This version updates the February 14, 2005 version of the Conformed Tariff to reflect:

• FERC's February 18, 2005 Order in Docket ER04-632-001, which accepted the ISO's May 21, 2004 compliance filing in that docket. The approved language (shown in highlight in previous versions of the Conformed Tariff) can be found on pages 178, 189, 190, 190A, 192, 301, 319, 340, 345, 347, 354, 380, 383, 383A, 387, and 387A.

• FERC's March 8, 2005 Order in the Amendment 48 Docket (see 110 ¶ FERC 61,271, Order on Rehearing and Accepting Compliance Filing) which accepted the ISO's November 24, 2004 Compliance Filing in that docket. The approved language (which deleted a phrase from Section 3.2.7.3(d) of the Tariff) can be found on Page 148A.

• FERC's March 24, 2005 Order in the Amendment 55 Docket (see 110 FERC ¶ 61,333) which accepted the ISO's November 29, 2004 Compliance Filing in that docket. The approved language (shown in highlight in previous versions of the Conformed Tariff) can be found on Pages 20, 20A, 859, 859A, 862, 863, 864, 865, 866, 867, 867A, 868, 869, 870, 871, 873, and 873A

• FERC's acceptance of Tariff Amendment No. 65 in an Order issued April 18, 2005 (see 111 ¶ FERC 61,073). The Amendment 65 language can be found on pages 204B and 204B.01. [These pages are contained in the PDF document below numbered 03, as well as in the Combined Tariff PDF document.]

• FERC's acceptance of Tariff Amendment No. 66 in an Order issued April 7, 2005 (see 111 ¶ FERC 61,008). The Amendment 66 language can be found on pages 104A, 107, 247.03, 692, 692A, 693, 694E, 694E.00, 694E.01, and 694F.

• FERC's April 6, 2005 letter Order in Docket ER04-632-002, which accepted the ISO's March 7, 2005 compliance filing (as amended on March 8, 2005) in that docket. The approved language can be found on page 387A.

• FERC's April 8, 2005 letter Order in Docket ER02-2298, which accepted the ISO's March 2, 2005 compliance filing in that docket. The approved language can be found on page 396E.

• FERC's April 18, 2005 letter Order in Docket ER04-688-003, which accepted the ISO's January 10, 2005 compliance filing in that docket. The approved language (shown in highlight in the previous Conformed Tariff) can be found on pages 141 and 141.00

• FERC's April 18, 2005 letter Order in Docket ER05-277, which accepted the ISO's February 14, 2005 compliance filing in that docket. The approved language, which was previously shown in highlight, can be found on page 247.03.

• FERC's May 6, 2005 letter order in Dockets ER02-2298 et al., accepting the Pro Forma Service Agreement tariff sheets proposed in the ISO's Compliance Filing made on April 12, 2005. The approved tariff sheets can be found on pages 970 through 1087.

• FERC's May 9, 2005 Order in the Amendment 62 Docket (see 111 FERC ¶ 61,193) which accepted the ISO's November 1, 2004 Compliance Filing in that Docket. The approved language (shown in highlight in previous versions of the Conformed Tariff) can be found on Pages 247D and 247D.01.

• FERC's May 10, 2005 Order in the Amendment 54 Docket (see 111 FERC ¶ 61,207) which accepted the ISO's September 7, 2004 Compliance Filing in that docket. The approved language (shown in highlight in previous versions of the Conformed Tariff) can be found on Pages 184E, 184E.01, 213, 213.00, 247.01, 247.02, 247C, 247C.00, 694C, 694D, 694E, 694G, 694H, 882, 883, 883A, 884, and 884A.

• FERC's acceptance of Tariff Amendment No. 67 in a Letter Order issued May 11, 2005 in Docket ER05-796. The Amendment 67 language can be found on pages 102, 184H, 465 and 476.

• FERC's acceptance of Tariff Amendment No. 69 in an Order issued May 20, 2005 (see 111 ¶ FERC 61,235). The Amendment 69 language can be found on pages 692, 692A, 694E.01, 694F and 695.

• FERC's June 2, 2005 Order in the Amendment 58 Docket (see 111 FERC ¶ 61,342) which accepted the ISO's September 7, 2004 Compliance Filing in that docket. The approved language (shown in highlight in previous versions of the Conformed Tariff) can be found on Pages 247.01, 247.02, 247A, 247C, 247C.00, 247C.01, 694C, 694D, and 694E. [These pages are contained in the PDF documents below numbered 04 and 20, as well as in the Combined Tariff PDF document.]

• The ISO's Compliance Filing made on April 25, 2005 in the Amendment 55 Dockets (ER03-1102 et al). The proposed language can be found on pages 863, 864, 864A, and 867; as this filing has not been approved by FERC as of June 27, 2005, all of the proposed language is shown in highlight. [These pages are contained in the PDF document below numbered 25, as well as in the Combined Tariff PDF document.]

• The ISO's Compliance Filing made on May 9, 2005 in Docket ER05-224, in response to FERC's April 8, 2005 Order in that Docket (see 111 FERC ¶ 61,015). The proposed language can be found on pages 939, 1065, 1066, 1066A, 1076, 1077, 1078 and 1079; as this filing has not been approved by FERC as of June 27, 2005, all of the proposed language is shown in highlight. [These pages are contained in the PDF document below numbered 28 and 29, as well as in the Combined Tariff PDF document.]

• The ISO's Compliance Filing made on June 8, 2005 in the Amendment 62 Docket (ER04-1087). The proposed language can be found on page 349A; as this filing has not been approved by FERC as of June 27, 2005, all of the proposed language is shown in highlight. [These pages are contained in the PDF document below numbered 25, as well as in the Combined Tariff PDF document.]

• FERC's April 18, 2005 Order on Rehearing and Compliance Filing (see 111 ¶ FERC 61,074) which accepted the ISO's February 14, 2005 compliance filing in the Amendment 50 docket. The approved language, which was previously shown in highlight, appears in a supplementary section styled Tab 1 to the Conformed Tariff, on pages 204B, and 204C; it does not appear in the conformed tariff itself because, although approved, it has not yet become effective.

• FERC's June 22, 2005 Order accepting in part and rejecting in part Tariff Amendment No. 68 (see 111 ¶ FERC 61,452). The approved language, including a new Station Power Protocol, appears in a supplementary section styled Tab 2 to the Conformed Tariff, on pages 189, 193, 308.01, 308A, 319, 328, 334A, 335, 344A, 349B, 352, 352.01, 387C, 738, 740, 945, 946, 947, 948, 949, and 950; it does not appear in the conformed tariff itself because, although approved, it has not yet become effective.

It should also be noted that OCP page 517A, which was approved by FERC in its Order issued October 23, 2001 (see 97 FERC ¶ 61,066) was inadvertently omitted from a number of previous versions of the Conformed Tariff; that omission has been corrected in the current Conformed Tariff. Also, the previous version of the Conformed Tariff left several provisions from the August 10, 2004 compliance filing in Docket ER04-835 shaded, although they should have been changed to plain text to reflect their approval by FERC in its Order issued October 29, 2004 (see 109 FERC ¶ 61,097). That error has been corrected in the current Conformed Tariff.

which are being self-provided the Energy Bid shall be used to determine the Dispatch, subject to the limitation on the Dispatch of Spinning Reserve and Non-Spinning Reserve set forth in Section 2.5.22.3.

**2.5.22.4 Supplemental Energy Bids.** In addition to the Generating Units, Loads and System Resources which have been scheduled to provide Ancillary Services in the Day-Ahead and Hour-Ahead Markets, the ISO may Dispatch Generating Units, Loads or System Resources for which Scheduling Coordinators have submitted Supplemental Energy bids.

# 2.5.22.4.1 Timing of Supplemental Energy Bids.

Supplemental Energy bids must be submitted to the ISO no later than sixty-two (62) minutes prior to the operating hour. Bids may also be submitted at any time after the Day-Ahead Market closes. These Supplemental Energy bids cannot be withdrawn after sixty-two (62) minutes prior to the Settlement Period.

# 2.5.22.4.2 Form of Supplemental Energy Bid Information.

Supplemental Energy bids must include the information specified in Schedules and Bids Protocol Section 6.1.

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(g) Hourly Pre-Dispatch. If Dispatched, each System Resource flagged for Hourly Pre-Dispatch in the next hour shall be Dispatched to operate at a constant level over the entire hour. The RTD Software shall perform the Hourly Pre-Dispatch for each hour once prior to the operating hour. Hourly Pre-Dispatched System Resources shall be Pre-Dispatched in merit order and shall not set the price. The Hourly Pre-Dispatch shall not subsequently be revised by the RTD Software.

# 2.5.22.6.2 Transmission System Constraints.

RTD shall use a Zonal DC network model where all nodes within a Zone would be collapsed into a single equivalent "Zonal bus." The constraints using the Zonal network model shall be the following:

- a) Power balance constraint in each Zone. The system Imbalance Energy requirement shall be calculated on a Zonal basis. The power balance constraints shall dictate an optimal Dispatch that would eliminate the Imbalance Energy requirement in all Zones, subject to (b) below.
- b) Inter-Zonal Interface constraints. These constraints shall limit the net active power flow on Inter-Zonal Interfaces at or below their transfer limits. For Inter-Zonal Interfaces between the ISO Control Area and another Control Area, inter-Zonal transfer capacity shall be reserved for awarded Ancillary Services from System Resources not already Dispatched.

### 2.5.22.6.3 Inter-hour Dispatch of Resources Without Real-Time Energy Bids.

Real-time Dispatch Instructions shall be issued for each Dispatch Interval as needed to prescribe the ramp between a resource's Final Hour-Ahead Schedule in one hour to its Final Hour-Ahead Schedule in the immediately succeeding operating hour. Such Dispatch Instructions shall be based on the lesser of: 1) the applicable operational ramp rate as provided for in SBP Section 6.5 and 2) the ramp rate associated with the Standard Ramp. The Dispatch

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(c) the Scheduling Coordinator for the Participating Generator, owner or operator of the Curtailable Demand or System Resource concerned shall have Uninstructed Imbalance Energy due to the difference between the Generating Unit's, Curtailable Demand's or System Resource's instructed and actual output (or Demand). The Uninstructed Imbalance Energy shall be subject to the settlement for Uninstructed Imbalance Energy in accordance with Section 11.2.4.1 and the Uninstructed Deviation Penalty in accordance with Section 11.2.4.1.2. This applies whether the Ancillary Services concerned are contracted or self-provided.

The ISO will develop additional mechanisms to deter Generating Units, Curtailable Demand and System Resources from failing to perform according to Dispatch instructions, for example reduction in payments to Scheduling Coordinators, or suspension of the Scheduling Coordinator's Ancillary Services certificate for the Generating Unit, Curtailable Demand or System Resource concerned.

# 2.5.23 Pricing Imbalance Energy.

**2.5.23.1 General Principles.** Instructed and Uninstructed Imbalance Energy shall be paid or charged the applicable Resource-Specific Settlement Interval Ex Post Price or the Zonal Settlement Interval Ex Post Price except for hourly pre-dispatched Instructed Imbalance Energy, which shall be settled as set forth in Section D 2.1.2 in Appendix D of the Settlement and Billing Protocol. These prices are determined using the Dispatch Interval Ex Post Prices. The Dispatch Interval Ex Post Prices shall be based on the bid of the marginal Generating Units, System Units, and Curtailable Demand dispatched by the ISO to increase or reduce Demand or Energy output in each Dispatch Interval as provided in Section 2.5.23.2.1.

The marginal bid is

agreements. The New Participating TO shall assume responsibility for paying all Scheduling Coordinators charges regardless of whether the New Participating TO elects to become a Scheduling Coordinator or obtains the services of a Scheduling Coordinator.

**3.1.3** Western Path 15 shall be required to turn over to ISO Operational Control only its rights and interests in the Path 15 Upgrade and shall not be required to turn over to ISO Operational Control Central Valley Project transmission facilities, Pacific AC Intertie transmission facilities, California-Oregon Transmission Project facilities, or any other new transmission facilities or Entitlements not related to the Path 15 Upgrade. For purposes of the ISO Tariff, Western Path 15 shall be treated with respect to revenue recovery as a Project Sponsor in accordance with Section 3.2.7.

**3.1.4** The capacity provided to the ISO under the Transmission Exchange Agreement originally accepted by FERC in Docket No. ER04-688 is deemed to be ISO Controlled Grid facilities and is subject to all terms and conditions of the ISO Tariff.

# 3.2 Transmission Expansion.

A Participating TO shall be obligated to construct all transmission additions and upgrades that are determined to be needed in accordance with the requirements of this Section 3.2 and which: (1) are additions or upgrades to transmission facilities that are located within its PTO Service Territory, unless it does not own the facility being upgraded or added and neither terminus of such facility is located within its PTO Service Territory; or (2) are additions to existing transmission facilities or upgrades to existing transmission facilities that it owns, that are part of the ISO Controlled Grid, and that are located outside of its PTO Service Territory, unless the joint-ownership arrangement, if any, does not permit. A Participating TO's obligation to construct such transmission additions and upgrades shall be subject to: (1) its ability, after making a good faith effort, to obtain all necessary approvals and property rights under applicable federal, state, and local laws and (2) the presence of a cost recovery mechanism with cost

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responsibility assigned in accordance with Section 3.2.7. The obligations of the Participating TO to construct such transmission additions or upgrades will not alter the rights of any entity to construct and expand transmission facilities as those rights would exist in the absence of the TO's obligations under this ISO Tariff or as those rights may be conferred by the ISO or may arise or exist pursuant to this ISO Tariff.

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(d) The Project Sponsor's share of Wheeling, Congestion and FTR auction revenues for the upgraded transmission facility shall be the number that is determined by dividing the number that is determined by subtracting the rating of the transmission facility before the upgrade or addition from the new rating for the upgraded or additional transmission facility by the new rating for the upgraded or additional transmission facility. The Participating TO's share of Wheeling, Congestion and FTR auction revenues for the upgraded or additional transmission facility shall be the number that is determined by subtracting the Project Sponsor's share from one hundred percent (100%). Such allocated shares shall become effective on the date the new rating takes effect. The full amount of capacity added to the system will be as determined through the regional reliability council process of the Western Electricity Coordinating Council or its successor.

**3.2.7.4** Once a New Participating TO has executed the Transmission Control Agreement and it has become effective, the cost for New High Voltage Facilities for all Participating TOs shall be included in the ISO Grid-wide component of the High Voltage Access Charge in accordance with Schedule 3 of Appendix F, unless and with respect to Western Path 15 only, cost recovery is provided in Section 3.2.7.3. The

Utility) in connection with services under Reliability Must-Run Contracts in the last 3 months for which invoices have been issued. The letter of credit must be issued by a bank or other financial institution whose senior unsecured debt rating is not less than A from S&P and A2 from Moody's. The letter of credit shall be in such form as the ISO may reasonably require from time to time by notice to the New Responsible Utility and shall authorize the ISO or the Owner to draw on the letter of credit for deposit solely into the RMR Owner Facility Trust Account in an amount equal to any amount due and not paid by the Responsible Utility under the ISO Invoice. The security provided by the New Responsible Utility pursuant to this Section 5.2.7.3 is intended to cover the New Responsible Utility's outstanding liability for payments it is liable to make to the ISO under this Section 5.2.7, including monthly payments, any reimbursement for capital improvement, termination fees and any other payments to which the ISO is liable under Reliability Must-Run Contracts.

**5.2.8 Responsibility for Reliability Must-Run Charge** Except as otherwise provided in Section 5.2.8.1, the costs incurred by the ISO under each Reliability Must-Run Contract shall be payable to the ISO by the Responsible Utility in whose PTO Service Territory the Reliability Must-Run Generating Units covered by such Reliability Must-Run Contract are located or, where a Reliability Must-Run Generating Unit is located outside the PTO Service Territory of any Responsible Utility, by the Responsible Utility or Responsible Utilities whose PTO Service Territories are contiguous to the Service Area in which the Generating Unit is located, in proportion to the benefits that each such Responsible Utility receives, as determined by the ISO. Where costs incurred by the ISO under a Reliability Must-Run Contract are allocated among two or more Responsible Utilities pursuant to this section, the ISO will file the allocation under Section 205 of the Federal Power Act.

Imbalance Energy for each Settlement Interval within the relevant hour and be settled at the Resource-Specific Settlement Interval Ex Post Price; (3) To the extent the Instructed Imbalance Energy payments are not sufficient to cover the generator's Minimum Load Cost as defined in Section 5.11.6.1.2 of this Tariff, the generator will also receive an uplift payment for its Minimum Load Cost compensation for the relevant eligible Settlement Intervals of hours during the Waiver Denial Period that the Generating Unit runs at minimum load in compliance with the must-offer obligation; and (4) To the extent the Generator is dispatched for real time Imbalance Energy above its minimum load for any Dispatch Interval within an hour during the Waiver Denial Period, the Generator will be eligible for Bid Cost Recovery, as set forth in Section 11.2.4.1.1.

# 5.11.6.1.1.1 Payments for Imbalance Energy Above the Minimum Operating Level for Generating Units Eligible to Be Paid Minimum Load Costs

When, on a Settlement Interval basis, a Must-Offer Generator's Generating Unit produces a quantity of Energy above the Generating Unit's minimum operating level due to an ISO Dispatch Instruction, the Must-Offer Generator shall recover its Minimum Load Costs and its bid costs, based on the ISO's instruction, as set forth in Section 11.2.4.1.1.1, for any such Settlement Intervals during hours within a Waiver Denial Period, irrespective of deviations outside of its Tolerance Band.

# 5.11.6.1.1.2 Payments for Imbalance Energy for the Minimum Operating Level for Generating Units Eligible to Be Paid Minimum Load Costs

A Generating Unit 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 specialpurpose Demand ID for the sole purpose of Scheduling the minimum operating level Energy shall be paid, in addition to being paid its Minimum Load Costs subject to eligibility as set forth in Section 5.11.6.1.1, an amount equal to the Resource Specific Settlement Interval Ex Post Price times the amount of Energy actually delivered.

# 5.11.6.1.2 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,

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of: 1) the product of the unit's average heat rate (as determined by the ISO from the data provided in accordance with Section 2.5.23.3.3) 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.

# 5.11.6.1.3 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

The Energy Bid shall be a staircase price (\$/MWh) versus quantity (MW) curve of up to 10 segments. The Energy Bid shall be submitted to the real-time Imbalance Energy market using the Supplemental Energy Bid template. The Energy Bid curve shall be monotonically increasing, i.e., the price of a subsequent segment shall be greater than the price of a previous segment. Subject to the foregoing, sellers may increase or decrease bids in the ISO Real Time Market for capacity associated with those parts of the bid curve that were not accepted in or before the Hour-Ahead Market. For capacity associated with those parts of the bid curve previously accepted in or before the Hour-Ahead Market, sellers may only submit lower bids in subsequent markets. Each Forbidden Operating Region must be represented by only one bid segment.

## 5.13.2 Energy Bid Submission.

5.13.2.1 Real Time Market. Bids shall be submitted for use in the real-time Hourly Pre-Dispatch in DP 8.6.3(j) and the Real-Time Economic Dispatch up to sixty-two (62) minutes prior to the Operating Hour. Resources required to offer their Available Generation in accordance with Section 5.11.4 shall be required to submit Energy Bids for 1) all of their Available Generation and 2) any Ancillary Services capacity awarded or self-provided in the Day-Ahead or Hour-Ahead Ancillary Services markets. In the absence of submitted bids, default bids will be used for resources required to offer their Available Generation in accordance with Section 5.11.4 that were awarded or self-provided Ancillary Services capacity Bid for no less than the amount of awarded or self-provided Ancillary Services capacity. Resources not required to offer their Available Generation in accordance with Section 5.11.4 that were awarded or self-provided Ancillary Services capacity. Resources not required to offer their Available Generation in accordance with Section 5.11.4 that were awarded or self-provided Ancillary Services capacity. Resources not required to offer their Available Generation in accordance with Section 5.11.4 may voluntarily submit Energy Bids. Submitted Energy Bids shall be subject to the Damage Control Bid Cap as set forth in Section 28.1 and to the Mitigation Measures set forth in Appendix A to the Market Monitoring and Information Protocol.

## 6.5 Confidentiality.

All information posted on WEnet shall be subject to the confidentiality obligations contained in Section 20.3 of this ISO Tariff.

## 6.6 Standards of Conduct.

The ISO and all Market Participants shall comply with their obligations, to the extent applicable, under the standards of conduct set out in 18 C.F.R. §37.

## 7. TRANSMISSION PRICING.

## 7.1 Access Charges.

All Market Participants withdrawing Energy from the ISO Controlled Grid shall pay Access Charges in accordance with this Section 7.1 and Appendix F, Schedule 3. Prior to the transition date determined under Section 4 of Schedule 3 to Appendix F, the Access Charge for each Participating TO shall be determined in accordance with the principles set forth in this Section 7.1 and in Section 5 of the TO Tariff. The Access Charge shall comprise two components, which together shall be designed to recover each Participating TO's Transmission Revenue Requirement. The first component shall be the annual authorized revenue requirement associated with the transmission facilities and Entitlements turned over to the Operational Control of the ISO by a Participating TO approved by FERC. The second component shall be based on the Transmission Revenue Balancing Account (TRBA), which shall be designed to flow through to the Participating TO's Transmission Revenue Credits calculated in accordance with Section 5 of the TO Tariff and other credits identified in Sections 6 and 8 of Schedule 3 in Appendix F of the ISO Tariff.

