, in two parts: 1) All Emission Costs attributed to minimum load Energy will be allocated to Scheduling Coordinators in proportion to and in a similar manner as each Scheduling Coordinator's Minimum Load Cost obligation per Section 40.8.6.1 or Un-Recovered Minimum Load Cost obligation under Section 40.6B.5.1. The amount of Emissions Costs attributed to minimum load Energy will be determined by dividing the total megawatt hours eligible for Minimum Load Cost compensation for the month by the total megawatt hours of Instructed Imbalance Energy for the month. The resulting percentage is then multiplied by the Emissions Cost Charges for the month to determine the Emission Costs attributed to minimum load Energy. The proportion of Emissions Costs to Minimum Load Costs will be determined by dividing the total Emissions Costs attributed to minimum load Energy for the month by the total Minimum Load Costs for the month. 2) All Emission Costs resulting from an ISO dispatch but not attributable to minimum load Energy will be allocated to against all Scheduling Coordinators based upon each Scheduling Coordinator's Control Area Gross Load and Demand within California outside of the ISO Control Area that is served by exports from the ISO Control Area. Scheduling Coordinators shall make payment for all Emissions Cost Charges in accordance with the ISO Payments Calendar.

\* \* \* \* \*

**40.11.3 ~~Rate For the Emissions Cost Charge.~~**

The ~~rate at which~~amount the ISO will assess ~~for~~the Emissions Cost Charge shall be ~~at the~~ projected

annual total of all Emissions Costs incurred by Resource Adequacy Resources and FERC Must-Offer Generators as a direct result of ISO Dispatch Instruction, adjusted for interest projected to be earned on the monies in the Emissions Cost Trust Account, divided by twelve (12) months, ~~the sum of the Control Area Gross Load and the projected Demand within California outside of the ISO Control Area that is served by exports from the ISO Control Area of all Scheduling Coordinators for the applicable year ("Emissions Cost Demand")~~. The initial rate amount for the Emissions Cost Charge, and all subsequent rate amounts for the Emissions Cost Charge, shall be posted on the ISO Website.

**40.11.4 Adjustment of the ~~Rate For the~~ Emissions Cost Charge.**

The ISO may adjust the ~~rate at which~~ amount the ISO will assess for the Emissions Cost Charge on a monthly basis, as necessary, to reflect the net effect of the following:

- (a) the difference, if any, between actual Emissions Cost Demand and projected Emissions Cost Demand;
- (b) the difference, if any, between the projections of the Emissions Costs incurred by Resource Adequacy Resources or FERC Must-Offer Generators as a direct result of ISO Dispatch Instructions and the actual Emissions Costs incurred by Resource Adequacy Resources or FERC Must-Offer Generators as a direct result of ISO Dispatch Instructions as invoiced to the ISO and verified in accordance with this Section 40.11; and
- (c) the difference, if any, between actual and projected interest earned on funds in the Emissions Cost Trust Account.

The adjusted ~~rate at which~~ amount the ISO will assess for the Emissions Cost Charge shall take effect on a prospective basis on the first day of the next calendar month. The ISO shall publish all data and calculations used by the ISO as a basis for such an adjustment on the ISO Website at least five (5) days in advance of the date on which the new ~~rate shall go into effect~~ amount shall be assessed.

\* \* \* \* \*

**40.12 Start-Up Costs.**

**40.12.1 Obligation to Pay Start-Up Cost Charges.**

Each Scheduling Coordinator shall be obligated to pay a charge which will be used to pay the verified Start-Up Costs incurred by a Resource Adequacy Resource or FERC Must-Offer Generator as a direct result of an ISO Dispatch Instruction, in accordance with this Section 40.12. Such Start-Up Costs shall include (1) fuel and (2) auxiliary power. The ISO shall levy this charge (the "Start-Up Cost Charge"), each month, against all Scheduling Coordinators in proportion to and in a similar manner as based upon each Scheduling Coordinator's Minimum Load Cost obligation under Section 40.8.6.1 or Un-Recovered Minimum Load Cost obligation under Section 40.6B.5.1, Control Area Gross Load and Demand within California outside of the ISO Control Area that is served by exports from the ISO Control Area. The proportion of Start-Up Costs to Minimum Load Costs will be determined by dividing the total Start-Up Cost Charge for the month by the total Minimum Load Costs for the month. The proportion of Start-Up Costs then will be multiplied by the individual Scheduling Coordinator's Minimum Load Costs for the month to determine the Scheduling Coordinator's Start-Up Cost Charge. Scheduling Coordinators shall make payment for all Start-Up Cost Charges in accordance with the ISO Payments Calendar.

\* \* \* \* \*

**40.12.3 ~~Rate For the Start-Up Cost Charge.~~**

The ~~rate at which~~amount the ISO will assess for the Start-Up Cost Charge shall be at the projected annual total of all Start-Up Costs incurred by Resource Adequacy Resources or FERC Must-Offer Generators as a direct result of ISO Dispatch Instruction, adjusted for interest projected to be earned on the monies in the Start-Up Cost Trust Account, divided by twelve (12) months~~, the sum of the Control Area Gross Load and the projected Demand within California outside of the ISO Control Area that is served by exports from the ISO Control Area ("Start-Up Cost Demand")~~. The initial amount~~rate~~ for the Start-Up Cost

Charge, and all subsequent ~~amounts~~ rates for the Start-Up Cost Charge, shall be posted on the ISO Website.

#### **40.12.4 Adjustment of the Rate ~~For the Start-Up Cost Charge.~~**

The ISO may adjust the ~~amount~~ rate at which the ISO will assess ~~for~~ the Start-Up Cost Charge on a monthly basis, as necessary, to reflect the net effect of the following:

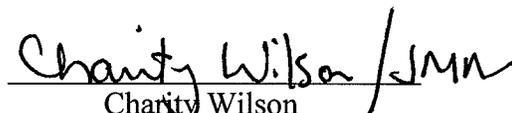
- (a) ~~the difference, if any, between actual Start-Up Cost Demand and projected Start-Up Cost Demand;~~
- (~~a~~b) the difference, if any, between the projections of the Start-Up Costs incurred by Resource Adequacy Resources or FERC Must-Offer Generators as a direct result of ISO Dispatch Instructions and the actual Start-Up Costs incurred by Resource Adequacy Resources or FERC Must-Offer Generators as a direct result of ISO Dispatch Instructions as invoiced to the ISO and verified in accordance with this Section 40.12; and
- (~~b~~e) the difference, if any, between actual and projected interest earned on funds in the Start-Up Cost Trust Account.

The adjusted ~~rate at which~~ amount the ISO will assess ~~for~~ the Start-Up Cost Charge shall take effect on a prospective basis on the first day of the next calendar month. The ISO shall publish all data and calculations used by the ISO as a basis for such an adjustment on the ISO Website at least five (5) days in advance of the date on which the new ~~rate shall go into effect~~ amount shall be assessed.

**Certificate of Service**

I hereby certify that I have this day served a copy of this document upon all parties listed on the official service list compiled by the Secretary in the above-captioned proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated this 26th day of February, 2007 at Folsom in the State of California.

  
Charity Wilson  
(916) 608-7147