Commencing on the transition date determined under Section 4 of Schedule 3 to Appendix F, the Access Charges shall be paid by any UDC or MSS Operator that is serving Gross Load in a PTO Service Territory,

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and shall consist, where applicable, of a High Voltage Access Charge, a Transition Charge and a Low Voltage Access Charge. High Voltage Access Charges and Low Voltage Access Charges shall each comprise two components, which together shall be designed to recover each Participating TO's High Voltage Transmission Revenue Requirement and Low Voltage Transmission Revenue Requirement, as applicable. The first component shall be based on the annual authorized Transmission Revenue Requirement associated with the high voltage or low voltage, as applicable, transmission facilities and Entitlements turned over to the ISO Operational Control by a Participating TO. The second component shall be the Transmission Revenue Balancing Account (TRBA), which shall be designed to flow through the Participating TO's Transmission Revenue Credits associated with the high voltage or low voltage, as applicable, transmission facilities and Entitlements and calculated in accordance with Section 5 of the TO Tariff and other credits identified in Section 6 and 8 of Schedule 3 of Appendix F of the ISO Tariff. Each Participating TO shall provide in its TO Tariff filing with FERC an appendix to such filing that states the Participating TO's High Voltage Transmission Revenue Requirement, its Low Voltage Transmission Revenue Requirement (if applicable) and its Gross Load used in developing the rate. The allocation of each Participating TO's Transmission Revenue Requirement between the High Voltage Transmission Revenue Requirement and the Low Voltage Transmission Revenue Requirement shall be undertaken in accordance with Section 11 of Schedule 3 of Appendix F. To the extent necessary, each Participating TO shall make conforming changes to its TO Tariff.

The applicable High Voltage Access Charge and the Transition Charge shall be paid to the ISO by each UDC and MSS Operator based on its Gross Load connected to a High Voltage Transmission Facility in a PTO Service Territory,

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either directly or through intervening distribution facilities, but not through a Low Voltage Transmission Facility. The applicable High Voltage Access Charge, the Transition Charge and the Low Voltage Access Charge for the applicable Participating TO shall be paid by each UDC and MSS Operator based on its Gross Load in the PTO Service Territory. The applicable High Voltage Access Charge and Transition Charge shall be assessed by the ISO as a charge for transmission service under this ISO Tariff, shall be determined in accordance with Schedule 3 of Appendix F, and shall include all applicable components of the High Voltage Access Charge and Transition Charge set forth therein.

The Low Voltage Access Charge for each Participating TO is set forth in that Participating TO's TO Tariff. Each Participating TO shall charge for and collect the Low Voltage Access Charge, as provided in its TO Tariff. If a Participating TO is using the Low Voltage Transmission Facilities of another Participating TO, such Participating TO shall also be assessed the Low Voltage Access Charge of the other Participating TO by such other Participating TO. The ISO shall provide to the applicable Participating TO a statement of the amount of Energy delivered to each UDC and MSS Operator serving Gross Load that utilizes the Low Voltage Transmission Facilities of that Participating TO on a monthly basis. If a UDC or MSS Operator that is serving Gross Load in a PTO Service Territory has Existing Rights to use another Participating TO's Low Voltage Transmission Facilities, such entity shall not be charged the Low Voltage Access Charge for delivery of Energy to Gross Load for deliveries using the Existing Rights. Each Participating TO shall recover Standby Transmission Revenues directly from the Standby Service Customers of that Participating TO through its applicable retail rates.

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The procedures for public participation in a federal power marketing agency's ratemaking process are posted on the federal power marketing agency's website. Each federal power marketing agency shall also post on its website the Federal Register Notices and FERC orders for rate making processes that impact the federal power marketing agency's High Voltage Transmission Revenue Requirement. At the time the federal power marketing agency submits its application to become a New Participating TO in accordance with the Transmission Control Agreement, it shall submit its first proposed High Voltage Transmission Revenue Requirement to the FERC and the ISO.

**7.1.2 High Voltage Access Charge and Transition Charge Settlement.** UDCs and MSS Operators serving Gross Load in a PTO Service Territory shall be charged on a monthly basis, in arrears, the applicable High Voltage Access Charge and Transition Charge. The High Voltage Access Charge and Transition Charge for a billing period is calculated by the ISO as the product of the applicable High Voltage Access Charge or Transition Charge, as applicable, and Gross Load connected to the facilities of the UDC and MSS Operator in the PTO Service Territory. The High Voltage Access Charge and Transition Charge are determined in accordance with Schedule 3 of Appendix F of the ISO Tariff. These rates may be adjusted from time to time in accordance with Schedule 3 to Appendix F. During the 10-year transition period described in Section 4 of Schedule 3 of Appendix F of the ISO Tariff, a UDC or MSS Operator that is also a Participating TO shall pay, or receive payment of, if applicable, the difference between (i) the High Voltage Access Charge and the Transition Charge applicable to its transactions as a UDC or MSS Operator; and (ii) the disbursement of High Voltage Access Charge revenues to which it is entitled pursuant to Section 7.1.3.

Issued by: Charles F. Robinson, Vice President and General Counsel Issued on: May 21, 2004

changes to the Suggested Adjusted Schedules, all of the Suggested Adjusted Schedules shall become the Final Schedules. The Final Schedules shall serve as the basis for Settlement between the ISO and each Scheduling Coordinator.

# 2.2.9 Prohibition on Scheduling Across Out-of-Service Transmission Paths. Scheduling

Coordinators shall not submit any Schedule using a transmission path for any Settlement Period for which the Operating Transfer Capability for that path is zero MW. The ISO shall reject Schedules submitted for transmission paths on which the Operating Transfer Capability is zero MW. If the Operating Transfer Capability of a transmission path is reduced to zero after Final Day-Ahead Schedules have been submitted, then, if time permits, the ISO shall direct the responsible Scheduling Coordinators to reduce all Schedules on such zero-rated transmission paths to zero in the Hour-Ahead Market. As necessary to comply with Applicable Reliability Criteria, the ISO shall reduce any non-zero Final Hour-Ahead Schedules across zero-rated transmission paths to zero after the close of the Hour-Ahead Market. No Usage Charges will be assessed, nor will any Usage Charges for counter-flow be paid, for Schedules across a path with an Operating Transfer Capability of zero.

# 2.2.10 Information to be Provided by the ISO to all Scheduling Coordinators.

By 6:00 p.m. two days prior to a Trading Day, the ISO shall publish on WEnet information, including the following to all Scheduling Coordinators for each Settlement Period of the Trading Day:

2.2.10.1 Scheduled Line Outages. Scheduled transmission line Outages;

2.2.10.2 [Not Used]

**2.2.10.3** Forecast Loop-Flow. Forecast Loop Flow over ISO Inter-Zonal Interfaces and Scheduling Points:

2.2.10.4 Advisory Demand Forecasts. Advisory Demand Forecasts by location;

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2.2.10.5 Updated Transmission Loss Factors. Updated Generation Meter Multipliers reflecting

Transmission Losses to be supplied by each Generating Unit and by each import into the ISO Control

Area;

2.2.10.6 Ancillary Services. Expected Ancillary Services requirement by reference to Zones for

each of the reserve Ancillary Services.

- 2.2.10.7 [Not Used]
- 2.2.10.8 [Not Used]

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7.2.6.1 Decremental Bids. With regard to decremental bids, if Final Hour-Ahead Schedules cause Congestion on the Intra-Zonal interface, the ISO shall, after Dispatching available and effective Reliability Must-Run Units to manage the Congestion, apply the decremental reference prices determined by the independent entity that determines the reference prices for the Automatic Mitigation Procedure (AMP) as described in Appendix A to the Market Monitoring and Information Protocol. The ISO shall Dispatch Generating Units according to the decremental reference prices thus established, the resource's effectiveness on the Congestion, and other relevant factors such as Energy limitations, existing contractual restrictions, and Regulatory Must-Run or Regulatory Must-Take status, to alleviate the Congestion after Final Hour-Ahead Schedules are issued. Where the ISO must reduce a Generating Unit's output, the ISO shall Dispatch Generating Units according to the decremental reference prices and not according to Adjustment Bids or Supplemental Energy Bids to alleviate Intra-Zonal Congestion. No Generating Unit shall be Dispatched below its minimum operating level or above its maximum operating level. No Reliability Must-Run Unit shall be Dispatched below the operating level determined by the ISO as necessary to maintain reliability. If Congestion still exists after all Generating Units are Dispatched to their minimum operating levels, the ISO shall instruct Generating Units to shut off in merit order based on their total shutdown costs, beginning with the most expensive unit, where such shut-down costs include the lesser of the cost to start up the Generating Unit or to keep the Generating Unit warm for each Generating Unit with a non-zero Final Day-Ahead Schedule for Energy for the next day. Units shut off due to Congestion as set forth in this Section 7.2.6.1 shall be charged the lesser of the decremental reference price for the operating range between zero MW output and the unit's minimum operating level or the relevant Market Clearing Price.

Intermittent Resources, or Qualifying Facilities to manage Intra-Zonal Congestion after redispatching all other available and effective generating resources, including Reliability Must-Run Units.

7.2.6.1.1 Decremental Bid Reference Levels. Decremental bid reference levels shall be determined for use in managing Intra-Zonal Congestion as set forth above in Section 7.2.6.1.

(a) Determination. Decremental bid reference levels shall be determined by applying the following steps in order as needed:

1. Excluding proxy bids, mitigated bids, and bids used out of merit order for managing Intra-Zonal Congestion, the accepted decremental bid, or the lower of the mean or the median of a resource's accepted decremental bids if such a resource has more than one accepted decremental bid in competitive periods over the previous 90 days for peak and off-peak periods, adjusted for monthly changes in fuel prices using the proxy figure for natural gas prices posted on the ISO Home Page. For the purposes of this Section 7.2.6.1.1, to determine whether accepted decremental bids over the previous 90 days were accepted during competitive periods, the independent entity responsible for determining reference prices will apply a test to the prior 90-day period. The test will require that the ratio of a unit's accepted out-of-sequence decremental bids (MWh) for the prior 90 days to its total accepted decremental bids (MWh) for the prior 90 days be less than 50 percent. If this ratio is greater or equal to 50%, accepted decremental bids will be determined to have been accepted in noncompetitive periods and cannot be used to determine the decremental reference price. This test would be applied each day on a rolling 90-day basis. One ratio would

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be calculated for each unit with no differentiation for various output

segments on the unit. Accepted and justified decremental bids below the

applicable

soft cap, as set forth in Section 28.1.3 of this Tariff, will be included in the calculation of reference prices;

- A level determined in consultation with the Market Participant submitting the bid or bids at issue, provided such consultation has occurred prior to the occurrence of the conduct being examined, and provided the Market Participant has provided sufficient data in accordance with specifications provided by the independent entity responsible for determining reference prices;
- 3. 90 percent of the unit's default Energy Bid determined monthly as set forth in Section 5.11.5 (based on the incremental heat rate submitted to the independent entity responsible for determining reference prices, adjusted for gas prices, and the variable O&M cost on file with the independent entity responsible for determining reference prices, or the default O&M cost of \$6/MWh);
- 4. 90 percent of the mean of the economic Market Clearing Prices for the units' relevant location during the lowest-priced 25 percent of the hours that the unit was dispatched or scheduled over the previous 90 days for peak and off-peak periods, adjusted for changes in fuel prices; or
- 5. If sufficient data do not exist to calculate a reference level on the basis of the first, second, or fourth methods and the third method is not applicable or an attempt to determine a reference level in consultation with a Market Participant has not been successful, the independent entity responsible for determining reference prices shall determine a reference level on the basis of:
  - i. the independent entity's estimated costs of an electric facility, taking into account available operating costs data, opportunity

Redispatch cost will be recovered for each Settlement Period through the Grid Operations Charge, which shall be paid to the ISO by all Scheduling Coordinators in proportion to their metered Demands within the Zone with Intra-Zonal Congestion, and scheduled exports from the Zone with Intra-Zonal Congestion to a neighboring Control Area, provided that, with respect to Demands within an MSS in the Zone and scheduled exports from the MSS to a neighboring Control Area, a Scheduling Coordinator shall be required to pay Grid Operations Charges only with respect to Intra-Zonal Congestion, if any, that occurs on an interconnection between the MSS and the ISO Controlled Grid, and with respect to Intra-Zonal Congestion that occurs within the MSS, to the extent the Congestion is not relieved by the MSS Operator.

# 7.4 Transmission Losses.

# 7.4.1 Obligation to Provide for Transmission Losses.

Each Scheduling Coordinator shall ensure that it schedules sufficient Generation to meet both its Demand and Transmission Losses responsibilities as determined in accordance with this Section 7.4. Scheduling Coordinators for Generators, System Units and System Resources are responsible for their respective proportion of Transmission Losses as determined in accordance with Section 7.4.2. For each Final Hour-Ahead Schedule, each Scheduling Coordinator representing Generators, dynamically scheduled System Resources or System Units shall elect through the flag described in SBP Section 2.1.1 to either: 1) generate sufficient additional energy to meet its respective Transmission Losses or 2) be financially responsible for its respective transmission loss obligation based on the Imbalance Energy procured on its behalf by the ISO. Scheduling Coordinators for non-dynamically scheduled System Resources may self-provide transmission losses by scheduling an additional balanced quantity of Energy, both Supply and Demand, equal to their expected transmission loss obligation above their committed delivery quantities in their Hour-Ahead Schedules. In the ISO Imbalance Energy market, all Scheduling

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Coordinators for Generators, System Units, and System Resources must be financially responsible for all respective Transmission Losses associated with their respective Imbalance Energy Dispatch Instructions in real time, based on the Imbalance Energy procured on their behalf by the ISO. A Scheduling Coordinator for an MSS Operator that has elected

## 11.2.4.1 Net Settlements for Uninstructed Imbalance Energy.

Uninstructed Imbalance Energy attributable to each Demand Take-Out Point, Generating Unit, System Unit or System Resource for which a Scheduling Coordinator has a Final Hour-Ahead Schedule or Metered Quantity, for each Settlement Interval, shall be deemed to be sold or purchased, as the case may be, by the ISO and charges or payments for Uninstructed Imbalance Energy shall be settled by debiting or crediting, as the case may be, the Scheduling Coordinator with an amount for each Settlement Interval in accordance with Section 2.5.23.2.1. Positive or negative Uninstructed Imbalance Energy as described in SABP Appendix D, Section 2.1.1 shall be paid or charged the Resource-Specific Settlement Interval Ex Post Price or the Zonal Settlement Interval Ex Post Price, as the case may be.

# 11.2.4.1.1 Settlement for Instructed Imbalance Energy

Instructed Imbalance Energy attributable to each Scheduling Coordinator in each Settlement Interval shall be deemed to be sold or purchased, as the case may be, by the ISO and charges or payments for Instructed Imbalance Energy shall be settled by debiting or crediting, as the case may be, the Scheduling Coordinator with an amount for each Settlement Interval in accordance with Section 2.5.23.

# 11.2.4.1.1.1 Bid Cost Recovery for Generating Units, System Units, Dynamically Scheduled System Resources, and Curtailable Demand.

The ISO shall determine, for each Trading Day, for each Generating Unit, System Unit, dynamically scheduled System Resource, and Curtailable Demand, Dispatched in the Real Time Market pursuant to Section 2.5.22, whether there exists a surplus or deficit in that resource's recovery of its Energy Bid costs, that are less than or equal to the Maximum Bid Level, through Instructed Imbalance Energy credits, as set forth in Section 11.2.4.1.1. This determination of market revenue surplus or deficit shall be calculated as the difference between: 1) the Instructed Imbalance Energy payment as based on the

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relevant Resource-Specific Settlement Interval Ex Post Price and 2) the resource's Energy Bid cost for each Settlement Interval. Bid cost recovery payment will be based on Settlement Intervals in which the resource: 1) did not recover its Energy Bid costs, and 2) generated or consumed an amount of Energy resulting from any Dispatch Instructions pursuant to Section 2.5.22. These Settlement Intervals will be netted against all Settlement Intervals in which the Instructed Imbalance Energy payments to the resource exceeded its Energy Bid costs. The resulting total bid cost recovery payment is then divided equally amongst the same Settlement Intervals to yield a per-Settlement Interval bid cost recovery payment. Payments for unrecovered bid costs for portions of Energy associated with bids above the Maximum Bid Level will not be netted with other surpluses or deficits and are subject to recall if the such bids above have not been adequately justified pursuant to Section 28.1.2. Energy Bid cost recovery associated with Residual Energy as provided for in Section 2.5.22.6.4 shall be based on the Energy Bids for the previous or next operating hour, whichever the case may be, upon which the Dispatch Instruction was based.

# 11.2.4.1.1.2 Bid Cost Recovery for System Resources

The ISO shall settle predispatched Energy from System Resources based on each resource's Energy Bid costs for each Settlement Interval, for each System Resource submitting bids in the Real Time Market pursuant to Section 2.5.22. This Energy bid cost settlement shall be calculated as set forth in Sections D 2.1.2 and D 2.6.3 in Appendix D of the Settlements and Billing Protocol. Bid cost settlement shall apply to both incremental and decremental predispatched Energy.

An uplift payment will be made as necessary for each Settlement Interval to assure that the System Resource recovers its Energy Bid costs for the quantity of Energy delivered. Payments for un-recovered bid costs for portions of Energy associated with bids above the Maximum Bid Level are subject to recall if such bids have not been adequately justified pursuant to Section 28.1.2.

# 11.2.4.1.2 Penalties for Uninstructed Imbalance Energy

Effective December 1, 2004, the ISO shall not charge any Uninstructed Deviation Penalties pursuant to this Section 11.2.4.1.2 until FERC issues an order authorizing the ISO to charge Uninstructed Deviation Penalties pursuant to this section. Beginning with Settlement Statements for the first Trading Day for which FERC authorizes the ISO to charge Uninstructed Deviation Penalties pursuant to this section, the ISO shall charge Scheduling Coordinators Uninstructed Deviation Penalties for Uninstructed Imbalance Energy resulting from resource deviations outside a Tolerance Band from their Dispatch Operating Point, for dispatched resources, or their Final Hour-Ahead Schedule otherwise. The Dispatch Operating Point will take into account the expected Ramping of a resource as it moves to a new Hour-Ahead Schedule at the top of each hour and as it responds to Dispatch Instructions. The Uninstructed Deviation Penalty will be applied as follows:

a) The Uninstructed Deviation Penalty for negative Uninstructed Imbalance Energy will be calculated and assessed in each Settlement Interval. The Uninstructed Deviation Penalty for positive Uninstructed Imbalance Energy will be calculated and assessed in each Settlement Interval in which the ISO has not declared a staged System Emergency;

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- b) The Uninstructed Deviation Penalty will apply to pre-Dispatched bids from nondynamically scheduled System Resources identified, when such a pre-Dispatch Instruction is issued more than 40 minutes prior to the relevant Operating Hour, subject to the following conditions: i) The Uninstructed Deviation Penalty will only apply to the pre-Dispatched amount of the bid that is declined or not delivered, ii) the Uninstructed Deviation Penalty will not apply to a portion of a pre-Dispatched bid that is subsequently not delivered at the direction of a Control Area, including the ISO, due to a curtailment of transmission capability or to prevent curtailment of native firm load occurring subsequent to issuing the pre-Dispatch Instruction, iii) the Uninstructed Deviation Penalty will not apply to uninstructed energy resulting from declining subsequent intrahour Dispatch Instructions. Dynamically scheduled System Resources, to the extent they deviate from their Final Hour-Ahead Schedule plus any real-time Dispatch Instructions, will be subject to the Uninstructed Deviation Penalty;
- c) The Uninstructed Deviation Penalty will not apply to Load or Curtailable Demand;
- d) [Not Used]
- e) The Uninstructed Deviation Penalty will not apply to Regulatory Must-Run Generation or Participating Intermittent Resources that meet the scheduling obligations established in the Eligible Intermittent Resources Protocol. No other applicable charges will be affected by this exemption. The Uninstructed Deviation Penalty also will not apply to Qualifying Facilities (QFs), including those that are dynamically scheduled, that have not executed a Participating Generator Agreement (PGA), pending resolution of QF-PGA issues at FERC;
- f) For the Scheduling Coordinator of an MSS that has elected to follow the MSS Load and associated Transmission Losses pursuant to Section 23.12, the deviation penalties in Sections 23.12.2.1 and 23.12.2.2 will apply. For the Scheduling Coordinator of an MSS

- I) The Uninstructed Deviation Penalty for positive Uninstructed Imbalance Energy will be the amount of the Uninstructed Imbalance Energy in excess of the Tolerance Band multiplied by a price equal to 100% of the corresponding Zonal Settlement Interval Ex Post Price. The net effect of the Uninstructed Deviation Penalty and the Settlement for positive Uninstructed Imbalance Energy beyond the Tolerance Band will be that the ISO will not pay for such Energy;
- m) The Uninstructed Deviation Penalty for negative Uninstructed Imbalance Energy will be the amount of the Uninstructed Imbalance Energy in excess of the Tolerance Band multiplied by a price equal to 50% of the corresponding Zonal Settlement Interval Ex Post Price;
- n) The Uninstructed Deviation Penalty will not apply to deviations from Energy delivered as part of a scheduled test so long as the test has been scheduled by the Scheduling Coordinator with the ISO or the ISO has initiated the test for the purposes of validating unit performance;
- o) The Uninstructed Deviation Penalty shall not apply to any excess Energy delivered from or any shortfall of Energy not delivered from an out-of-market (OOM) transaction involving a Generating Unit or a System Unit unless the ISO and the supplier have agreed upon the time of, duration of, and the amount of Energy to be delivered in the OOM transaction and the ISO reflects the OOM transaction in its real-time Expected Energy calculations. The Uninstructed Deviation Penalty shall apply to Energy outside the Tolerance Band from firm OOM transactions with dynamically scheduled System Resources to the extent the agreed-to Energy is not delivered or over-delivered, and to any Energy from non-dynamically scheduled System Resources to the extent the agreed-to Energy is not delivered if that over- or under-delivery was due to action taken

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by or not taken by the System Resource and not the result of action taken by a Control

Area operator due to a curtailment of firm transmission capability or to prevent

curtailment of native firm load occurring subsequent to the OOM transaction;

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- p) Generating Units and dynamically scheduled System Resources with Uninstructed Imbalance Energy will be exempted from the Uninstructed Deviation Penalty if the Generating Unit or dynamically scheduled System Resource was physically incapable of delivering the expected Energy, provided that the Generating Unit or dynamically scheduled System Resource had notified the ISO within 30 minutes of the onset of an event that prevents the resource from performing its obligations. A Generating Unit or dynamically scheduled System Resource must notify ISO operations staff of its reasons for failing to deliver the expected Energy in accordance with Section 2.3.3.9.5 and must provide information to the ISO that verifies the reason the resource failed to comply with the Dispatch instruction within 48 hours of the operating hour in which the instruction is issued;
- Adjustments to any Generating Unit, Curtailable Demand and System Resource Final Hour-Ahead Schedules made in accordance with the terms of Existing Contracts shall not be subject to Uninstructed Deviation Penalties.
- Any changes made to Schedules prior to the ISO issuing Final Hour-Ahead Schedules shall not be subject to Uninstructed Deviation Penalties.
- s) Uninstructed Deviation Penalties shall not be charged to any deviation from a Dispatch Instruction that does not comply with the requirements set forth in the Dispatch Protocol.

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- t) Amounts collected as Uninstructed Deviation Penalties shall first be assigned to reduce the portion of above-MCP costs that would otherwise be assigned pro rata to all Scheduling Coordinators in that Settlement Interval pursuant to Section 11.2.4.2.2. Any remaining portion of amounts collected as Uninstructed Deviation Penalties after satisfying these sequential commitments shall be treated in accordance with SABP 6.5.2.
- u) Condition 2 RMR Units shall be exempt from Uninstructed Deviation Penalties.
- The Uninstructed Deviation Penalty shall not apply to positive Uninstructed Imbalance V) Energy attributable to operation below the Generating Unit's minimum operating level from the time the Generating Unit synchronizes to the grid to the earlier of (1) the Settlement Interval in which the Generating Unit produces a quantity of Energy that represents an average rate of delivery over such Settlement Interval in excess of the Generating Unit's minimum operating level plus the applicable Tolerance Band, or (2) the first Settlement Interval after the expiration of a period of time that begins at the end of the Settlement Interval in which the Generating Unit synchronizes to the grid and ends after the Generating Unit's maximum start-up time as specified in the Master File. The Uninstructed Deviation Penalty shall not apply to any positive Uninstructed Imbalance Energy attributable to operation below the Generating Unit's minimum operating level for a duration equal to the time specified in the Generating Unit's Resource Data Template for the Generating Unit to disconnect from the grid after reaching its minimum operating level following either (1) the last Settlement Interval of an hour in which the Generating Unit had a non-zero Final Hour-Ahead Schedule or (2) the Settlement Interval in which the Generating Unit is expected to reach its minimum operating level based on the applicable ramp rate when the ISO instructed the Generating Unit to shut down. The amount of Uninstructed Imbalance Energy

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exempted from the Uninstructed Deviation Penalty shall not exceed the amount of the

Generating Unit's minimum operating level plus the applicable Tolerance Band.

(w) UDP shall not apply to deviations by a Generating Unit that are attributable to any

automatic response to a system disturbance in accordance with Applicable Reliability

Criteria.

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Access ChargeA charge paid by all UDCs and MSS Operators with Gross Loadin a PTO Service Territory, as set forth in Section 7.1. TheAccess Charge includes the High Voltage Access Charge, theTransition Charge and the Low Voltage Access Charge. TheAccess Charge will recover the Participating TO's TransmissionRevenue Requirement in accordance with Appendix F,Schedule 3.

Active Zone The Zones so identified in Appendix I to the ISO Tariff. Adjustment Bid A bid in the form of a curve defined by (i) the minimum MW output to which a Scheduling Coordinator will permit a resource (Generating Unit or Dispatchable Load) included in its Schedule or, in the case of an inter-Scheduling Coordinator trade, included in its Schedule or the Schedule of another Scheduling Coordinator, to be redispatched by the ISO; (ii) the maximum MW output to which a Scheduling Coordinator will permit the resource included in its Schedule or, in the case of an inter-Scheduling Coordinator trade, included in its Schedule or the Schedule of another Scheduling Coordinator, to be redispatched by the ISO; (iii) up to a specified number of MW values in between; (iv) a preferred MW operating point; and (v) for the ranges between each of the MW values greater than the preferred operating point, corresponding prices (in \$/MWh) for

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Fifth Revised Sheet No. 319 FIRST REPLACEMENT VOLUME NO. I Superseding Substitute Fourth Revised Sheet No. 319 Grid Management Charge The ISO monthly charge on all Scheduling Coordinators that provides for the recovery of the ISO's costs listed in Section 8.2 through the eight service charges described in Section 8.3 calculated in accordance with the formula rate set forth in Appendix F, Schedule 1, Part A of this Tariff. The eight charges that comprise the Grid Management Charge consist of: 1) the Core Reliability Services -Demand Charge, 2) the Core Reliability Services – Energy Exports Charge, 3) the Energy Transmission Services Net Energy Charge, 4) the Energy Transmission Services Uninstructed Deviations Charge, 5) the Forward Scheduling Charge, 6) the Congestion Management Charge, 7) the Market Usage Charge, and 8) the Settlements, Metering, and Client Relations Charge. **Grid Operations Charge** An ISO charge that recovers Redispatch costs incurred due to Intra-Zonal Congestion in each Zone. These charges will be paid to the ISO by the Scheduling Coordinators, in proportion to their metered Demand within, and metered exports from, the Zone to a neighboring Control Area. **Gross Load** For the purposes of calculating the transmission Access Charge, Gross Load is all Energy (adjusted for distribution losses) delivered for the supply of End-Use Customer Loads directly connected to the transmission facilities or directly connected to the Distribution System of a UDC or MSS Operator located in a PTO Service Territory. Gross Load shall exclude Load with respect to which the Wheeling Access Charge is payable and the portion of the Load of an individual retail customer of a UDC or MSS Operator that is served by a Generating Unit that: (a) is located on the customer's site or provides service to the customers site through arrangements as authorized by Section 218

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Preliminary Settlement Statement	The initial statement issued by the ISO of the calculation of the
	Settlements and allocation of the charges in respect of all
	Settlement Periods covered by the period to which it relates.
Price Overlap	The price range of bids for Supplemental Energy or Energy
	associated with Ancillary Services bids for any Dispatch
	Interval that includes decremental and incremental Energy Bids
	where the price of the decremental Energy Bids exceeds the
	price of the incremental Energy Bids.
Project Sponsor	A Market Participant or group of Market Participants or a
	Participating TO that proposes the construction of a
	transmission addition or upgrade in accordance with
	Section 3.2 of the ISO Tariff.
Proxy Price	The value determined for each gas-fired Generating Unit
	owned or controlled by a Must-Offer Generator in accordance
	with Section 2.5.23.3.4.
PTO Service Territory	The area in which an IOU, a Local Public Owned Electric
	Utility, or federal power marketing administration that has
	turned over its transmission facilities and/or Entitlements to ISO
	Operational Control is obligated to provided electric service to
	Load. A PTO Service Territory may be comprised of the
	Service Areas of more than one Local Public Owned Electric
	Utility, if they are operating under an agreement with the ISO
	for aggregation of their MSS and their MSS Operator is
	designated as the Participating TO.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Substitute Third Revised Sheet No. 345 FIRST REPLACEMENT VOLUME NO. I Superseding Second Revised Sheet No. 345 The utility which is a party to the TCA in whose PTO Service **Responsible Utility** Territory the Reliability Must-Run Unit is located or whose PTO Service Territory is contiguous to the PTO Service Territory in which a Reliability Must-Run Unit owned by an entity outside of the ISO Controlled Grid is located. **Revenue Requirement** The revenue level required by a utility to cover expenses made on an investment, while earning a specified rate of return on the investment. **Revised Adjusted RMR** The monthly invoice issued by the RMR Owner to the ISO pursuant Invoice to the RMR Contract reflecting any appropriate revisions to the Adjusted RMR Invoice based on the ISO's validation and actual data for the billing month. **Revised Estimated RMR** The monthly invoice issued by the RMR Owner to the ISO pursuant Invoice to the RMR Contract reflecting appropriate revisions to the Estimated RMR Invoice based on the ISO's validation of the Estimated RMR Invoice. **Revised Schedule** A Schedule submitted by a Scheduling Coordinator to the ISO following receipt of the ISO's Suggested Adjusted Schedule. **RMR Owner** The provider of services under a Reliability Must-Run Contract. The security constrained optimal dispatch and ex post pricing **Real-Time Dispatch (RTD)** Software software used by the ISO to determine which Ancillary Service and Supplementary Energy resources to Dispatch and to calculate the Ex Post Prices.

SCADA (Supervisory	A computer system that allows an electric system operator to
Control and Data	
Acquisition)	remotely monitor and control elements of an electric system.

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Scheduling Point	A location at which the ISO Controlled Grid is connected, by a
	group of transmission paths for which a physical, non-
	simultaneous transmission capacity rating has been
	established for Congestion Management, to transmission
	facilities that are outside the ISO's Operational Control. A
	Scheduling Point typically is physically located at an "outside"
	boundary of the ISO Controlled Grid (e.g., at the point of
	interconnection between a Control Area utility and the ISO
	Controlled Grid). For most practical purposes, a Scheduling
	Point can be considered to be a Zone that is outside the ISO's
	Controlled Grid.
Security Monitoring	The real-time assessment of the ISO Controlled Grid that is
	conducted to ensure that the system is operating in a secure
	state, and in compliance with all Applicable Reliability Criteria.
Service Area	An area in which an IOU or a Local Publicly Owned Electric
	Utility is obligated to provide electric service to End-Use
	Customers.
<u>Set Point</u>	Scheduled operating level for each Generating Unit or other

resource scheduled to run in the Hour-Ahead Schedule.

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The charge determined in accordance with Section 2.5.23.3.7.
The level of Demand specified in Section 2.5.23.3.7.3.
The invoice submitted to the ISO in accordance with Section
2.5.23.3.7.6.
The trust account established in accordance with Section
2.5.23.3.7.2.
The cost incurred by a particular Generating Unit from the time
of first fire, the time of receipt of an ISO Dispatch instruction, or
the time the unit was last synchronized to the grid, whichever is
later, until the time the generating unit reaches its minimum
operating level. Start-Up Costs are determined as the sum of
(1) the cost of auxiliary power used during the start-up and (2)
the number that is determined multiplying the actual amount of
fuel consumed by the proxy gas price as 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,
from the nearest of those three Service Areas.

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TRR (Transmission Revenue Requirement)	The TRR is the total annual authorized revenue requirements
	associated with transmission facilities and Entitlements turned
	over to the Operational Control of the ISO by a Participating
	TO. The costs of any transmission facility turned over to the
	Operational Control of the ISO shall be fully included in the
	Participating TO's TRR. The TRR includes the costs of
	transmission facilities and Entitlements and deducts
	Transmission Revenue Credits and credits for Standby
	Transmission Revenue and the transmission revenue expected
	to be actually received by the Participating TO for Existing
	Rights and Converted Rights.
<u>Trustee</u>	The trustee of the California Independent System Operator
	trust established by order of the California Public Utilities
	Commission on August 2, 1996 Decision No. 96-08-038
	relating to the Ex Parte Interim Approval of a Loan Guarantee
	and Trust Mechanism to Fund the Development of an
	Independent System Operator (ISO) and a Power Exchange
	(PX) pursuant to Decision 95-12-063 as modified.
<u>UDC (Utility Distribution</u> <u>Company)</u>	An entity that owns a Distribution System for the delivery of
	Energy to and from the ISO Controlled Grid, and that provides
	regulated retail electric service to Eligible Customers, as well
	as regulated procurement service to those End-Use Customers
	who are not yet eligible for direct access, or who choose not to
	arrange services through another retailer.

described in Schedule 3 to Appendix F. The Tac Benefit of a New Participating TO shall not be less than zero.

"Transition Date" means the date defined in Section 4.2 of this Schedule.

2. Assessment of High Voltage Access Charge and Transition Charge. All UDCs and MSS Operators in a PTO Service Territory serving Gross Loads directly connected to the transmission facilities or Distribution System of a UDC or MSS Operator in a PTO Service Territory shall pay to the ISO a charge for transmission service on the High Voltage Transmission Facilities included in the ISO Controlled Grid. The charge will be based on the High Voltage Access Charge applicable to the TAC Area in which the point of delivery is located and the applicable Transition Charge. A UDC or MSS Operator that is also a Participating TO shall pay, or receive payment of, if applicable, the difference between (i) the High Voltage Access Charge and Transition Charge applicable to its transactions as a UDC or MSS Operator; and (ii) the disbursement of High Voltage Access Charge revenues to which it is entitled pursuant to Section 7.1.3 of the ISO Tariff.

# 3. TAC Areas.

- 3.1 TAC Areas are based on the Control Areas in California prior to the ISO Operations Date. Three TAC Areas will be established based on the Original Participating TOs: (1) a Northern Area consisting of the PTO Service Territory of Pacific Gas and Electric Company and the PTO Service Territory of any entity listed in Section 3.3 or 3.5 of this Schedule; (2) an East Central Area consisting of the PTO Service Territory of Southern California Edison Company and the PTO Service Territory of any entity listed in Section 3.4, 3.5 or 3.6 (as indicated therein) of this Schedule 3; and (3) a Southern Area consisting of the PTO Service Territory of San Diego Gas & Electric Company. Participating TOs that are not in one of the above cited PTO Service Territories are addressed below.
- 3.2 If the Los Angeles Department of Water and Power joins the ISO and becomes a Participating TO, its PTO Service Territory will form a fourth TAC Area, the West Central Area.

transmission capacity to determine the amount of FTRs to be given to the New Participating TO in accordance with Section 9.4.3 of the ISO Tariff.

# 5. Determination of the Access Charge.

- 5.1 The Access Charge consists of a High Voltage Access Charge (HVAC) that is based on a TAC Area component and an ISO Grid-wide component, a Transmission Charge, and a Low Voltage Access Charge (LVAC) that is based on a utility-specific rate established by each Participating TO in accordance with its TO Tariff.
- 5.2 Each Participating TO will develop, in accordance with Section 6 of this Schedule 3, a High Voltage Transmission Revenue Requirement (HVTRR PTO) consisting of a Transmission Revenue Requirement for Existing High Voltage Facility (EHVTRR PTO) and a Transmission Revenue Requirement for New High Voltage Facility (NHVTRR PTO). The HVTRR PTO includes the TRBA adjustment described in Section 6.1 of this Schedule 3.
- **5.3** The Gross Load amount in MWh shall be established by each Participating TO and filed at FERC with each Participating TO's Transmission Revenue Requirement (GL<sub>PTO</sub>).
- 5.4 The HVAC applicable to each UDC or MSS Operator serving Gross Load in the PTO Service Territory, shall be based on a TAC Area component (HVAC<sub>A</sub>) and an ISO Gridwide component (HVAC<sub>I</sub>).

# $HVAC = HVAC_A + HVAC_I$

**5.5** The Existing Transmission Revenue Requirement for the TAC Area component (ETRR<sub>A</sub>) is the summation of each Participating TO's EHVTRR  $_{PTO}$  in that TAC Area. The Gross Load in the TAC Area (GL<sub>A</sub>) is the summation of each Participating TO's Gross Load in that TAC Area (GL<sub>PTO</sub>). The TAC Area component will be based on the product of Existing Transmission Revenue Requirement for the TAC Area (ETRR<sub>A</sub>) and the applicable annual transition percentage (%TA) in Section 5.8 of this Schedule 3, divided by the Gross Load in the TAC Area (GL<sub>A</sub>).

ETRR <sub>A</sub> = 
$$\Sigma$$
 EHVTRR <sub>PTO</sub>  
GL<sub>A</sub> =  $\Sigma$  GL <sub>PTO</sub>

HVAC 
$$_{A} = (ETRR _{A} * \%TA) / GL_{A}$$

5.6 The Existing Transmission Revenue Requirement for the ISO Grid-wide component (ETRR<sub>I</sub>) will be the summation of all TAC Areas' ETRR A multiplied by the applicable annual transition percentage (%IGW) in Section 5.8 of this Schedule 3. The New Transmission Revenue Requirement (NTRR) is the summation of each Participating TO's NHVTRR PTO. The ISO Grid-wide component will be based on the ETRR<sub>I</sub> plus the NTRR, divided by the summation of all Gross Loads in the TAC Areas (GL<sub>A</sub>).

$$ETRR_{I} = \Sigma ETRR_{A} * \% IGW$$

$$HVAC_{I} = (ETRR_{I} + NTRR) / \Sigma GL_{A}$$

The foregoing formulas will be adjusted, as necessary to take account of new TAC Areas.

5.7 The Transition Charge shall be calculated separately for each Participating TO by dividing (i) the net difference between (1) the Participating TO's payment responsibility, if any, under Section 8.6 of the ISO Tariff and Section 7 of this Schedule 3; and (2) the amount, if any, payable to the Participating TO in accordance with Section 8.6 of the ISO Tariff and Section 7 of this Schedule 3; by (ii) the total of all forecasted Gross Load in the PTO Service Territory of the Participating TO, including the UDC and/or MSS Operator. If greater than zero, the Transition Charge shall be collected with the High Voltage Access Charge. If less than zero, the Transition Charge shall be credited with the High Voltage Access Charge. The amount of

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9.2 Federal power marketing agencies whose transmission facilities are under ISO Operational Control shall develop their High Voltage Transmission Revenue Requirements pursuant to applicable federal laws and regulations, including filing with FERC. All such filings with FERC will include a separate appendix that states the HVTRR, LVTRR (if applicable) and the appropriate Gross Load data and other information required by the FERC to support the Access Charges. The procedures for public participation in a federal power marketing agency's ratemaking process shall be posted on the federal power marketing agency's website. The federal power marketing agency shall also post on the website the Federal Register Notices and FERC orders for rate making processes that impact the federal power marketing agency's High Voltage Transmission Revenue Requirement. The Participating TO will provide a copy of its filing to the ISO and the other Participating TOs in accordance with the notice provisions in the Transmission Control Agreement.

# 10. Disbursement of High Voltage Access Charge and Transition Charge Revenues.

- **10.1** High Voltage Access Charge and Transition Charge revenues shall be calculated for disbursement to each Participating TO on a monthly basis as follows:
  - (a) the amount determined in accordance with Section 7.1.2 of the ISO Tariff ("Billed HVAC/TC");
  - (b)
- (i) for a Participating TO that is a UDC or MSS Operator and has Gross
   Load in its TO Tariff in accordance with Appendix F, Schedule 3, Section
   9, then calculate the amount each UDC or MSS Operator would have
   paid and the Participating TO would have received by multiplying the
   High Voltage Utility-Specific Rates for the Participating TO whose High
   Voltage Facilities served such UDC and MSS Operator

times the actual Gross Load of such UDCs and MSS Operators ("Utility-specific HVAC"); or

- (ii) for a Participating TO that is not a UDC or MSS Operator and that does not have Gross Load in its TO Tariff in accordance with Appendix F, Schedule 3, Section 9, then calculate the Participating TO's portion of the total Billed HVAC/TC in subsection (a) based on the ratio of the Participating TO's High Voltage Transmission Revenue Requirement to the sum of all Participating TOs' High Voltage Revenue Requirements.
- (c) if the total Billed HVAC/TC in subsection (a) received by the ISO less the total dollar amounts calculated in Utility-specific HVAC in subsection (b)(i) and subsection (b)(ii) is different from zero, the ISO shall allocate the positive or negative difference among those Participating TOs that are subject to the calculations in subsection (b)(i) based on the ratio of each Participating TO's High Voltage Transmission Revenue Requirement to the sum of all of those Participating TOs' High Voltage Transmission Revenue Requirements that are subject to the calculations in subsection (b)(i). This monthly distribution amount is the "HVAC Revenue Adjustment";
- (d) the sum of the HVAC revenue share determined in subsection (b) and the HVAC
   Revenue Adjustment in subsection (c) will be the monthly disbursement to the
   Participating TO.
- 10.2 If the same entity is both a Participating TO and a UDC or MSS Operator, then the monthly High Voltage Access Charge and Transition Charge amount billed by the ISO will be the charges payable by the UDC or MSS Operator in accordance with Section 7.1.2 of the ISO Tariff less the disbursement determined in accordance with Section 10.1(d). If this difference is negative, that amount will be paid by the ISO to the Participating TO.
- 11 Determination of Transmission Revenue Requirement Allocation Between High Voltage and Low Voltage Transmission Facilities.
- 11.1 Each Participating TO shall allocate its Transmission Revenue Requirement between the High Voltage Transmission Revenue Requirement and Low Voltage Transmission Revenue Requirement based on the "Procedure for Division of Certain Costs Between the High and Low Voltage Transmission Access Charges" posted on the ISO Home Page.

# 3.2 Termination

- **3.2.1** Termination by ISO. Subject to Section 5.2, the ISO may terminate this Agreement by giving written notice of termination in the event that the Participating Generator commits any material default under this Agreement and/or the ISO Tariff which, if capable of being remedied, is not remedied within thirty (30) days after the ISO has given, to the Participating Generator, written notice of the default, unless excused by reason of Uncontrollable Forces in accordance with Article X of this Agreement. With respect to any notice of termination given pursuant to this Section, the ISO must file a timely notice of termination with FERC. The filing of the notice of termination by the ISO will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within 30 days after receipt of such request. This Agreement shall terminate upon acceptance by FERC of such a notice of termination.
- **3.2.2** Termination by Participating Generator. In the event that the Participating Generator no longer wishes to schedule Energy or provide Ancillary Services through a Scheduling Coordinator over the ISO Controlled Grid, it may terminate this Agreement, on giving the ISO ninety (90) days written notice, provided, however, that in accordance with Section 4.1.3, the Participating Generator may modify Schedule 1 to eliminate generating resources which it no longer owns or no longer has contractual entitlement to and such modification shall be effective upon receipt by the ISO. With respect to any notice of termination given pursuant to this Section, the ISO must file a timely notice of termination with FERC. The filing of the notice of termination by the ISO will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within 30 days of receipt of such request. This Agreement shall terminate upon acceptance by FERC of such a notice of termination.

#### ARTICLE IV GENERAL TERMS AND CONDITIONS

### 4.1 Net Scheduled QFs

- **4.1.1 Identification of Net Scheduled QF.** The Participating Generator has identified the Net Scheduled QF that it owns, operates or has a contractual entitlement to, in Schedule 1, as required by Section 5.3 of the ISO Tariff.
- **4.1.2 Technical Characteristics.** The Participating Generator shall provide to the ISO the required information regarding operating contacts, rated capacity, and operating characteristics of the Net Scheduled QF. Pursuant to Section 2.5.25 of the ISO Tariff, and the Existing QF Contract, if any, associated with that Net Scheduled QF, the ISO may verify, inspect and test the capacity and operating characteristics of the Net Scheduled QF. The performance of such inspection or test shall be conducted at a time mutually agreed upon by the Parties, which agreement shall not unreasonably be withheld.
- 4.1.3 Notification of Changes. Sixty (60) days prior to changing any technical information in Schedule 1, the Participating Generator shall notify the ISO of the proposed changes. Pursuant to Section 2.5.25 of the ISO Tariff, the ISO may verify, inspect and test the capacity and operating characteristics; provided that the performance of such inspection or test is conducted at a time mutually agreed upon by the Parties, which agreement shall not unreasonably be withheld. The ISO shall post on the ISO Home Page a schedule showing, for at least one year in advance: (i) the proposed dates on which the ISO's Master File will be updated, which dates shall occur at least every three months; (ii) the dates on which the information contained in the revised Master File will become effective; and (iii) the deadlines by which changed technical information must be submitted to the ISO in order to be tested and included in the next scheduled update of the ISO's

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#### DP 3 SCHEDULING AND REAL-TIME INFORMATION

#### DP 3.1 Final Schedules

The scheduling process described in the SP will produce for the ISO real-time dispatchers for each Settlement Period of the Trading Day a Final Schedule consisting of the combined commitments contained in the Final Day-Ahead Schedules and the Final Hour-Ahead Schedules for the relevant Settlement Period. The Final Schedule will include information with respect to:

- (a) Generation schedules;
- (b) Demand schedules;
- (c) Ancillary Services schedules based on the ISO's Ancillary Services auction;
- Ancillary Services schedules, based on SCs' ISO accepted schedules and forecast load, for self-provided Ancillary Services;
- (e) Interconnection schedules between the ISO Control Area and other Control Areas; and
- (f) Inter-Scheduling Coordinator Energy Trades.

#### DP 3.2 Supplemental Energy

In addition to the Final Schedules, Supplemental Energy bids will be available to the ISO real-time dispatchers, as described in the SBP, by sixty-two (62) minutes prior to the start of the Settlement Period to which such Supplemental Energy bids apply.

#### DP 3.3 SC Intertie Schedules

In accordance with the SBP and the SP, SCs shall provide the ISO with Interconnection schedules prepared in accordance with all NERC, WECC and ISO requirements. The provisions of the SBP and the SP shall apply to real-time changes in Interconnection schedules under Existing Contracts.

#### DP 3.4 Information to be Supplied by SCs

# DP 3.4.1 SC Dispatch

Each SC shall be responsible for the scheduling and Dispatch of Generation and Demand in accordance with its Final Schedule.

#### DP 3.4.2 Generator or Interconnection Schedule Change

Each SC shall keep the ISO appraised of any change or potential change in the current status of all Generating Units, Interconnection schedules and Inter-Scheduling Coordinator Energy Trades. This will

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- verify that each SC's Ancillary Services obligations are scheduled as required. The ISO will procure additional Ancillary Services if insufficient resources are scheduled;
- (b) verify any Supplemental Energy bids received up to thirty (30) minutes prior to the Settlement Period, for increases or decreases in Energy output which it may require for the Settlement Period; and
- (c) verify that with currently anticipated operating conditions there is sufficient transfer capacity on the ISO Controlled Grid to implement all Final Schedules.

#### DP 7.2 Confirm Interchange Transaction Schedules (ITSs)

Also in the hour prior to the beginning of the Settlement Period the ISO will:

- (a) adjust interchange transaction schedules (ITSs) as required under Existing Contracts in accordance with the procedures in the SBP and the SP for the management of Existing Contracts;
- (b) adjust ITSs as required by changes in transfer capability of transmission paths occurring after close of the Hour-Ahead Market; and
- (c) agree on ITS changes with adjacent Control Area Operators.

# DP 7.3 Supplemental Energy Bids

Supplemental Energy bids may be submitted to the ISO no later than sixty-two (62) minutes prior to the beginning of the Settlement Period in accordance with the format and content requirements of the SBP. These Supplemental Energy bids cannot be withdrawn after sixty-two (62) inutes prior to the beginning of the Settlement Period. A System Resource that identifies its bid as a Hourly Pre-Dispatch bid will only be pre-dispatched and will not be subject to any intra-hour Redispatch except as necessary to maintain inter-Control Area transmission reliability.

#### DP 7.4 Intra-Zonal Congestion Management

In the hour prior to the beginning of the Settlement Period the ISO may adjust SCs' Final Schedules to alleviate Intra-Zonal Congestion. Except in those instances where the ISO calls Reliability Must-Run Units as provided in Section 5.2 of the ISO Tariff, the ISO will adjust resources in accordance with DP 8.4 and DP 8.5.

#### D 2.1.2 Instructed Imbalance Energy Charges on Scheduling Coordinators

Standard Ramping Energy is Energy associated with a Standard Ramp and shall be deemed delivered and settled at a price of zero dollars per MWh.

Ramping Energy Deviation is Energy produced or consumed due to hourly schedule changes in excess of Standard Ramping Energy and shall be paid or charged, as the case may be, at a Resource-Specific Settlement Interval Ex Post Price calculated using the applicable Dispatch Interval Ex Post Prices as described in this Appendix D 2.4. For Scheduling Coordinators scheduling a MSS that has elected to follow its Load, this Ramping Energy Deviation will account for the units following Load.

Ramping Energy Deviation shall be settled as an explicit component of Instructed Imbalance Energy for each resource i in Dispatch Interval k of Settlement Interval o for hour h, and calculated as follows:

$$REDC_{i,h,o} = \left(\sum_{1}^{k} RED_{i,h,o,k}\right) * STLMT \_ PRICE_{i,h,o}$$

Hourly Predispatched energy from System Resources is an explicit component of Instructed Imbalance Energy for each interchange resource *i* in Dispatch Interval *k* of Settlement Interval *o* for hour *h*, and settled pursuant to Sections 11.2.4.1.1 and 11.2.4.1.1.2 of the ISO Tariff. The settlement calculation is as follows:

lf (

 $(COST\_AT\_STLMT\_PRICE_{i,h,o} >= 0$ 

And

 $BID\_COST_{i,h,o} >= 0$ )

Then

$$IIEC\_PREDISPATCH_{i,h,o} = (-1)*$$

$$\left[min(COST\_AT\_STLMT\_PRICE_{i,h,o}, BID\_COST_{i,h,o}) + (STLMT\_PRICE_{i,h,o}*PRE\_DISP\_ABC\_BQ_{i,h,o})\right]$$

Else

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 $IIEC\_PREDISPATCH_{i,h,o} = (-1) *$ 

 $\begin{bmatrix}BID\_COST_{i,h,o} + (STLMT\_PRICE_{i,h,o} * PRE\_DISP\_ABC\_BQ_{i,h,o})\end{bmatrix}$ 

Where

 $COST\_AT\_STLMT\_PRICE_{i,h,o} =$ 

$$\left(\sum_{1}^{k} IIE \_ PREDISPATCH_{i,h,o,k}\right) * STLMT \_ PRICE_{i,h,o}$$

 $BID\_COST_{i,h,o} =$ 

 $\sum_{1}^{k} \sum_{1}^{m} IIE \_ PREDISPATCH \_ FOR \_ SEGMENT_{i,h,o,k,m} * IIE \_ PRICE_{i,h,o,k,m}$ 

for the portion of incremental energy bid segments with IIE\_PRICE<sub>i,h,o,k,m</sub> less than or equal to the Maximum Bid Level and all decremental energy bid segments with IIE\_PRICE<sub>i,h,o,k,m</sub> limited to the Bid Floor when IIE\_PRICE<sub>i,h,o,k,m</sub> is less than the Bid Floor.

))

where

 $PRE_DISP_ABC_BQ_{i,h,o} =$ 

 $\sum_{l=1}^{k} \sum_{j=1}^{m} IIE \_ PREDISPATCH \_ FOR \_ SEGMENT_{i,h,o,k,m}$  for the portion of

incremental energy bid segments with  $IIE\_PRICEi_{h,o,k,m}$  greater than the Maximum Bid Level.

The amount of Instructed Imbalance Energy that will be deemed delivered in each Dispatch Interval will be based on Dispatch Instructions, as provided for in Section 2.5.22.6, and Final Hour-Ahead Schedules. The amount of Instructed Imbalance Energy to be settled in a Settlement Interval will be equal to the sum of all Instructed Imbalance Energy for all Dispatch Intervals within the relevant Settlement Interval. Instructed Imbalance Energy for each Settlement Interval shall be settled at the relevant Resource Specific Settlement Interval Ex Post Price. Generating Units, Participating Loads, and System Units may be eligible to recover their Energy Bid costs in accordance with Section 11.2.4.1.1.1. Instructed Imbalance Energy from System Resources shall be settled in accordance with Section 11.2.4.1.1.2.

The Instructed Imbalance Energy amount for each resource *i* in Settlement Interval *o* for hour *h* shall be determined as follows:

$$IIEC_{i,h,o} = (-1)^{*} \begin{pmatrix} \sum_{i=1}^{k} \sum_{j=1}^{m} IIE \_ ECON_{i,h,o,k,m} + \sum_{j=1}^{k} \sum_{j=1}^{m} RIE_{i,h,o,k,m} \\ + \sum_{j=1}^{k} IIE \_ RERATE_{i,h,o,k} + \sum_{j=1}^{k} IIE \_ ML_{i,h,o,k} \end{pmatrix}^{*} STLMT \_ PRICE_{i,h,o}$$

1.

+ 
$$IIEC \_OOS_{i,h,o}$$
 +  $REDC_{i,h,o}$  +  $IIEC \_REG_{i,h,o}$  +  $IIEC \_PREDISPATCH_{i,h,o}$ 

Uninstructed Imbalance Energy is Imbalance Energy due to noncompliance with a Dispatch Instruction and shall be settled as provided for in SABP Appendix D Section 2.1.1.

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 $IIEC\_PREDISPATCH_{i,h,o} = (-1) *$ 

 $\begin{bmatrix}BID\_COST_{i,h,o} + (STLMT\_PRICE_{i,h,o} * PRE\_DISP\_ABC\_BQ_{i,h,o})\end{bmatrix}$ 

Where

 $COST\_AT\_STLMT\_PRICE_{i,h,o} =$ 

$$\left(\sum_{1}^{k} IIE \_ PREDISPATCH_{i,h,o,k}\right) * STLMT \_ PRICE_{i,h,o}$$

 $BID\_COST_{i,h,o} =$ 

 $\sum_{1}^{k} \sum_{1}^{m} IIE \_ PREDISPATCH \_ FOR \_ SEGMENT_{i,h,o,k,m} * IIE \_ PRICE_{i,h,o,k,m}$ 

for the portion of incremental energy bid segments with IIE\_PRICE<sub>i,h,o,k,m</sub> less than or equal to the Maximum Bid Level and all decremental energy bid segments with IIE\_PRICE<sub>i,h,o,k,m</sub> limited to the Bid Floor when IIE\_PRICE<sub>i,h,o,k,m</sub> is less than the Bid Floor.

))

where

 $PRE_DISP_ABC_BQ_{i,h,o} =$ 

 $\sum_{l=1}^{k} \sum_{j=1}^{m} IIE \_ PREDISPATCH \_ FOR \_ SEGMENT_{i,h,o,k,m}$  for the portion of

incremental energy bid segments with  $IIE\_PRICEi_{h,o,k,m}$  greater than the Maximum Bid Level.

D 2.6 Calculation of Unrecovered Cost Payment for Generating Units, System Units, Dynamically Scheduled System Resources, and Curtailable Demand.

> As set forth in 11.2.4.1.1.1, Generating Units, System Units, dynamically scheduled System Resources, and Curtailable Demand resources will be eligible to recover their bid costs (less than or equal to the Maximum Bid Level) for extra-marginal Energy dispatched above Pmin, if such costs are not recovered from the net of expected revenues earned through participation in the ISO's Real Time Market during the Trade Day (24-hour period).

The Unrecovered Cost Payment for each resource i shall be determined for the Trade Day *d* then evenly divided over n-Settlement Intervals as follows:

$$COST\_RECOVERY_{i,d} = min(0, \sum_{l=1}^{h} \sum_{i=1}^{o} (MR\_DEFICIT_{i,h,o} + MR\_SURPLUS_{i,h,o}))$$

where,

 $MR\_DEFICIT_{i,h,o}$  = Market Revenue deficit for resource i in hour h for Settlement interval o based on the difference between the expected revenues earned in the Settlement Interval and and/or its bid cost; $MR\_SURPLUS_{i,h,o}$ = Market Revenue surplus for resource i in hour h for Settlement interval o based on the difference between the expected revenues earned in the Settlement Interval and/or its bid cost.

Resource i shall receive a share of its total cost recovery in each Settlement Interval o that is included in the  $COST\_RECOVERY_{i,d}$  calculation.

$$COST\_RECOVERY_{i,h,o} = COST\_RECOVERY_{i,d} / n$$

where,

*n* is the number of Settlement Intervals o that are included in the  $COST\_RECOVERY_{i,d}$  calculation for resource i in Trade Day d.

#### Calculation of Market Revenue Surplus or Deficit

The market revenue surplus or deficit for each resource i will be computed for each Settlement Interval o based on the difference between the revenues earned in the Settlement Interval at the relevant 10-minute Ex Post price and the resource's bid cost (less than or equal to the Maximum Bid Level) as follows:

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$$MR\_DIFF_{i,h,o} = \left(\sum_{l=1}^{k}\sum_{l=1}^{m}IIE\_ECON_{i,h,o,k,m} + \sum_{l=1}^{k}\sum_{l=1}^{m}RIE_{i,h,o,k,m}\right) * STLMT\_PRICE_{i,h,o}$$

 $- BID\_COST_{i,h,o} - BID\_COST\_RIE_{i,h,o}$ 

for all incremental energy bid segments m with  $IIE_PRICE_{i,h,o,k,m}$  and  $RIE_PRICE_{i,h,o,k,m}$  less than or equal to the Maximum Bid Level and all decremental energy bid segments m with  $IIE_PRICE_{i,h,o,k,m}$  and  $RIE_PRICE_{i,h,o,k,m}$  greater than or equal to the Bid Floor.

 $MR\_DEFICIT_{i,h,o} = min(0, MR\_DIFF_{i,h,o})$ 

 $MR\_SURPLUS_{i,h,o} = \max(0, MR\_DIFF_{i,h,o})$ 

where,

$$BID\_COST_{i,h,o} = \left(\sum_{1}^{k}\sum_{1}^{m}IIE\_ECON_{i,h,o,k,m} * IIE\_PRICE_{i,h,o,k,m}\right)$$

$$BID\_COST\_RIE_{i,h,o} = \sum_{I}^{k} \sum_{I}^{m} RIE_{i,h,o,k,m} * RIE \_ PRICE_{i,h,o,k,m}$$

#### D 2.6.1 Tolerance Band and Performance Check

The ISO shall determine the Tolerance Band for each Settlement Interval *o* for PGA resources and dynamically scheduled System Resources based on the data from the Master File as follows:

 $TOLERANCE\_BAND_{i,h,o} = \pm \max(FIX \_LIM , TOL\_PERCENT * P \max_i) / 6$ 

where,

FIX\_LIMis a fixed MW limit and is initially equal to 5 MW.TOL\_PERCENTis a fixed percentage and is initially equal to<br/>3%.Pmaxi3%.Pmaxiis the maximum operating capacity in<br/>MW of resource i specified in the Master File.

The ISO shall determine the Tolerance Band for each Settlement Interval o for PLA resources as follows:

TOLERANCE\_BAND<sub>*i*,*h*,*o*</sub> =  $\pm max(FIX \_ LIM, TOL \_ PERCENT * HAfin_{i,h}) / 6$ 

where *HAfin<sub>i,h</sub>* is the Final Hour Ahead Energy Schedule.

Resources must operate within their relevant Tolerance Band in order to receive any above-Ex Post Price payments. The ISO shall determine the performance status of the resource for each Settlement Interval o.

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A resource shall have met its performance requirement if its  $UIE_{i,h,o}$  is within its relevant Tolerance Band. A resource meeting its performance requirement in Settlement Interval o will have a PERF\_STAT<sub>i,h,o</sub> = 1. A resource that has not met its performance requirement in Settlement Interval o will have a PERF\_STAT<sub>i,h,o</sub> = 0.

Must-offer resources that produce a quantity of Energy above Minimum Load due to an ISO Dispatch Instruction during a Waiver Denial Period are not subject to the Tolerance Band requirement for purposes of receiving Minimum Load Cost Compensation, as defined in section 5.11.6.1.1. Accordingly, the PERF\_STAT<sub>*i*,*h*,*o*</sub> for eligible must-offer resources, as defined in section 5.11.6.1.1, shall be set to 1, irrespective of deviations outside of the Tolerance Band, for the purpose of determining eligibility for Minimum Load Cost Compensation during a Waiver Denial Period. The Tolerance Band shall be used to apply UDP during a Waiver Denial Period.

Non-dynamically scheduled System Resources do not have a Tolerance Band. Non-Participating Load Agreement (PLA) load resources are not subject to the performance requirement.

#### D 2.6.2 Unrecovered Costs Neutrality Allocation

For each Settlement Interval o, the total Unrecovered Costs for Trade Day d shall be allocated pro-rata to each Scheduling Coordinator g based on its Metered Demand, calculated as follows:

 $URC\_ALLOC_{g,h,o} = M_{g,h,o} * Per Unit Price$ 

where,

 $M_{g,h,o}$  = the Metered Demand in the ISO control area for Scheduling

Coordinator *g* in Settlement Interval *o* for hour *h*;

Per Unit Price =  $\frac{-1 * \sum_{1}^{i} COST \_ RECOVERY_{i,h,o}}{\sum_{1}^{g} M_{g,h,o}}$ 

#### D 2.6.3 Calculation of Unrecovered Bid Cost Payment for System Resources

As set forward in Section 11.2.4.1.1.2, System Resources that are predispatched hourly incremental or decremental Instructed Imbalance Energy will be settled based on their Energy bid costs for each Settlement Interval for the quantity of Energy delivered in each Settlement Interval. The hourly pre-dispatched Instructed Imbalance Energy is first settled as set forth in Section D 2.1.2. An additional uplift payment for any applicable Settlement Interval shall be determined when settlement as set forth in Section D 2.1.2 is insufficient recovery

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of its bid costs for the Settlement Interval. For pre-dispatched hourly Instructed Imbalance Energy, where the resource-specific settlement amount is positive and the bid-cost is positive, an uplift payment is determined for each Settlement Interval based on the minimum of zero or the difference between the resource-specific settlement amount and the bid cost settlement amount as follows:

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The predispatched uplift payment for each applicable Settlement Interval is calculated as follows:

lf (

 $(COST\_AT\_STLMT\_PRICE_{i,h,o} >= 0$ 

And

 $BID\_COST_{i,h,o} >= 0$ )

Then

 $PREDISPATCH \_UPLIFT_{i,h,o} = min \left(0, COST \_AT \_STLMT \_PRICE_{i,h,o} - BID \_COST_{i,h,o}\right)$ 

Where

$$COST\_AT\_STLMT\_PRICE_{i,h,o} = \left(\sum_{i=1}^{k} IIE\_PREDISPATCH_{i,h,o,k}\right) * STLMT\_PRICE_{i,h,o}$$
$$BID\_COST_{i,h,o} = \sum_{i=1}^{k} \sum_{i=1}^{m} IIE\_PREDISPATCH\_FOR\_SEGMENT_{i,h,o,k,m} * IIE\_PRICE_{i,h,o,k,m}$$

Else

PREDISPATC  $H \_ UPLIFT_{i,h,o} = 0$ )

for the portion of incremental energy bid segments with  $IIE\_PRICE_{i,h,o,k,m}$  less than or equal to the Maximum Bid Level and all decremental energy bid segments with  $IIE\_PRICE_{i,h,o,k,m}$  limited to the Bid Floor when  $IIE\_PRICE_{i,h,o,k,m}$  is less than the Bid Floor.

#### D 2.6.4 Allocation of Unrecovered Cost Payments for Hourly Predispatched System Resources

For each Settlement Interval *o*, the total uplift payments (*PREDISPATCH\_PMT*<sub>*i*,*h*,*o*</sub>) for all hourly pre-dispatched System Resources will be included in the Excess Cost Payments to be allocated to a Scheduling Coordinator's Net Negative Deviation through allocation of excess costs and/or ISO metered Demand through excess cost neutrality allocation.

# D 2.6.5 Excess Cost Payments for Instructed Incremental Energy Bids above the Maximum Bid Level

Incremental Instructed Imbalance Energy above the Maximum Bid Level will receive an additional Excess Cost Payment subject to operating within a resource's Tolerance Band.

Excess cost payments are calculated as follows:

$$EXCESS \_ COST_{i,h,o} = \left[ \left( \sum_{1}^{k} \sum_{1}^{m} IIE \_ ECON_{i,h,o,k,m} + \sum_{1}^{k} \sum_{1}^{m} IIE \_ PREDISPATCH_{i,h,o,k,m} + \sum_{1}^{k} \sum_{1}^{m} RIE_{i,h,o,k,m} \right) * STLMT \_ PRICE_{i,h,o} - BID \_ COST_{i,h,o} - BID \_ COST \_ RIE_{i,h,o} \right] \\ * PERF \_ STAT_{i,h,o}$$

for the portion of energy bid segments with IIE  $PRICE_{i,h,o,k,m}$  and  $RIE_PRICE_{i,h,o,k,m}$  greater than the Maximum Bid Level.

# D 2.7 Transmission Loss Obligation

The transmission loss obligation charge shall be determined as follows: For Generators:

 $TL_{i,h,o} = ME_{i,h,o} * (1 - GMMa_h)$ 

For System Resources, the transmission loss obligation shall be determined as follows:

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$$TL_{i,h,o} = \sum_{l=1}^{k} \sum_{j=1}^{\nu} REAL \_TIME \_FLOW_{i,h,o,k,\nu} * (1 - GMMa_h)$$

The transmission loss charge will be calculated based on the following formulation:

$$TLC_{i,h,o} = -\sum_{1}^{k} IIE\_LOSS_{i,h,o,k} * STLMT\_PRICE_{i,h,o} + TL_{i,h,o} * STLMT\_PRICE_{i,h,o}$$

#### D 2.8 Uninstructed Deviation Penalty Charges

The ISO will calculate but not assess charges for UDP according to this Section 2.8 until the first day of the month two months after the software that calculates UDP is put into service.

For negative Uninstructed Deviation Penalty billable quantities where  $UDP_BQ_{h,o} < 0$  and  $ZONAL_EX_POST_PRICE_{j,h,o} > 0$ ,  $UDP_NEG_Amt_i AMT_{i,h,o} = -1 * UDP_BQ_{i,h,o} * ZONAL_EX_POST_PRICE_{i,h,o} * .5$ 

For positive UDP billable quantities where  $UDP_BQ_{i,h,o} > 0$  and  $ZONAL_EX_POST_PRICE_{j,h,o} > 0$ , then  $UDP_POS\_AMT_{i,h,o} = UDP_BQ_{i,o,h} * ZONAL\_EX_POST\_PRICE_{j,h,o}$ 

where,

 $UDP_BQ_{i,o,h}$  is the Uninstructed Deviation Penalty (UDP) billable quantity in MWh for a resource, or aggregated resource, denoted by i for Settlement Interval *o* of hour *h*.

 $UDP_POS_AMT_{i,o,h}$  or  $UDP_NEG_AMT_{i,o,h}$  are the penalty amounts in Dollars for either an aggregated or individual resource *i* for Settlement Interval *o* of hour *h*.

The ISO will not calculate UDP settlement amounts for Settlement Intervals when the corresponding Zonal Settlement Interval Ex Post Price is negative or zero.

For an MSS that has elected to follow its own Load, the Scheduling Coordinator for the MSS Operator will be assessed the Uninstructed Deviation Penalty charges based on the Deviation Band and Deviation Price in Section 23.12.2 of the ISO Tariff.

#### D 2.9 Minimum Load Cost Compensation

The ISO shall calculate a Must-Offer Generator's Minimum Load Cost Compensation (MLCC), pursuant to section 5.11.6.1.1 of the ISO Tariff, as the Minimum Load Cost for each resource *i* during Settlement Interval *o* of hour *h*, as defined in section 5.11.6.1.2 of the ISO Tariff.

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- D 3 Meaning of terms in the formulae
- D 3.1 [Not Used]

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#### D 3.2 COST\_AT\_STLMT\_PRICE<sub>i,h,o</sub>- \$/MWh

The sum of all dollar amounts from each dispatched bid segment for Energy quantities settled at the Resource-Specific Ex Post Price, for resource i during Settlement Interval o of hour h, and limited to those bid segments with Energy Bid prices below the Maximum Bid Level.

#### D 3.3 BID\_COST<sub>i,h,o</sub> - \$/MWh

The sum of all dollar amounts from each dispatched bid portion of Energy quantities settled at the maximum of either the corresponding Energy Bid price for those bids with Energy Bid prices below the Maximum Bid Level or the Bid Floor, for resource i during Settlement Interval o during hour h.

#### D 3.4 PRE\_DISP\_ABC\_BQ<sub>i,h,o</sub> - MWh

The pre-dispatched Energy from all Energy Bids with any Energy Bid price above the Maximum Bid Level, for resource i during Settlement Interval o during hour h.

#### D 3.5 IIE\_PREDISPATCH\_FOR\_SEGMENT<sub>i,h,o,k,m</sub> - MWh

The pre-dispatched Energy for resource i during Dispatch Interval k of Settlement Interval o of hour h for bid segment m.

- D 3.6 [Not Used]
- D 3.6.1 [Not Used]
- D 3.6.2 [Not Used]
- D 3.6.3 [Not Used]
- D 3.7 G<sub>a,i,j,h,o</sub> MWh

The total actual metered Generation of Generator i in Zone j during Settlement Interval o during Settlement Period h.

D 3.8 [Not Used]

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#### **ISO ENFORCEMENT PROTOCOL**

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- (d) Participating Transmission Owners (PTOs);
- (e) Participating Generators;
- (f) Control Area Operators, to the extent the agreement between the Control Area Operator and the ISO so provides;
- (g) Operators;
- (h) Other Market Participants;
- (i) The ISO; and
- (j) FERC

# EP 1.7 Liability of ISO

Any liability of the ISO arising out of or in relation to this Protocol shall be subject to Section 14 of the ISO Tariff as if references to the ISO Tariff were references to this Protocol.

#### EP 1.8 Application of Other Remedies

The activities and remedies authorized under this Protocol are in addition to any other actions or relief that may be available to the ISO elsewhere in the ISO Tariff or under law, regulation or order. Nothing in this Protocol limits or should be construed to limit the right of the ISO to take action or seek relief otherwise available to it, and such action or relief may be pursued in lieu of or in addition to the action or relief specified in this Protocol.

#### EP 1.9 FERC Authority

In addition to any authority afforded Market Monitoring Staff in this Protocol, FERC shall have the authority to assess the sanctions, and otherwise to enforce the rules as set forth and described in this Protocol. FERC shall have authority to remedy a violation under this Protocol from the date of the violation. Nothing in this Protocol shall be deemed to be a limitation or condition on the authority of FERC or other entities under current law or regulation.

#### EP 1.10 Administration of the EP

Pursuant to the FERC Orders dated February 20, 2004 and October 28, 2004 in Docket No. ER03-1102, until a subsequent filing by the ISO and further order of FERC, the Rules of Conduct specified herein shall be enforced by FERC, and no Sanctions may be assessed by Market Monitoring Staff without prior FERC approval.

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#### EP 2 COMPLY WITH OPERATING ORDERS

#### EP 2.1 Compliance with Orders Generally

- **Expected Conduct.** Market Participants must comply with operating (a) orders issued by the ISO as authorized under the ISO Tariff. For purposes of enforcement under this EP 2, an operating order shall be an order(s) from the ISO directing a Market Participant to undertake, a single, clearly specified action (e.g., the operation of a specific device, or change in status of a particular Generating Unit) that is feasible and intended to resolve a specific operating condition. A Market Participant's failure to obey an operating order containing multiple instructions to address a specific operating condition will result in a single violation of EP 2. If some limitation prevents the Market Participant from fulfilling the action requested by the ISO, then the Market Participant must promptly and directly communicate the nature of any such limitation to the ISO. Compliance with ISO operating orders requires a good faith effort to achieve full performance as soon as is reasonably practicable in accordance with Good Utility Practice.
- (b) Sanctions. The Sanction for a violation of this Section shall be the greater of the quantity of Energy non-performance multiplied by the applicable Hourly Ex Post Price or the following: for the first violation in a rolling twelve (12) month period, \$5,000; for the second and subsequent violations in a rolling twelve (12) month period, \$10,000. Sanctions under EP 2.1 will not be greater than \$10,000 per violation and will be subject to the limitation stated in EP 2.6. If a quantity of energy cannot be objectively determined, then the financial sanctions specified above will apply. A Market Participant may incur Sanctions for more than one violation per day.

#### EP 2.2 Failure to Curtail Load

- (a) **Expected Conduct.** A UDC or MSS Operator shall promptly comply with any ISO operating order to curtail interruptible or firm load issued pursuant to the ISO's authority under Section 4.4.4 of the ISO Tariff.
- (b) **Sanctions.** The Sanction for non-compliance with an operating order to curtail load will be \$10,000 for each violation.

#### EP 2.3 Operations & Maintenance Practices

(a) **Expected Conduct.** Market Participants shall undertake such operating and maintenance practices as necessary to avoid contributing to a major outage or prolonging response time as indicated by Section 2.3.2.9.3 of the ISO Tariff.

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(b) **Sanctions**. The Sanction for a violation of EP 2.3 will be \$10,000.

#### EP 2.4 Must-Offer Denials/Revocations

- (a) Expected Conduct. A Market Participant shall start a Generating Unit and have that Generating Unit operating at minimum load within 30 minutes of the time at which a must-offer waiver revocation becomes effective, or report the derate, outage or other event outside the control of the Market Participant that prevents the Generating Unit from being started by such time. Notwithstanding the foregoing, no violation shall occur unless the Market Participant has been provided advance notice of the waiver revocation consistent with the relevant start-up time set forth in the ISO Master File. A Market Participant that fails to perform in accordance with the expected conduct described in this EP 2.4(a) shall be subject to Sanction.
- (b) Sanctions. The Sanctions for a violation of EP 2.4 shall be as follows: for the first violation in a rolling twelve (12) month period, \$5,000; for the second and all subsequent violations in a rolling twelve (12) month period, \$10,000. A Market Participant is limited to one Sanction per Generating Unit per calendar day.

#### EP 2.5 Enhancements and Exceptions

Except as otherwise specifically provided, penalty amounts shall be tripled for any violation of EP 2.1 through EP 2.4 if an ISO System Emergency exists at the time an operating order becomes effective or at any time during the Market Participant's non-performance. Notwithstanding the foregoing, violations of EP 2.1 through EP 2.4 are subject to penalty under this rule only to the extent that the ISO has issued a separate and distinct non-automated Dispatch Instruction to the Market Participant. Any penalty amount that is tripled under this provision and that would exceed the \$10,000 per day penalty limit shall not be levied against a Market Participant until the ISO proposes and the Commission approves such an enhancement. A Market Participant that is subject to an enhanced penalty amount under this EP 2.5 may appeal that penalty amount to FERC if the Market Participant believes a mitigating circumstance not covered in EP 9.2 exists. The duty of the Market Participant to pay the enhanced penalty amount will be tolled until FERC renders its decision on the appeal.

#### EP 2.6 Per-Day Limitation on Amount of Sanctions

The amount of Sanctions that any Market Participant will incur for committing two or more violations of EP 2.1 through EP 2.4 on the same day will be no greater than \$10,000 per day.

# EP 3 SUBMIT FEASIBLE ENERGY AND ANCILLARY SERVICE BIDS AND SCHEDULES

# EP 3.1 Bidding Generally

(a) **Expected Conduct.** Market Participants must bid and schedule Energy and Ancillary Services from resources that are reasonably expected to be available and capable of performing at the levels specified in the bid and/or schedule, and to remain available and capable of so performing

based on all information that is known to the Market Participant or should have been known to the Market Participant at the time of bidding or scheduling.

(b) **Consequence for Non-Performance.** A Market Participant that fails to perform in accordance with the expected conduct described in EP 3.1 (a) above shall be subject to having the payment rescinded for any portion of an Ancillary Service that is unavailable.

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#### EP 3.2 Exceptions.

Violations of EP 3.1 that result in circumstances in which an Uninstructed Deviation Penalty under Section 11.2.4.1.2 of the ISO Tariff may be assessed or for which payments have been eliminated under Section 2.5.26 of the ISO Tariff are not subject to Sanction under this section. The submission of a Schedule that causes, or that the ISO expects to cause Intra-Zonal Congestion shall not, by itself, constitute a violation of EP 3.1 unless the Market Participant fails to comply with an obligation under the ISO Tariff to modify Schedules as determined by the ISO to mitigate such congestion or such Schedules violate another element of this Rule.

#### EP 4 COMPLY WITH AVAILABILITY REPORTING REQUIREMENTS

#### EP 4.1 Reporting Availability

- (a) Expected Conduct. A Market Participant shall report to the ISO Control Center any Outage of a Generating Unit subject to Section 5 of the ISO Tariff within thirty (30) minutes after the Outage occurs, in accordance with Section 2.3.3.9.2 of the ISO Tariff.
- (b) Sanctions. The Sanctions for a violation of EP 4.1 shall be as follows: for the first violation in a rolling twelve (12) month period, a warning letter; for the second violation in a rolling twelve (12) month period, \$1,000; for the third violation in a rolling twelve (12) month period, \$2,000; for the fourth and subsequent violations in a rolling twelve (12) month period, \$5,000. A Market Participant shall not be subject to more than one Sanction per Generating Unit per calendar day for violating EP 4.1. A "violation" shall mean each failure to report an Outage as required.

# EP 4.2 Scheduling and Final Approval of Outages

(a) Expected Conduct. A Market Participant shall not undertake an Outage except as approved by the ISO Outage Coordination Office in accordance with Sections 2.3.3.2, OCP 4.2, and OCP 5.1 of the ISO Tariff. A Market Participant shall not commence any Outage without obtaining final approval from the ISO Control Center in accordance with Sections 2.3.3.8, OCP 4.3.6, OCP 4.3.8, OCP 5.7, OCP 5.8, and OCP 6 of the ISO Tariff. CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Second Sub. First Revised Sheet No. 867 FIRST REPLACEMENT VOLUME NO. II Superseding Original Sheet No. 867

> (b) Sanctions. The Sanctions for a violation of EP 4.2 shall be as follows: for the first violation within a rolling twelve (12) month period, \$5,000; for subsequent violations within a rolling twelve (12) month period, \$10,000. A "violation" shall mean each Outage undertaken for which all required approvals were not obtained.

### EP 4.3 Explanation of Forced Outages

- (a) Expected Conduct. A Market Participant, within two working days of the commencement of a Forced Outage, must provide an explanation of the Forced Outage to the ISO that includes a description of the equipment failure or other cause and a description of all remedial actions taken by the Operator, in accordance with Section 2.3.3.9.5 of the ISO Tariff. An Operator must promptly provide information requested by the ISO to enable the ISO to review the explanation submitted by the Operator and to prepare a report on the Forced Outage.
- (b) **Sanctions**. The Sanction for failing to provide a timely explanation of Forced Outage shall be \$500 per day for each day the explanation is late. The Sanction for failing to provide a timely response to information requested shall be as specified in EP 6.1.

#### EP 4.4 Enhancements and Exceptions

Except as otherwise specifically provided, penalty amounts shall be tripled for any violation of EP 4.1 through EP 4.3 that occurs during an ISO System Emergency. Violations of the above rules that result in circumstances in which an Uninstructed Deviation Penalty under Section 11.2.4.1.2 of the ISO Tariff may be assessed shall not be subject to Sanction under this EP 4. A Market Participant that is subject to an enhanced penalty amount under this EP 4.4 may appeal that penalty amount to FERC if the Market Participant believes a mitigating circumstance not covered in EP 9.2 exists. The duty of the Market Participant to pay the enhanced penalty amount will be tolled until FERC renders its decision on the appeal.

#### EP 5 PROVIDE FACTUALLY ACCURATE INFORMATION

#### EP 5.1 Accurate Information Generally

(a) Expected Conduct. All applications, Schedules, reports, and other communications by a Market Participant or agent of a Market Participant to the ISO, including maintenance and outage data, bid data, transaction information, and load and resource information, must be submitted by a responsible company official who is knowledgeable of the facts submitted. The Market Participant shall provide accurate and factual information and not submit false or misleading information, or omit material information, in any communication with FERC, FERC-approved market monitors, FERC-approved regional transmission organizations, or FERC-approved independent system operators, or jurisdictional transmission providers, unless the Market Participant exercised due diligence to prevent such occurrences.

Issued by: Charles F. Robinson, Vice President and General Counsel Issued on: April 25, 2005 Effective: Upon Commission Approval CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. II

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(b) **Sanctions.** The Sanctions for a violation of EP 5.1 shall be as follows: for the first violation within a rolling twelve (12) month period, \$2,500; for the second violation within a rolling twelve (12) month period), \$5,000; subsequent violations within a rolling twelve (12) month period, \$10,000. CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Substitute First Revised Sheet No. 868 FIRST REPLACEMENT VOLUME NO. II Superseding Original Sheet No. 868

#### EP 5.2 Inaccurate Meter Data

- (a) Expected Conduct. Market Participants shall provide complete and accurate Settlement Quality Meter Data for each Trade hour and shall correct any errors in such data prior to the issuance of Final Settlement Statements. Failure to provide complete and accurate Settlement Quality Meter Data, as required by Section 10 of the ISO Tariff and that results in an error that is discovered after issuance of Final Settlement Statements, shall be a violation of this rule.
- (b) **Sanctions.** Violations under this EP 5.2 shall be subject to Sanction described in Appendix A to this EP.
- (c) **Disposition of Sanction Proceeds.** For purposes of redistributing collected penalties, any amounts collected under this provision shall be applied first to those parties affected by the conduct. Any excess amounts shall be disposed of as set forth in EP 9.4.

#### EP 6 PROVIDE INFORMATION REQUIRED BY ISO TARIFF

#### EP 6.1 Required Information Generally

- (a) Expected Conduct. Except as provided below in EP 6.4 (Review by FERC), all information that is required to be submitted to the ISO under the ISO Tariff, ISO protocols, or jurisdictional contracts must be submitted in a complete, accurate, and timely manner. Market Participants must comply with requests for information or data by the ISO authorized under the ISO Tariff, including timelines specified in the ISO Tariff for submitting Schedules and other information.
- (b) **Sanctions.** Except as otherwise provided below, in EP 6.2 and EP 6.3, a violation of this rule is subject to a penalty of \$500 for each day that the required information is late.

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#### EP 6.2 Investigation Information

- (a) **Expected Conduct.** Except as provided below in EP 6.4 (Review by FERC), Market Participants must submit timely information in response to a written request by the ISO for information reasonably necessary to conduct an investigation authorized by the ISO Tariff.
- (b) Sanctions. The Sanction for a violation of EP 6.2 shall be as follows: for the first violation in a rolling 12-month period, \$1000/day; for the second violation in a rolling 12-month period, \$2000/day; for the third and subsequent violations in a rolling 12-month period, \$5000/day. For purposes of this subsection, a violation shall be each failure to provide a full response to a written request and the Sanction shall be determined from the date that the response was due until a full response to the request is received.

#### EP 6.3 Audit Materials

- (a) **Expected Conduct.** Except as provided below in EP 6.4 (Review by FERC), Market Participants shall comply with the ISO's audit and/or test procedures, and further shall perform and timely submit an annual self-audit as required under the ISO Tariff.
- (b) Sanctions. For failure to submit an annual SC Self Audit report, the Sanction shall be \$1000/day until such report is received by the ISO. For all other violations of this rule the Sanctions shall be as follows: for the first violation in a rolling 12-month period, \$1000/day; for the second violation in a rolling 12-month period, \$2000/day; for the third and subsequent violations in a rolling 12-month period, \$5000/day. For purposes of this subsection, a "violation" shall be each failure to provide all information required under the audit or test, from the date that the information was due until all required information is received by the ISO.

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#### EP 6.4 Review by FERC

A Market Participant who objects to an information, audit or test obligation that is enforceable under EP 6.1, 6.2 or 6.3 above shall have the right immediately (and in all events, no later than the due date for the information) to seek review of the obligation with FERC. In the event that such review is sought, the time for submitting the response or other information to the ISO shall be tolled until FERC resolves the issue.

#### EP 7 NO MARKET MANIPULATION

#### EP 7.1 Market Manipulation Generally

- (a) Expected Conduct. Actions or transactions that are without a legitimate business purpose and that are intended to or foreseeably could manipulate market prices, market conditions, or market rules for electric energy or electricity products are prohibited. Actions or transactions by a Market Participant that are explicitly contemplated in the ISO Tariff or are undertaken at the direction of the ISO are not in violation of this Rule of Conduct.
- (b) **Sanctions**. Violations or potential violations of this rule shall be referred to FERC for appropriate sanction.

#### EP 7.2 Wash Trades

- (a) **Expected Conduct.** Market Participants shall not engage in prearranged offsetting trades of the same product among the same parties, which involve no economic risk and no net change in beneficial ownership (sometimes called "wash trades").
- (b) **Sanctions**. Violations or potential violations of this rule shall be referred to FERC for appropriate sanction.

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#### EP 7.3 False Information

- (a) **Expected Conduct.** A Market Participant shall not engage in transactions predicated on submitting false information to transmission providers or other entities responsible for operation of the transmission grid (such as inaccurate load or generation data; or scheduling non-firm service or products sold as firm), unless the Market Participant exercised due diligence to prevent such occurrences.
- (b) **Sanctions**. Violations or potential violations of this rule shall be referred to FERC for appropriate sanction.

#### EP 7.4 Artificial Congestion

- (a) **Expected Conduct.** A Market Participant shall not engage in transactions in which it first creates artificial congestion and then purports to relieve such artificial congestion (unless the Market Participant exercised due diligence to prevent such an occurrence).
- (b) **Sanctions**. Violations or potential violations of this rule shall be referred to FERC for appropriate sanction.

#### EP 7.5 Collusion

- (a) **Expected Conduct.** Market Participants shall not engage in collusion with another party for the purpose of manipulating market prices, market conditions, or market rules for electric energy or electricity products.
- (b) **Sanctions**. Violations or potential violations of this rule shall be referred to FERC for appropriate sanction.

#### EP 8 PROCESS FOR INVESTIGATION AND ENFORCEMENT

Until further order of FERC (see EP 1.10 above, "Administration of the EP"), the Rules of Conduct specified herein shall be enforced by FERC, in accordance with the Commission's standard rules and procedures The ISO and its Market Monitoring Staff will refer to FERC and its staff all matters in which it has formed a reasonable belief that a violation of these rules may have occurred.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Substitute First Revised Sheet No. 873 FIRST REPLACEMENT VOLUME NO. II Superseding Original Sheet No. 873

#### EP 9.3 Settlement

- Settlement Statements. The ISO will administer any penalties issued (a) under this Enforcement Protocol through Preliminary Settlement Statements, and Final Settlement Statements issued to the responsible Scheduling Coordinator by the ISO. Before invoicing a financial penalty through the Settlement process, the ISO will provide a description of the penalty to the responsible Scheduling Coordinator and all Market Participants the Scheduling Coordinator represents that are liable for the penalty, when the ISO has sufficient objective information to identify and verify responsibility of such Market Participants. The ISO shall specify whether such penalty is enhanced pursuant to EP 2.5 or EP 4.4. The description shall include the identity of the Market Participant that committed the violation and the amount of the penalty. Where FERC has determined the Sanction, the ISO will provide such of the above information as is provided to it by FERC. The ISO also may publish this information under the ISO Home Page after Final Settlement Statements are issued.
- (b) Payment. Except as provided in EP 2.5, EP 4.4 or EP 9.3(c) below, the Scheduling Coordinator shall be obligated to pay all penalty amounts reflected on the Preliminary and Final Settlement Statements to the ISO pursuant to the ISO's Settlement process, as set forth in Section 11 of the ISO Tariff.
- (c) Other Responsible Party. Where a party or parties other than the Scheduling Coordinator is responsible for the conduct giving rise to a penalty reflected on a Preliminary or Final Settlement Statement, and where the Scheduling Coordinator bears no responsibility for the conduct, such other party or parties ultimately shall be liable for the penalty. Under such circumstances, the Scheduling Coordinator shall use reasonable efforts to obtain payment of the penalty from the responsible party(ies) and to remit such payment to the ISO in the ordinary course of the settlement process. In the event that the responsible party(ies) wish to dispute the penalty, or the Scheduling Coordinator otherwise is unable to obtain payment from the responsible parties, the Scheduling Coordinator shall notify the ISO and dispute the Preliminary Settlement Statement. The ISO promptly shall notify FERC. If the ISO finds that a Market Participant separate from the Scheduling Coordinator that is unable to obtain payment from the responsible party(ies) is solely responsible for a violation, the Scheduling Coordinator that is unable to obtain payment may net its payment of its Invoice amount by the amount of the penalty in question. The ISO may refuse to offer further service to any responsible party that fails to pay a penalty, unless excused under the terms of the Tariff or this Enforcement Protocol, by providing notice of such refusal to the Scheduling Coordinator. Following such notice, the Scheduling Coordinator shall be liable for any subsequent penalties assessed on account of such responsible party.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. II OI

Original Sheet No. 873A

(d) **Dispute of FERC Sanctions**. The right that a Market Participant may otherwise have under the Tariff or this Enforcement Protocol to dispute a penalty that has been determined by FERC shall be limited to a claim that the ISO failed properly to implement the penalty or other Sanction ordered by FERC, except as provided by EP 2.5 and EP 4.4.

hydroelectric units operating on a common watershed (but having multiple different interconnection points), or geothermal units fed from a common geothermal steam supply.

#### UAP 2 SUBMITTAL OF A REQUEST FOR UDP AGGREGATION

Requests for UDP Aggregation are submitted to the ISO and must include the following documentation:

- (1) A completed UDP Aggregation Request form, which is available for downloading on the ISO website;
- (2) A simplified electrical one-line diagram, which illustrates each resource, the connection of the resources to each other and to the ISO Control Area Grid;
- (3) For Custom UDP Aggregations, a detailed description that explains physical operating interrelationships between the units, or, if there are no interrelationships, how the units are compatible and why an aggregation of these units for the purpose of calculating Uninstructed Deviation Penalties is reasonable.

#### UAP 3 ISO REVIEW OF A UDP AGGREGATION REQUEST

Upon receipt of a completed request form and accompanying attachments, the ISO shall review the request according to the criteria outlined herein. For Basic UDP Aggregations, the ISO shall review and approve or reject it within one week of receipt. The ISO shall review and approve or reject a request for a Custom UDP Aggregation within thirty (30) days of receipt.

#### UAP 3.1 Criteria for Reviewing a Request

#### UAP 3.1.1 Scheduling Coordinator and Interconnection Point

Uninstructed Deviations may be aggregated for resources that are:

- (1) Represented by the same Scheduling Coordinator and
- (2) Connected to the same ISO Controlled Grid bus and voltage level.

The ISO will consider, on a case-by-case basis, requests to aggregate Uninstructed Deviations among resources represented by the same Scheduling Coordinator but not sharing a common ISO Controlled Grid bus and voltage level. In particular, the ISO will consider whether the request concerns resources related by a common flow of fuel which cannot be interrupted without a substantial loss of efficiency of the combined output of all components; whether the Energy production from one resource necessarily causes Energy production from other resource(s); and whether the operational arrangement of resources determines the overall physical efficiency of the combined output of all of the resources.

#### UAP 3.1.2 Additional Criteria

Additional eligibility criteria for a UDP Aggregation are as follows:

- (1) Only Generating Units shall be eligible for UDP Aggregation. As a general rule, pump-generating Units (or a Physical Scheduling Plant [PSP] containing a pump-generating Unit) cannot be part of a UDP Aggregation. However, it is possible that generating Units could form a UDP Aggregation comprised entirely of pump-generating Units whose operation is uniform, that is, Units all operating in either Generation mode or all in pump mode, but never mixed.
- (2) UDP Aggregations cannot include any of the following:
  - (a) Load;
  - (b) Condition 2 Reliability Must Run (RMR) Units;
  - (c) Participating Intermittent Resources;
  - (d) Generating Units less than 5 MW; or
  - (e) Generating Units that span active or inactive Congestion Zones.
- (3) The resources must have ISO direct telemetry and must be fully compliant with the ISO's direct telemetry standards.
- (4) The Generating Units must have the same relative effect on all network elements for which the Generating Units have at least a five (5) percent effectiveness factor, that is, for those network elements for which a 1 MW change in the output of the Generating Unit changes the flow across that element by at least 0.05 MW. For the purposes of this item (4), the "same relative effect" means that the effectiveness factors of any Generating Unit relative to a network element cannot differ by more than 10% from the midpoint effectiveness factor of all the units. The midpoint effectiveness is the arithmetic mean of the two most different effectiveness factors to be aggregated.
- (5) Custom UDP Aggregations involving units not directly connecting to the ISO Controlled Grid must recognize the transfer limits and status of the intermediate local facilities.

#### UAP 3.1.3 Approval of a Request

If a UDP Aggregation request is approved, the ISO shall create a new unique Resource ID, which reflects the identity or location of the units and stipulates the UDP Aggregation, but which cannot be used for scheduling purposes. The ISO shall inform the Scheduling Coordinator of the approval and ask the Scheduling Coordinator to confirm the desired start date of the UDP Aggregation. When that confirmation has been received, the new aggregation will be entered into the ISO systems. Unless otherwise agreed to by the Scheduling Coordinator and the ISO, the UDP Aggregation will become effective on the first day of the month following approval. The Units in an approved UDP Aggregation are obligated to follow their individual schedules and instructions at all times.

#### UAP 3.1.4 Rejection of a Request

If the ISO determines that the proposed UDP Aggregation is likely to impact grid reliability or the reliability of transmission systems or equipment of intermediate entities between the relevant resources and the ISO grid, the request will be rejected. If the ISO rejects a request, the ISO shall inform the Scheduling Coordinator, and forward to it the reason for the rejection. The ISO may suggest alternative solutions if it has adequate time and data. The Scheduling Coordinator may choose to resubmit based on the ISO's recommendations, or to close the request.

#### UAP 4 MODIFICATIONS TO AN EXISTING UDP AGGREGATION

#### UAP.4.1 Status of UDP Aggregation

An approved UDP Aggregation shall be considered active until otherwise requested by the Scheduling Coordinator.

#### UAP 4.2 Suspension by the ISO

The ISO may suspend previously approved UDP Aggregations if, due to changes to the grid, to the aggregated Generating Units, or to the facilities connecting aggregated Generating Units to the grid, the UDP Aggregation no longer meets the criteria set forth in Sections 3.1.1 and 3.1.2 of this ISO Protocol. If the ISO must suspend the UDP Aggregation due to a forced outage or other unanticipated event, the ISO shall provide notice that the UDP Aggregation has been suspended as soon as practical after the affecting event, but in no case longer than 72 hours after that event. If the ISO must suspend the UDP Aggregation due to future changes, the ISO shall notify the affected Scheduling Coordinator (1) that the UDP Aggregation will be suspended and (2) when the UDP Aggregation will be suspended as soon as practical after the ISO determines the UDP Aggregation must be suspended.

The ISO shall write a report that explains the reason for the suspension and that specifies the effective date and time. The ISO will forward the report to the Scheduling Coordinator and take steps to have the aggregation removed from the ISO systems.

In the event that a resource in a UDP Aggregation changes from one Scheduling Coordinator to another, the UDP Aggregation will be suspended. In order to reinstate the aggregation, the new Scheduling Coordinator must submit a new request reflecting the change.

Original Sheet No. 884A

#### UAP 4.3 Request for Modification by a Scheduling Coordinator

A Scheduling Coordinator may request a modification to an existing aggregation up to once per calendar month. A request for modification will follow the same procedures as a new request.

#### DSP 6 OPERATING AND SCHEDULING REQUIREMENTS

- **DSP 6.1** For any operating hour for which Energy, Supplemental Energy, and/or Ancillary Services (and associated Energy) is scheduled dynamically to the ISO from the System Resource, a firm (or non-interruptible for that hour) matching transmission service must be reserved across the entire dynamic schedule transmission path external to the ISO Control Area.
- **DSP 6.2** All dynamic schedules associated with newly implemented dynamically scheduled System Resources must be electronically tagged (e-tagged).
- **DSP 6.3** Formal inter-Control Area dynamic schedules may be issued only by the dynamically scheduled System Resource's Host Control Area and must be routed through the EMSs of all Intermediary Control Areas (such schedules would be considered "wheel-through" schedules by Intermediary Control Areas).
- **DSP 6.4** The ISO will treat dynamically scheduled Energy as a resource contingent firm import. The ISO will procure (or allow for self-provision of) WECC MORC-required Operating Reserves for loads served by dynamically scheduled System Resources.
- **DSP 6.5** All Energy schedules associated with dynamically scheduled imports of Spinning Reserve and Non-Spinning Reserve will be afforded similar treatment (i.e., resource contingent firm).
- **DSP 6.6** The dynamic signal must be integrated over time by the Host Control Area for every operating hour.
- DSP 6.7 Notwithstanding any dispatches of the System Resource in accordance with the ISO Tariff, the ISO shall have the right to issue operating orders to the System Resource either directly or through the Host Control Area for emergency or contingency reasons, or to ensure the ISO's compliance with operating requirements based on WECC or NERC requirements and policies (e.g., WECC's Unscheduled Flow Reduction Procedure). However, such operating orders may be issued only within the range of the ISO-accepted Energy, Ancillary Services, and/or or Supplemental Energy Schedules and bids for a given operating hour (or the applicable "sub-hour" interval).
- **DSP 6.8** If there is no dynamic schedule in the ISO's Day-Ahead, Hour-Ahead, or Supplemental Energy markets, the dynamic signal must be at "zero" ("0") except when in response to ISO's Dispatch Instructions associated with accepted Ancillary Services and/or Supplemental Energy bids.
- **DSP 6.9** The SC of the dynamically scheduled System Resource must have the ability to override the associated dynamic schedule in order to respond to the operating orders of the ISO or the Host Control Area.
- **DSP 6.10** Unless the dynamically scheduled System Resource (1) is implemented as a directlytelemetered load-following functionality, (2) is base-loaded Regulatory Must Take Generation, or (3) responds to an ISO intra-hour Dispatch Instruction, the dynamic schedule representing such resource must follow WECC-approved practice of 20-minute ramps centered at the top of the hour. The ISO does not provide any special settlements treatment nor offer any ISO Tariff exemptions for dynamic load following functionalities.

Original Sheet No. 970

### **ISO TARIFF APPENDIX M**

## **Participating Generator Agreement**

## CALIFORNIA INDEPENDENT SYSTEM OPERATOR

# AND

# [PARTICIPATING GENERATOR]

# PARTICIPATING GENERATOR AGREEMENT

Issued by: Charles F. Robinson, Vice President and General Counsel Issued on: April 12, 2005

Effective: April 12, 2005

Original Sheet No. 972

#### PARTICIPATING GENERATOR AGREEMENT (PGA)

THIS AGREEMENT is dated this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_ and is entered into, by and between:

(1) **[Full Legal Name]** having its registered and principal place of business located at **[Address]** (the "Participating Generator");

and

(2) **California Independent System Operator Corporation,** a California nonprofit public benefit corporation having a principal executive office located at such place in the State of California as the ISO Governing Board may from time to time designate, initially 151 Blue Ravine Road, Folsom, California 95630 (the "ISO").

The Participating Generator and the ISO are hereinafter referred to as the "Parties".

#### Whereas:

- A. The ISO Tariff provides that the ISO shall not schedule Energy or Ancillary Services generated by any Generating Unit interconnected to the ISO Controlled Grid, or to the Distribution System of a Participating TO or of a UDC otherwise than through a Scheduling Coordinator.
- **B.** The ISO Tariff further provides that the ISO shall not be obliged to accept Schedules or Adjustment Bids or bids for Ancillary Services relating to Generation from any Generating Unit interconnected to the ISO Controlled Grid unless the relevant Generator undertakes in writing to the ISO to comply with all applicable provisions of the ISO Tariff.
- **C.** The Participating Generator wishes to be able to Schedule Energy and to submit Adjustment Bids, Supplemental Energy bids and bids for Ancillary Services to the ISO through a Scheduling Coordinator and, therefore, wishes to undertake to the ISO that it will comply with the applicable provisions of the ISO Tariff.
- **D.** The Parties are entering into this Agreement in order to establish the terms and conditions on which the ISO and the Participating Generator will discharge their respective duties and responsibilities under the ISO Tariff.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

#### ARTICLE I DEFINITIONS AND INTERPRETATION

- **1.1 Master Definitions Supplement.** All terms and expressions used in this Agreement shall have the same meaning as those contained in the Master Definitions Supplement to the ISO Tariff.
- **1.2 Rules of Interpretation.** The following rules of interpretation and conventions shall apply to this Agreement:
  - (a) if there is any inconsistency between this Agreement and the ISO Tariff, the ISO Tariff will prevail to the extent of the inconsistency;
  - (b) the singular shall include the plural and vice versa;
  - (c) the masculine shall include the feminine and neutral and vice versa;
  - (d) "includes" or "including" shall mean "including without limitation";
  - (e) references to a Section, Article or Schedule shall mean a Section, Article or a Schedule of this Agreement, as the case may be, unless the context otherwise requires;
  - (f) a reference to a given agreement or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made;
  - (g) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
  - unless the context otherwise requires, any reference to a "person" includes any individual, partnership, firm, company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having separate legal personality;
  - unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;
  - (j) any reference to a day, week, month or year is to a calendar day, week, month or year; and
  - (k) the captions and headings in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement.

#### ARTICLE II ACKNOWLEDGEMENTS OF PARTICIPATING GENERATOR AND ISO

2.1 ISO Responsibility. The Parties acknowledge that the ISO is responsible for the efficient use and reliable operation of the ISO Controlled Grid consistent with achievement of planning and operating reserve criteria no less stringent than those established by the Western Systems Coordinating Council and the North American Electric Reliability Council and further acknowledges that the ISO may not be able to satisfy fully these responsibilities if the Participating Generator fails to fully comply with all of its obligations under this Agreement and the ISO Tariff.

- 2.2 Scope of Application to Parties. The Participating Generator and ISO acknowledge that all Generators, except those specified in Section 2.2.1 of this Agreement, wishing to schedule Energy and to submit Adjustment Bids, Supplemental Energy bids and bids for Ancillary Services to the ISO through a Scheduling Coordinator must sign this Agreement in accordance with Section 5 of the ISO Tariff.
- 2.2.1 Exemption for Certain Generators. The Generator with an existing power purchase agreement with a UDC is not required to sign a Participating Generator Agreement if: (a) the Generator sells all of its Energy (excluding any Energy consumed by auxiliary load equipment electrically connected to that Generator at the same point) and Ancillary Services to the UDC; (b) the Generator sells any Energy through "over the fence" arrangements as authorized under Section 218(b) of the California Public Utilities Code; or (c) the Generator employs landfill gas technology for the generation of electricity as authorized under 218(c) of the California Public Utilities Code. With respect to subsections (a) and (b), an existing power purchase agreement shall mean an agreement which has been entered into and is effective as of December 20, 1995. With respect to subsection (c), an existing power purchase agreement shall mean an agreement which has been entered into and is effective as of December 20, 1995.

#### ARTICLE III TERM AND TERMINATION

**3.1** Effective Date. This Agreement shall be effective as of the later of the date it is executed by the Parties or the date accepted for filing and made effective by FERC, and shall remain in full force and effect until terminated pursuant to Section 3.2 of this Agreement.

#### 3.2 Termination

- **3.2.1** Termination by ISO. Subject to Section 5.2, the ISO may terminate this Agreement by giving written notice of termination in the event that the Participating Generator commits any material default under this Agreement and/or the ISO Tariff which, if capable of being remedied, is not remedied within thirty (30) days after the ISO has given, to the Participating Generator, written notice of the default, unless excused by reason of Uncontrollable Forces in accordance with Article X of this Agreement. With respect to any notice of termination given pursuant to this Section, the ISO must file a timely notice of termination with FERC. The filing of the notice of termination by the ISO will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within 30 days of receipt of such request. This Agreement shall terminate upon acceptance by FERC of such a notice of termination.
- **3.2.2** Termination by Participating Generator. In the event that the Participating Generator no longer wishes to schedule Energy or provide Ancillary Services through a Scheduling Coordinator over the ISO Controlled Grid, it may terminate this Agreement, on giving the ISO ninety (90) days written notice, provided, however, that in accordance with Section 4.1.3, the Participating Generator may modify Schedule 1 to eliminate Generating Units which it no longer owns or no longer has contractual entitlement to and such modification shall be effective upon receipt by the ISO. With respect to any notice of termination given pursuant to this Section, the ISO must file a timely notice of termination with FERC. The filing of the notice of termination by the ISO will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within 30 days of receipt of such request. This Agreement shall terminate upon acceptance by FERC of such a notice of termination.

#### ARTICLE IV GENERAL TERMS AND CONDITIONS

#### 4.1 Generating Units

- **4.1.1 Identification of Generating Units.** The Participating Generator has identified the Generating Units that it owns, operates or has a contractual entitlement to in Schedule 1, as required by Section 5.3 of the ISO Tariff.
- **4.1.2 Technical Characteristics.** The Participating Generator has provided to the ISO in Schedule 1 the required information regarding the capacity and operating characteristics of each of the Generating Units listed in that schedule. Pursuant to Section 2.5.25 of the ISO Tariff, the ISO may verify, inspect and test the capacity and operating characteristics provided in Schedule 1.
- Notification of Changes. Sixty (60) days prior to changing any technical information in 4.1.3 Schedule 1, the Participating Generator shall notify the ISO of the proposed changes. Pursuant to Section 2.5.25 of the ISO Tariff, the ISO may verify, inspect and test the capacity and operating characteristics provided in the revised Schedule 1. The ISO shall post on the ISO Home Page a schedule showing, for at least one year in advance: (i) the proposed dates on which the ISO's Master File will be updated, which dates shall occur at least every three months; (ii) the dates on which the information contained in the revised Master File will become effective; and (iii) the deadlines by which changed technical information must be submitted to the ISO in order to be tested and included in the next scheduled update of the ISO's Master File. Unless the Participating Generator fails to test at the values in the proposed change(s), the change will become effective upon the effective date for the next scheduled update of the Master File, provided the Participating Generator submits the changed information by the applicable deadline and is tested by the deadline. Subject to such notification this Agreement shall not apply to any generating unit identified in Schedule 1 which the Participating Generator no longer owns or no longer has contractual entitlement to.
- **4.2** Agreement Subject to ISO Tariff. The Parties will comply with all applicable provisions of the ISO Tariff, including Sections 2.3.2, 2.5.3.4 and 5. This Agreement shall be subject to the ISO Tariff which shall be deemed to be incorporated herein.

#### 4.3 Obligations Relating to Ancillary Services

- **4.3.1 Submission of Bids.** When the Scheduling Coordinator on behalf of the Participating Generator submits a bid for Ancillary Services, the Participating Generator will, by the operation of this Section 4.3.1, warrant to the ISO that it has the capability to provide that service in accordance with the ISO Tariff and that it will comply with ISO Dispatch instructions for the provision of the service in accordance with the ISO Tariff.
- **4.3.2 Certification.** Except as provided in Section 4.3.3, the Participating Generator shall not use a Scheduling Coordinator to submit a bid for the provision of an Ancillary Service or submit a schedule for the self provision of an Ancillary Service unless the Scheduling Coordinator serving that Participating Generator is in possession of a current certificate pursuant to Sections 2.5.6 and 2.5.24 of the ISO Tariff.
- **4.3.3 Initial Exemption.** Not later than November 1, 1998, the ISO shall fully implement its certification process in accordance with Sections 2.5.6 and 2.5.24 of the ISO Tariff. Until full implementation of the certification process and notification of the Participating Generator and its Scheduling Coordinator of the completion of such process, the non-certified Scheduling Coordinator on behalf of a Participating Generator may submit a bid for the provision of an Ancillary Service or submit a schedule for the self provision of an Ancillary Service. Upon timely notification by the ISO, the Participating Generator must complete the certification process prior to November 1, 1998 to continue its participation in accordance with Section 4.3.2 of this Agreement.

#### 4.4 Obligations relating to Major Incidents

**4.4.1 Major Incident Reports.** The Participating Generator shall promptly provide such information as the ISO may reasonably request in relation to major incidents, in accordance with Section 5.8.3 of the ISO Tariff.

#### ARTICLE V PENALTIES AND SANCTIONS

- **5.1 Penalties.** If the Participating Generator fails to comply with any provisions of this Agreement, the ISO shall be entitled to impose penalties and sanctions on the Participating Generator. No penalties or sanctions may be imposed under this Agreement unless a Schedule providing for such penalties or sanctions has first been filed with and made effective by FERC. Nothing in the Agreement, with the exception of the provisions relating to ADR, shall be construed as waiving the rights of the Participating Generator to oppose or protest any penalty proposed by the ISO to the FERC or the specific imposition by the ISO of any FERC-approved penalty on the Participating Generator.
- **5.2 Corrective Measures.** If the Participating Generator fails to meet or maintain the requirements set forth in this Agreement and/or the ISO Tariff, the ISO shall be permitted to take any of the measures, contained or referenced in the ISO Tariff, which the ISO deems to be necessary to correct the situation.

#### ARTICLE VI COSTS

**6.1 Operating and Maintenance Costs.** The Participating Generator shall be responsible for all its costs incurred in connection with operating and maintaining the Generating Units identified in Schedule 1 for the purpose of meeting its obligations under this Agreement.

#### ARTICLE VII DISPUTE RESOLUTION

7.1 **Dispute Resolution.** The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. In the event any dispute is not settled, the Parties shall adhere to the ISO ADR Procedures set forth in Section 13 of the ISO Tariff, which is incorporated by reference, except that any reference in Section 13 of the ISO Tariff to Market Participants shall be read as a reference to the Participating Generator and references to the ISO Tariff shall be read as references to this Agreement.

#### ARTICLE VIII REPRESENTATIONS AND WARRANTIES

**8.1 Representation and Warranties.** Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.

8.2 Necessary Approvals. The Participating Generator represents that all necessary leases, approvals, permits, licenses, easements, rights of way or access to install, own and/or operate its Generating Units have been or will be obtained by the Participating Generator prior to the effective date of this Agreement.

#### ARTICLE IX LIABILITY

**9.1 Liability.** The provisions of Section 14 of the ISO Tariff will apply to liability arising under this Agreement, except that all references in Section 14 of the ISO Tariff to Market Participants shall be read as references to the Participating Generator and references to the ISO Tariff shall be read as references to this Agreement.

#### ARTICLE X UNCONTROLLABLE FORCES

**10.1 Uncontrollable Forces Tariff Provisions.** Section 15 of the ISO Tariff shall be incorporated by reference into this Agreement except that all references in Section 15 of the ISO Tariff to Market Participants shall be read as a reference to the Participating Generator and references to the ISO Tariff shall be read as references to this Agreement.

#### ARTICLE XI MISCELLANEOUS

- **11.1 Assignments.** Either Party may assign or transfer any or all of its rights and/or obligations under this Agreement with the other Party's prior written consent in accordance with Section 17 of the ISO Tariff. Such consent shall not be unreasonably withheld. Any such transfer or assignment shall be conditioned upon the successor in interest accepting the rights and/or obligations under this Agreement as if said successor in interest was an original Party to this Agreement.
- **11.2 Notices.** Any notice, demand or request which may be given to or made upon either Party regarding this Agreement shall be made in accordance with Section 20.1 of the ISO Tariff. A Party must update the information in Schedule 3 of this Agreement as information changes. Such changes shall not constitute an amendment to this Agreement.
- **11.3 Waivers.** Any waivers at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- **11.4 Governing Law and Forum.** This Agreement shall be deemed to be a contract made under, and for all purposes shall be governed by and construed in accordance with, the laws of the State of California, except its conflict of law provisions. The Parties irrevocably consents that any legal action or proceeding arising under or relating to this Agreement to which the ISO ADR Procedures do not apply, shall be brought in any of the following forums, as appropriate: any court of the State of California, any federal court of the United States of America located in the State of California, or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.

- **11.5 Consistency with Federal Laws and Regulations.** This Agreement shall incorporate by reference Section 20.8 of the ISO Tariff as if the references to the ISO Tariff were referring to this Agreement.
- **11.6 Merger.** This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereto and supersedes all prior agreements, whether written or oral, with respect to such subject matter.
- **11.7** Severability. If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.
- **11.8** Section Headings. Section headings provided in this Agreement are for ease of reading and are not meant to interpret the text in each Section.
- **11.9 Amendments.** This Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. If the amendment does not require FERC approval, the amendment will be filed with FERC for information.
- **11.10 Counterparts.** This Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date hereinabove written.

#### California Independent System Operator Corporation

By:	
Name:	
Title:	
Date:	

#### [NAME OF PARTICIPATING GENERATOR]

By:	
Name:	
Title:	
Date:	

[The following page is a placeholder for Schedule 1, Section 1.]

[The following page is a placeholder for Schedule 1, Section 2.]

#### SCHEDULE 2

#### ISO IMPOSED PENALTIES AND SANCTIONS [Section 5.1]

[TO BE INSERTED UPON FERC APPROVAL]

#### CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. II

#### SCHEDULE 3

#### NOTICES (Section 10.2)

#### Participating Generator

Name of Primary	
Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax No:	
Name of Alternative	
Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax No:	

ISO

Name of Primary	
Representative:	
Title:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax No:	
Name of Alternative	
Representative:	
Title:	
Address:	
City/State/Zip Code:	
Email Address:	
Phone:	
Fax No:	

### **ISO TARIFF APPENDIX N**

### Meter Service Agreement for ISO Metered Entities

## CALIFORNIA INDEPENDENT SYSTEM OPERATOR

## AND

# [ISO METERED ENTITY]

# METER SERVICE AGREEMENT FOR ISO METERED ENTITIES

Issued by: Charles F. Robinson, Vice President and General Counsel Issued on: April 12, 2005

#### METER SERVICE AGREEMENT FOR ISO METERED ENTITIES

**THIS AGREEMENT** is dated this \_\_\_\_ day of \_\_\_\_\_, \_\_\_ and is entered into, by and between:

(1) **[Full legal name]** having its registered and principal place of business located at **[Address]** (the "ISO Metered Entity");

and

(2) **California Independent System Operator Corporation,** a California nonprofit public benefit corporation having a principal executive office located at such place in the State of California as the ISO Governing Board may from time to time designate, initially 151 Blue Ravine Road, Folsom, California 95630 (the "ISO").

The ISO Metered Entity and the ISO are hereinafter referred to as the "Parties".

#### Whereas:

- A. Section 10.3.1 of the ISO Tariff requires the ISO to establish meter service agreements with ISO Metered Entities for the collection and transfer of Meter Data.
- **B.** Section 10.2.4 of the ISO Tariff further provides that an ISO Metered Entity shall certify its revenue quality meters and Section 10.2.1 provides that ISO Metered Entities shall make Meter Data available to MDAS.
- **C.** The Parties are entering into this Agreement in order to establish the terms and conditions upon which the ISO and the ISO Metered Entity shall discharge their respective duties and responsibilities pursuant to this Agreement, and the ISO Tariff.
- **D.** All obligations and responsibilities included in this Agreement may be set forth in further detail in the Metering Protocol of the ISO Tariff.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

#### ARTICLE I

- **1.1 Master Definitions Supplement.** Unless defined in Section 1.2 of this Agreement, all terms and expressions used in this Agreement shall have the same meaning as those contained in the Master Definitions Supplement to the ISO Tariff.
- **1.2 Special Definitions for this Agreement**. In this Agreement, the following words and expressions shall have the meanings set forth below:

"**Authorized Users**" means users authorized by the ISO Metered Entity to access the Meter Data of that ISO Metered Entity held by the ISO.

"**ISO Authorized Inspector**" has the meaning as defined in the Metering Protocol of the ISO Tariff.

#### "ISO Metered Entity" means:

- (a) any one of the following entities that is directly connected to the ISO Controlled Grid:
  - i. a Generator other than a Generator that sells all of its Energy (excluding any Energy consumed by auxiliary load equipment electrically connected to that Generator at the same point) and Ancillary Services to the UDC in whose Service Area it is located;
  - ii. an Eligible Customer; or
  - iii. an End-User other than an End-User that purchases all of its Energy from the UDC in whose Service Area it is located; and
- (b) any one of the following entities:
  - i. a Participating Generator;
  - ii. a Participating TO in relation to its Tie Point Meters with other TOs or Control Areas; or
  - iii. a Participating Load.

"Metering Protocol" means the Protocol of the ISO Tariff on the subject of revenue quality metering which sets forth requirements and procedures that ISO Metered Entities, amongst others, shall meet and follow in order to comply with their obligations under Section 10 and Appendix J of the ISO Tariff.

"MDAS" means the ISO revenue metering data acquisition and processing system.

"Metering Facilities" means revenue quality meters, instrument transformers, secondary circuitry, secondary devices, meter data servers, related communication facilities and other related local equipment.

"SC" means Scheduling Coordinator.

- **1.3 Rules of Interpretation.** The following rules of interpretation and conventions shall apply to this Agreement:
  - (a) if there is any inconsistency between this Agreement and the ISO Tariff, the ISO Tariff will prevail to the extent of the inconsistency;
  - (b) the singular shall include the plural and vice versa;
  - (c) the masculine shall include the feminine and neutral and vice versa;
  - (d) "includes" or "including" shall mean "including without limitation";
  - (e) references to a section, article or schedule shall mean a section, article or a schedule of this Agreement, as the case may be, unless the context otherwise requires;
  - (f) a reference to a given agreement or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made;
  - (g) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
  - (h) unless the context otherwise requires, any reference to a "person" includes any individual, partnership, firm, company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having separate legal personality;
  - (i) unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;
  - (j) any reference to a day, week, month or year is to a calendar day, week, month or year;
  - the captions and headings in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement; and
  - (m) references to the Metering Protocol of the ISO Tariff and other ISO Documents shall be interpreted in accordance with any exceptions or exemptions to such as may have been granted by the ISO.

#### ARTICLE II TERM AND TERMINATION

2.1 Effective Date. This Agreement shall be effective as of the later of the date of execution of this Agreement, or the date it is accepted and made effective by FERC and shall remain in full force and effect until terminated by operation of law or pursuant to Section 2.2 of this Agreement.

#### 2.2 Termination

2.2.1 Termination by ISO. Subject to Section 4.2, the ISO may terminate this Agreement by giving written notice of termination in the event that the ISO Metered Entity commits any default under this Agreement and/or the ISO Tariff which, if capable of being remedied, is not remedied within thirty (30) days after the ISO has given it written notice of the default, unless excused by reason of Uncontrollable Force in accordance with Section 15 of the ISO Tariff. With respect to any notice of termination given pursuant to this Section, the ISO must file a timely notice of termination with FERC. The filing of the notice of termination by the ISO will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within 30 days of receipt of such

request. This Agreement shall terminate upon acceptance by FERC of such notice of termination.

2.2.2 Termination by ISO Metered Entity. In the event that the ISO Metered Entity wishes to terminate this Agreement, the ISO Metered Entity shall give the ISO ninety (90) days written notice. With respect to any notice of termination given pursuant to this Section, the ISO must file a timely notice of termination with FERC. The filing of the notice of termination by the ISO will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within 30 days of receipt of such request. This Agreement shall terminate upon acceptance by FERC of such notice of termination.

#### ARTICLE III GENERAL TERMS AND CONDITIONS

- **3.1** Agreement Subject to ISO Tariff and ISO Metering Protocol. This Agreement shall be subject to the provisions of the ISO Tariff which shall be deemed to be incorporated herein, as the same may be changed or superseded from time to time. The Parties agree that they will comply with the provisions of Section 10 of the ISO Tariff and the Metering Protocol of the ISO Tariff.
- 3.2 Obligations and Rights of the ISO Metered Entity.
- **3.2.1** Submission of Meter Data through MDAS. The ISO Metered Entity agrees to make available to the ISO through MDAS its Meter Data in accordance with the ISO Tariff. The ISO's requirements regarding the frequency with which it requires Meter Data to be made available to it through MDAS by the ISO Metered Entity are referred to in the Metering Protocol of the ISO Tariff.
- **3.2.2 Meter Information.** The ISO Metered Entity shall provide in the format prescribed by Schedule 1 to this Agreement the required information with respect to all of its meters used to provide Meter Data to the ISO. The ISO Metered Entity must immediately notify the ISO of any changes to the information provided to the ISO in accordance with this Section 3.2.2 and provide the ISO with any information in relation to such change as reasonably requested by the ISO. The ISO Metered Entity to modify Schedule 1, which modification shall not constitute an amendment to this Agreement. Such modification shall be effective upon receipt of notice by the ISO.
- **3.2.3** Transformer and/or Line Loss Correction Factors. If the ISO Metered Entity uses low voltage side metering, it shall use the ISO approved transformer and/or line loss correction factor referred to in the Metering Protocol of the ISO Tariff.
- **3.2.4** Rights to Access Metering Facilities. The ISO Metered Entity shall use its best efforts to procure any rights necessary for the ISO to access all Metering Facilities of the ISO Metered Entity to fulfill its obligations under the ISO Tariff and its obligations under this Agreement. If, after using its best efforts, the ISO Metered Entity is unable to provide the ISO with such access rights, the ISO Metered Entity shall ensure that one of its employees is an ISO Authorized Inspector and such employee undertakes, at the ISO's request, the certification, testing, inspection and/or auditing of those Metering Facilities in accordance with the procedures established pursuant to the Metering Protocol of the ISO Tariff, including the requirement to complete and provide to the ISO all necessary documentation. The ISO acknowledges that it will not be prevented from fulfilling its obligations under the ISO Tariff or this Agreement by reason of the fact that it is provided with escorted access to the Metering Facilities of the ISO Metered Entity.

**3.2.5** Security and Validation Procedures. The security measures and the validation, editing and estimation procedures that the ISO will apply to Meter Data made available to the ISO by the ISO Metered Entity shall be as referred to in the Metering Protocol of the ISO Tariff.

#### 3.3 Obligations and Rights of the ISO.

- **3.3.1 Direct Polling of MDAS.** The ISO shall allow the SC representing the ISO Metered Entity and all Authorized Users to directly poll MDAS for the Meter Data relating to the ISO Metered Entity in accordance with the procedures referred to in the Metering Protocol of the ISO Tariff.
- **3.3.2 ISO as Third-Party Beneficiary.** The ISO shall be a third-party beneficiary to any future agreement between the ISO Metered Entity and any other party relating to the Metering Facilities of the ISO Metered Entity for the purpose of granting the ISO access to any relevant information, records and facilities as needed by the ISO to fulfill its obligations under the ISO Tariff and its obligations under this Agreement.
- **3.3.3** Remote and Local Access to Metering Data. The ISO shall provide the ISO Metered Entity any password or other requirements necessary for the ISO Metered Entity to access its Metered Data remotely or locally at the Meter.
- **3.4 Exemptions Granted by the ISO.** Any exemptions provided for under the ISO Tariff that are granted by the ISO shall be set forth in Schedule 2 of this Agreement. Any amendment or addition to Schedule 2 shall not constitute an amendment to this Agreement.

#### ARTICLE IV PENALTIES AND SANCTIONS

- 4.1 Penalties. If an ISO Metered Entity provides inaccurate or incorrect Meter Data or fraudulent Meter Data to the ISO, the ISO shall be entitled to impose penalties and sanctions, including but not limited to suspension of trading rights following 14 days written notice to the ISO Metered Entity. Fraudulent Meter Data means any Meter Data provided to the ISO by the ISO Metered Entity that it knows to be false, incorrect or incomplete at the time it provided that Meter Data to the ISO. All penalties and sanctions shall be set forth in Schedule 4 Part A to this Agreement. No penalties or sanctions, including suspension of trading rights, may be imposed under this Agreement unless a Schedule providing for such penalties or sanctions has first been filed with and made effective by FERC. Nothing in the Agreement, with the exception of the provisions relating to ADR, shall be construed as waiving the rights of the ISO Metered Entity to oppose or protest any penalty proposed by the ISO to the FERC or the specific imposition by the ISO of any FERC-approved penalty on the ISO Metered Entity.
- **4.2 Corrective Measures.** If the ISO Metered Entity fails to meet or maintain the standards for Metering Facilities or comply with the audit or test procedures as referred to in the ISO Tariff, the ISO shall be permitted to take corrective measures. The corrective measures and rights the ISO may exercise upon any failure by any entity to meet those standards for Metering Facilities or to comply with the audit or test procedures shall be set forth in Schedule 4 Part B.

#### ARTICLE V ACCESS TO METERING DATA

**5.1 Authorized Users.** In addition to the persons referred to in the ISO Tariff, including the ISO Metered Entity and the relevant Scheduling Coordinator, as being entitled to access Meter Data on MDAS, the ISO Metered Entity may set forth in Schedule 3 of this Agreement any additional authorized users that shall be entitled to access the ISO Metered Entity's Settlement Quality Meter Data held by the ISO. The ISO Metered Entity shall include in Schedule 3 as authorized

users the relevant UDCs and TOs. The ISO shall provide the authorized users with any password or other information necessary to access the ISO Metered Entity's Settlement Quality Metered Data held by the ISO on MDAS. Any amendment or addition to Schedule 3 shall not constitute an amendment to this Agreement.

#### ARTICLE VI COSTS

6.1 Certification, Inspection and Auditing of Meters. The ISO Metered Entity shall be responsible for all reasonable costs incurred by the ISO or an ISO Authorized Inspector in connection with them carrying out the certification, inspection, testing or auditing of the meters identified in Schedule 1 from which the ISO Metered Entity provides Meter Data to the ISO. The ISO or ISO Authorized Inspector will furnish the ISO Metered Entity, upon request, an itemized bill for such costs.

#### ARTICLE VII DISPUTE RESOLUTION

7.1 **Dispute Resolution.** The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. In the event any dispute is not settled, the Parties shall adhere to the ISO ADR Procedures set forth in Section 13 of the ISO Tariff, which is incorporated by reference, except that all reference in Section 13 of the ISO Tariff to Market Participants shall be read as a reference to the ISO Metered Entities and references to the ISO Tariff shall be read as references to this Agreement.

#### ARTICLE VIII REPRESENTATIONS AND WARRANTIES

- 8.1 **Representations and Warranties.** Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.
- **8.2** Necessary Approvals. The ISO Metered Entity represents that all necessary approvals, permits, licenses, easements, right of way or access to install, own and operate its meters have been or will be obtained by the ISO Metered Entity prior to the effective date of this Agreement.

#### ARTICLE IX LIABILITY AND INDEMNIFICATION

**9.1** Liability and Indemnification. The provisions of Section 14 of the ISO Tariff will apply to liability arising under this Agreement, except that all references in Section 14 of the ISO Tariff to Market Participants shall be read as references to the ISO Metered Entity and references to the ISO Tariff shall be read as references to this Agreement.

#### ARTICLES X UNCONTROLLABLE FORCES

**10.1 Uncontrollable Forces Tariff Provisions.** Section 15 of the ISO Tariff shall be incorporated by reference into this Agreement except that all references in Section 15 of the ISO Tariff to Market

Issued by: Charles F. Robinson, Vice President and General Counsel Issued on: April 12, 2005

Participants shall be read as references to the ISO Metered Entity and all references to the ISO Tariff shall be read as references to this Agreement.

#### ARTICLE XI MISCELLANEOUS

- **11.1 Assignments.** Either Party may assign or transfer any or all of its rights and/or obligations under this Agreement with the other Party's prior written consent in accordance with Section 17 of the ISO Tariff. Such consent shall not be unreasonably withheld. Any such transfer or assignment shall be conditioned upon the successor in interest accepting the rights and/or obligations under this Agreement as if said successor in interest was an original Party to this Agreement.
- **11.2 Notices.** Any notice, demand or request which may be given to or made upon either Party regarding this Agreement shall be made in accordance with Section 20.1 of the ISO Tariff. A Party must update the information in Schedule 5 as information changes. Such changes shall not constitute an amendment to this Agreement.
- **11.3 Waivers.** Any waiver at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- **11.4 Governing Law and Forum.** This Agreement shall be deemed to be a contract made under and for all purposes shall be governed by and construed in accordance with the laws of the State of California, except its conflict of law provisions. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Agreement to which the ISO ADR Procedures do not apply shall be brought in any of the following forums, as appropriate: any court of the State of California, any federal court of the United States of America located in the State of California or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.
- **11.5 Consistency with Federal Laws and Regulations.** This Agreement shall incorporate by reference Section 20.8 of the ISO Tariff as if the references to the ISO Tariff were referring to this Agreement.
- **11.6 Merger.** This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereto and supersedes all prior agreements, whether written or oral, with respect to such subject matter.
- **11.7 Severability.** If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect and the parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.

- **11.8 Amendments.** This Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that are subject to FERC approval shall not take effect until FERC has accepted such amendments for filing and has made them effective. If the amendment does not require FERC approval, the amendment will be filed with FERC for information.
- **11.9 Counterparts.** This Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date hereinabove written.

#### California Independent System Operator Corporation

By:	
Name:	
Title:	
Date:	

#### [Full legal name of ISO Metered Entity]

By:	
Name:	
Title:	
Date:	

Original Sheet No. 995

#### SCHEDULE 1 METER INFORMATION [Section 3.3.2]

Resource ID/Meter Number	
Name of the Facility	
Location (address if applicable)	

### EXEMPTIONS FROM METERING STANDARDS AND OTHER REQUIREMENTS [Section 3.4]

#### ACCESS TO METER DATA AND AUTHORIZED USERS [Section 5.1]

List authorized users and any restrictions or limitations placed on them.

Original Sheet No. 998

#### SCHEDULE 4 PART A ISO IMPOSED PENALTIES AND SANCTIONS [Section 4.1]

[TO BE INSERTED UPON FERC APPROVAL]

PART B CORRECTIVE MEASURES [SECTION 4.2]

[TO BE DEVELOPED]

#### CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. II

#### **SCHEDULE 5**

#### NOTICE [Section 11.2]

Name of Primary Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email address:	
Phone:	
Fax:	
Name of Alternative Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code:	
Email address:	
Phone:	
Fax:	

ISO	
100.	

Name of Primary Representative:	
Title:	
Address:	
City/State/Zip Code:	
Email address:	
Phone:	
Fax:	
Name of Alternative Representative:	
Title:	
Address:	
City/State/Zip Code:	
Email address:	
Phone:	
Fax:	

### **ISO TARIFF APPENDIX O**

### Meter Service Agreement for Scheduling Coordinators

## CALIFORNIA INDEPENDENT SYSTEM OPERATOR

## AND

## [SC]

## METER SERVICE AGREEMENT FOR SCHEDULING COORDINATORS

Issued by: Charles F. Robinson, Vice President and General Counsel Issued on: April 12, 2005

#### METER SERVICE AGREEMENT FOR SCHEDULING COORDINATORS

**THIS AGREEMENT** is dated this \_\_\_\_ day of \_\_\_\_\_, \_\_\_ and is entered into, by and between:

(1) **[Full legal name]** having its registered and principal place of business located at **[Address]** (the "SC");

and

(2) **California Independent System Operator Corporation**, a California non-profit public benefit corporation having a principal executive office located at such place in the State of California as the ISO Governing Board may from time to time designate, initially 151 Blue Ravine Road, Folsom, California 95630 (the "ISO").

The SC and the ISO are hereinafter referred to as the "Parties".

#### Whereas:

- A. Section 10.6.7 of the ISO Tariff requires the ISO to enter into a meter service agreement with each SC responsible for providing Settlement Quality Meter Data for SC Metered Entities that it represents.
- **B.** Section 10.6.7 of the ISO Tariff requires SCs to ensure that the SC Metered Entities that they represent adhere to the requirements and standards for Metering Facilities set forth in Section 10.6.
- **C.** The Parties are entering into this Agreement in order to establish the terms and conditions upon which the ISO and the SC shall discharge their respective duties and responsibilities pursuant to this Agreement and the ISO Tariff.
- **D.** All obligations and responsibilities included in this Agreement may be set forth in further detail in the Metering Protocol of the ISO Tariff.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

#### ARTICLE I DEFINITIONS AND INTERPRETATION

- **1.1 Master Definitions Supplement.** Unless defined in Section 1.2 of this Agreement, all terms and expressions used in this Agreement shall have the same meaning as those contained in the Master Definitions Supplement to the ISO Tariff.
- **1.2 Special Definitions for this Agreement.** In this Agreement, the following words and expressions shall have the meanings set forth below:

"**ISO Authorized Inspector**" has the meaning as defined in the Metering Protocol of the ISO Tariff.

#### "ISO Metered Entity" means:

- (a) any one of the following entities that is directly connected to the ISO Controlled Grid:
  - i. a Generator other than a Generator that sells all of its Energy (excluding any Energy consumed by auxiliary load equipment electrically connected to that Generator at the same point) and Ancillary Services to the UDC in whose Service Area it is located;
  - ii. an Eligible Customer; or
  - iii. an End-User other than an End-User that purchases all of its Energy from the UDC in whose Service Area it is located; and
- (b) any one of the following entities:
  - i. a Participating Generator;
  - ii. a Participating TO in relation to its Tie Point Meters with other TOs or Control Areas; or
  - iii. a Participating Load.

"Metering Protocol" means the Metering Protocol of the ISO Tariff on the subject of revenue quality metering which sets forth the requirements and procedures that SCs, amongst others, shall meet and follow in order to comply with their obligations under Section 10 of the ISO Tariff.

"MDAS" means the ISO's revenue metering data acquisition and processing system.

"**Metering Facilities**" means revenue quality meters, instrument transformers, secondary circuitry, secondary devices, meter data servers, related communication facilities and other related local equipment.

"SC" means Scheduling Coordinator.

"Scheduling Coordinator Metered Entity" or "SC Metered Entity" means a Generator, Eligible Customer or End-User that is not an ISO Metered Entity.

- **1.3 Rules of Interpretation.** The following rules of interpretation and conventions shall apply to this Agreement:
  - (a) if there is any inconsistency between this Agreement and the ISO Tariff, the ISO Tariff will prevail to the extent of the inconsistency;
  - (b) the singular shall include the plural and vice versa;
  - (c) the masculine shall include the feminine and neutral and vice versa;

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- (d) "includes" or "including" shall mean "including without limitation";
- (e) references to a section, article or schedule shall mean a section, article or a schedule of this Agreement, as the case may be, unless the context otherwise requires;
- (f) a reference to a given agreement or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made;
- (g) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
- unless the context otherwise requires, any reference to a "person" includes any individual, partnership, firm, company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having separate legal personality;
- (i) unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;
- (j) any reference to a day, week, month or year is to a calendar day, week, month or year;
- (k) the captions and headings in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement; and
- (I) references to the Metering Protocol of the ISO Tariff and other ISO Documents shall be interpreted in accordance with any exceptions or exemptions to such as may have been granted by the ISO.

#### ARTICLE II TERM AND TERMINATION

2.1 Effective Date. This Agreement shall be effective as of the later of the date of execution of this Agreement, or the date it is accepted and made effective by FERC, and shall remain in full force and effect until terminated by operation of law or pursuant to Section 2.2 of this Agreement.

#### 2.2 Termination

- **2.2.1 Termination by ISO.** Subject to Section 4.2, the ISO may terminate this Agreement by giving written notice of termination in the event that the SC commits any default under this Agreement and/or the ISO Tariff which, if capable of being remedied, is not remedied within thirty (30) days after the ISO has given it written notice of the default, unless excused by reason of Uncontrollable Force in accordance with Section 15 of the ISO Tariff. With respect to any notice of termination given pursuant to this Section, the ISO must file a timely notice of termination with FERC. The filing of the notice of termination by the ISO will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within 30 days of receipt of such request. This Agreement shall terminate upon acceptance by FERC of such notice of termination.
- **2.2.2 Termination by SC.** In the event that the SC wishes to terminate this Agreement, the SC shall give the ISO ninety (90) days written notice. With respect to any notice of termination given pursuant to this Section, the ISO must file a timely notice of termination with FERC. The filing of the notice of termination by the ISO will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within 30 days of receipt of such request. This Agreement shall terminate upon acceptance by FERC of such a notice of termination.

Issued by: Charles F. Robinson, Vice President and General Counsel Issued on: April 12, 2005

#### ARTICLE III GENERAL TERMS AND CONDITIONS

- **3.1** Agreement Subject to ISO Tariff. This Agreement shall be subject to the provisions of the ISO Tariff which shall be deemed to be incorporated herein, as the same may be changed or superseded from time to time. The Parties agree that they will comply with the provisions of Section 10 of the ISO Tariff and the Metering Protocol of the ISO Tariff.
- **3.2** Requirements and Standards for Metering Facilities. The SC shall ensure that the SC Metered Entities it represents shall adhere to the requirements and standards for Metering Facilities of its Local Regulatory Authority. If that SC Metered Entity's Local Regulatory Authority has not set any requirements or standards in relation to any of its Metering Facilities, the SC representing that SC Metered Entity must comply with the requirements and standards for those Metering Facilities as set forth in this Agreement and the ISO Tariff.

#### 3.3 Obligations and Rights of the SC.

- **3.3.1** Meter Information. If the ISO so requests, the SC shall provide in the format prescribed by Schedule 1 to this Agreement the required information with respect to the meters for all SC Metered Entities it represents including the reference to specific distribution loss factors or methodology it proposes to use as determined by the relevant UDC and approved by the relevant Local Regulatory Authority. The SC must immediately notify the ISO of any changes to the information provided to the ISO in accordance with this Section 3.3.1 and provide the ISO with any information in relation to such change as reasonably requested by the ISO. Any amendments or additions to Schedule 1 shall not constitute an amendment to this Agreement.
- **3.3.2** Assistance and Cooperation of SC. The SC shall ensure that the ISO shall, upon reasonable notice, have access to the entire Metering Facilities of the SC Metered Entities that it represents from the meter data server to the Metering Facilities in order to inspect, test or otherwise audit those Metering Facilities.
- **3.3.3 Profiled and Cumulative Meter Data.** The SC shall provide the ISO with any applicable load profile for each SC Metered Entity that it represents that is load profiled in accordance with the ISO Tariff. The SC shall provide a copy of the load profile applicable to each SC Metered Entity (if any) that it represents which shall be set forth in Schedule 2 to this Agreement. The SC must immediately notify the ISO of any changes to the load profiles referred to in Schedule 2 to this Agreement and provide the ISO with a copy of the new or amended load profile. Such change to Schedule 2 shall not constitute an amendment to this Agreement.
- **3.3.4** Security and Validation Procedures. The SC shall apply to the Meter Data of the SC Metered Entities that it represents, the security and validation procedures prescribed by the relevant Local Regulatory Authority. If the relevant Local Regulatory Authority has not prescribed any such procedures, the SC shall apply the procedures set forth in the Metering Protocol of the ISO Tariff. Meter Data submitted by an SC for SC Metered Entities shall conform to these standards unless the ISO has, at its discretion, exempted the SC from these standards.

#### 3.4 Obligations and Rights of the ISO.

- **3.4.1** Exemptions Granted by ISO. Any exemptions provided for under the ISO Tariff that are granted by the ISO shall be set forth in Schedule 3 to this Agreement. Any amendment or addition to Schedule 3 shall not constitute an amendment to this Agreement.
- **3.4.2 ISO as Third-Party Beneficiary.** The ISO shall be a third-party beneficiary to the agreements between the SC and SC Metered Entities that the SC represents. Such agreements shall grant the ISO access to any relevant information, records and facilities of the SC Metered Entity as needed for the ISO to fulfill its obligations under this Agreement and the ISO Tariff.

#### ARTICLE IV PENALTIES & SANCTIONS

- 4.1 Penalties. If the SC provides inaccurate or incorrect Settlement Quality Meter Data or fraudulent Meter Data to the ISO, the ISO shall be entitled to impose penalties and sanctions, including but not limited to suspension of trading rights following 14 days written notice to the SC. Fraudulent Meter Data means any data provided to the ISO by the SC that the SC knows to be false, incorrect or incomplete at the time it provided it to the ISO. All penalties and sanctions shall be set forth in Schedule 4 Part A. No penalties or sanctions, including the suspension of trading rights, may be imposed under this Agreement unless a Schedule providing for such penalties or sanctions has first been filed with and made effective by FERC. Nothing in the Agreement, with the exception of the provisions relating to ADR, shall be construed as waiving the rights of the SC to oppose or protest any penalty proposed by the ISO to the FERC or the specific imposition by the ISO of any FERC-approved penalty on the SC. The ISO shall notify the SC of those approved penalties within 14 days of their approval by the FERC.
- **4.2 Corrective Measures.** If the SC or any SC Metered Entity that it represents fails to meet or maintain the standards for Metering Facilities or comply with the audit or test procedures as set forth in the ISO Tariff, the ISO shall be permitted to take corrective measures. Details of the corrective measures and rights the ISO may exercise upon any failure by any entity to meet those standards for Metering Facilities or to comply with the audit or test procedures shall be set forth in Schedule 4 Part B.

#### ARTICLE V ACCESS TO METER DATA

5.1 Third Parties. Third parties that are authorized by the SC to access the Meter Data of a SC Metered Entity held by the ISO and that are entitled to such Meter Data shall be identified in Schedule 5 to this Agreement. The SC shall not provide a third party access to Meter Data of a SC Metered Entity unless the SC has permission from that SC Metered Entity to provide that access. The relevant UDCs and TOs shall be included in Schedule 5 provided that the SC Metered Entity has granted those UDCs and TOs access to its Meter Data. Any amendment or addition to Schedule 5 shall not constitute an amendment to this Agreement. The Scheduling Coordinator shall, on request by the SC Metered Entity, access the Meter Data held by the ISO relating to that SC Metered Entity and provide that Meter Data to the SC Metered Entity in a timely manner.

#### ARTICLE VI COSTS

6.1 Certification, Inspection and Auditing of Meters. The SC shall be responsible for all reasonable costs incurred by the ISO or an ISO Authorized Inspector in connection with them carrying out the certification, inspection, testing or auditing of the meters identified in Schedule 1 from which the SC provides Meter Data to the ISO. The ISO or ISO Authorized Inspector will furnish the SC, upon request, an itemized bill for such costs.

#### ARTICLE VII DISPUTE RESOLUTION

7.1 **Dispute Resolution.** The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. In the event any dispute is not settled, the Parties shall adhere to the ISO ADR Procedures set forth in Section 13 of the ISO Tariff, which is incorporated by reference, except that all reference in Section 13 of the ISO Tariff to Market Participants shall be read as a reference to the SC Metered Entity and references to the ISO Tariff shall be read as references to this Agreement.

#### ARTICLE VIII REPRESENTATIONS AND WARRANTIES

- 8.1 **Representations and Warranties.** Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.
- 8.2 Necessary Authority. The SC represents and warrants that all of the entities which it identifies on Schedule 1 as SC Metered Entities that it represents have granted it all necessary authority to enable it to carry out its obligations under this Agreement and the ISO Tariff, and, subject to the execution and delivery by the ISO, this Agreement will be enforceable against the SC in accordance with its terms.
- 8.3 Meter Data Access. The SC represents and warrants that all third parties referred to in Schedule 5 to this Agreement have been authorized by the relevant SC Metered Entity as having access to its Settlement Quality Meter Data.

#### ARTICLE IX LIABILITY AND INDEMNIFICATION

**9.1** Liability and Indemnification. The provisions of Section 14 of the ISO Tariff will apply to liability arising under this Agreement except that all references in Section 14 of the ISO Tariff to Market Participants shall be read as references to the SC and references in the ISO Tariff shall be read as references to this Agreement.

#### ARTICLE X UNCONTROLLABLE FORCES

**10.1 Uncontrollable Forces.** Section 15 of the ISO Tariff shall be incorporated by reference into this Agreement except that all references in Section 15 of the ISO Tariff to Market Participants shall be read as references to the SC and all references to the ISO Tariff shall be read as references to the SC and all references to the ISO Tariff shall be read as references to this Agreement.

#### ARTICLE XI MISCELLANEOUS

- **11.1 Assignments.** Either Party may assign or transfer any or all of its rights and/or obligations under this Agreement with the other Party's prior written consent in accordance with Section 17 of the ISO Tariff. Such consent shall not be unreasonably withheld. Any such transfer or assignment shall be conditioned upon the successor in interest accepting the rights and/or obligations under this Agreement as if said successor in interest was an original Party to this Agreement.
- **11.2 Notices.** Any notice, demand or request which may be given to or made upon either Party regarding this Agreement shall be made in accordance with the SC's SC Agreement and in accordance with Section 20.1 of the ISO Tariff. A Party must update the information in Schedule 6 as information changes. Such changes shall not constitute an amendment to this Agreement.
- **11.3 Waivers.** Any waiver at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay short of the statutory period of limitations in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- **11.4 Governing Law and Forum.** This Agreement shall be deemed to be a contract made under and for all purposes shall be governed by and construed in accordance with the laws of the State of California, except its conflict of law provisions. The SC irrevocably consents that any legal action or proceeding arising under or relating to this Agreement to which the ISO ADR Procedures do not apply shall be brought in any of the following forums, as appropriate: any court of the State of California, any federal court of the United States of America located in the State of California or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.
- **11.5 Consistency with Federal Laws and Regulations.** This Agreement shall incorporate by reference Section 20.8 of the ISO Tariff as if the references to the ISO Tariff were referring to this Agreement.
- **11.6 Merger.** This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereto and supersedes all prior agreements, whether written or oral, with respect to such subject matter.

- **11.7 Severability.** If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.
- **11.8 Amendments.** This Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that are subject to FERC approval shall not take effect until FERC has accepted such amendments for filing and has made them effective. If the amendment does not require FERC approval, the amendment will be filed with FERC for information.
- **11.9 Counterparts.** This Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date hereinabove written.

#### California Independent System Operator Corporation

By:	
Name:	
Title:	
Date <sup>.</sup>	

[Full legal name of SC]

By:	
Name:	
Title:	
Date:	

#### METER INFORMATION [Section 3.3.1]

Meter Number

Name of the Facility

Contact details for SC Metered Entity Representative

#### APPROVED LOAD PROFILE [Section 3.3.3]

Attach details of each load profile used by the SC Metered Entities represented by the SC, the names of the SC Metered Entities that use each of those load profiles and the name of the Local Regulatory Authority that approved each of those load profiles.

#### EXEMPTIONS FROM METERING STANDARDS AND OTHER REQUIREMENTS [Section 3.4.1]

Exemption

Attach variation with an explanation.

Name of the relevant Local Regulatory Authority which sets security and validation standards for the SC Metered Entity.

Other Exemptions

#### PART A

#### ISO IMPOSED PENALTIES AND SANCTIONS [Section 4.1]

#### [TO BE INSERTED UPON FERC APPROVAL]

PART B

CORRECTIVE MEASURES [Section 4.2]

[TO BE DEVELOPED]

#### ACCESS TO METER DATA [Section 5.1]

List the third parties authorized by each SC Metered Entity represented by the SC to access that SC Metered Entities' Settlement Quality Meter Data.

#### CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. II

#### SCHEDULE 6

#### NOTICE [Section 11.2]

Name of Primary Representative:	
Title:	
Address:	
City/State/Zip Code:	
Email address:	
Phone:	
Fax:	
Name of Alternative	
Representative:	
Title:	
Address:	
City/State/Zip Code:	
Email address:	
Phone:	
Fax:	

#### ISO:

Phone: Fax:

Name of Primary Representative:	
Title:	
Address:	
City/State/Zip Code:	
Email address:	
Phone:	
Fax:	
Name of Alternative Representative:	
Title:	
Address:	
City/State/Zip Code:	
Email address:	

### ISO TARIFF APPENDIX P

### **Utility Distribution Company Operating Agreement**

### CALIFORNIA INDEPENDENT SYSTEM OPERATOR

### AND

### **[UTILITY DISTRIBUTION COMPANY]**

# UTILITY DISTRIBUTION COMPANY OPERATING AGREEMENT

Issued by: Charles F. Robinson, Vice President and General Counsel Issued on: April 12, 2005

#### UTILITY DISTRIBUTION COMPANY OPERATING AGREEMENT

THIS OPERATING AGREEMENT is dated this \_\_\_\_ day of \_\_\_\_\_, \_\_\_ and is entered into, by and between:

(1) **[Full legal name of UDC]** having its registered and principal place of business located at **[Address]** (the "UDC");

and

(2) **California Independent System Operator Corporation**, a California non-profit public benefit corporation having its principal place of business located in such place in the State of California as the ISO Governing Board may from time to time designate, initially 151 Blue Ravine Road, Folsom, California 95630 (the "ISO").

The UDC and the ISO are hereinafter referred to as the "Parties".

#### Whereas:

- A. The purpose of this Operating Agreement is to establish the rights and obligations of the UDC and the ISO with respect to the UDC's Interconnection with the ISO Controlled Grid and the UDC's cooperation and coordination with the ISO to aid the reliability and the operational control of the ISO Controlled Grid and the UDC's Distribution System.
- B. The UDC owns and operates a Distribution System within the ISO Control Area subject to the authority of a Local Regulatory Authority.
- C. The UDC wishes to transmit Energy and/or supply Ancillary Services to or from the ISO Controlled Grid under the terms and conditions set forth in the ISO Tariff. The UDC also wishes to support and be part of the coordinated response to System Emergencies and to System Reliability concerns relating to the ISO Controlled Grid.
- D. The ISO has certain statutory obligations under California law to maintain the reliability of the ISO Controlled Grid.
- E. This Operating Agreement obligates the UDC and the ISO to comply with the relevant sections of the ISO Tariff, the ISO Operating Procedures and the ISO Specifications.
- F. The UDC and the Participating TO with which it is interconnected intend to coordinate the planning and implementation of any expansions or modifications of the UDC's or Participating TO's systems that will affect their transmission interconnection, the ISO Controlled Grid or the transmission services to be required by the UDC.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

#### ARTICLE I DEFINITIONS AND INTERPRETATION

**1.1 Master Definitions Supplement.** Unless defined in Section 1.2 of this Operating Agreement, all terms and expressions used in this Operating Agreement shall have the same meaning as those contained in the Master Definitions Supplement to the ISO Tariff.

**1.2 Special Definitions for this Operating Agreement**. In this Operating Agreement, the following words and expressions shall have the meanings set opposite them:

"**ISO Specifications**" means those standards pertaining to the areas of operation listed in Article IV of this Operating Agreement, approved by the ISO to establish detailed technical performance and reliability parameters at the ISO Controlled Grid and UDC Interconnection, associated with the ISO Tariff, as those standards may be amended from time to time.

**"ISO Operating Procedure"** means those procedures pertaining to the areas of operation listed in Article IV of this Operating Agreement, created by the ISO to establish detailed operating practices at the ISO Controlled Grid and UDC Interconnection, associated with general provisions required in the ISO Tariff, as those standards may be amended from time to time.

"**Underfrequency Load Shedding (UFLS)**" means automatic Load Shedding, accomplished by the use of such devices as underfrequency relays, intended to arrest frequency decline and assure continued operation within anticipated islands.

- **1.3 Rules of Interpretation.** The following rules of interpretation and conventions shall apply to this Operating Agreement:
  - (a) if there is any inconsistency between this Operating Agreement and the ISO Tariff, the ISO Tariff will prevail to the extent of the inconsistency;
  - (b) the singular shall include the plural and vice versa;
  - (c) the masculine shall include the feminine and neutral and vice versa;
  - (d) "includes" or "including" shall mean "including without limitation";
  - (e) references to a Section, Article or Schedule shall mean a Section, Article or a Schedule of this Operating Agreement, as the case may be, unless the context otherwise requires;
  - (f) a reference in this Operating Agreement to a given agreement, instrument or the ISO Tariff shall be a reference to that agreement, instrument or the ISO Tariff as modified, amended, supplemented or restated through the date as of which such reference is made;
  - (g) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
  - (h) unless the context otherwise requires, any reference to a "person" includes any individual, partnership, firm, company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having separate legal personality;
  - (i) unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;
  - (j) any reference to a day, week, month or year is to a calendar day, week, month or year; and the captions and headings in this Operating Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Operating Agreement.

#### ARTICLE II TERM AND TERMINATION

- 2.1 Effective Date. This Operating Agreement shall be effective as of the later of the date it is executed by the Parties or the date accepted for filing and made effective by the FERC and shall remain in full force and effect until the earlier of the termination date, the termination of the TCA or such other date as the Parties shall mutually agree. With respect to any such termination, the ISO must file a timely notice of termination with FERC, and this Operating Agreement shall terminate upon acceptance by FERC of such a notice of termination.
- 2.2 Termination Date. Either Party (the terminating Party) may terminate this Operating Agreement by giving written notice in the event that the other Party (the defaulting Party) commits any default under this Operating Agreement and/or the ISO Tariff which, if capable of being remedied, is not remedied within 30 days after the terminating Party has given the defaulting Party written notice of the default, unless excused by reason of Uncontrollable Forces under Article X of this Operating Agreement. With respect to any notice of termination given pursuant to this Section, the ISO must file a timely notice of termination with FERC. The filing of the notice of termination by the ISO will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within 30 days of receipt of such request. This Operating Agreement shall terminate upon acceptance by FERC of such a notice of termination.
- 2.3 Termination Pursuant to the TCA. If the UDC is a party to the Transmission Control Agreement ("TCA"), this Operating Agreement shall terminate upon the effective date of the UDC's withdrawal from the TCA in accordance with Section 3.3 of the TCA, provided, however, that first the ISO shall have filed a timely notice of termination with FERC and FERC shall have accepted such notice of termination. The filing of the notice of termination by the ISO will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within 30 days of receipt of such request.

#### ARTICLE III GENERAL TERMS AND CONDITIONS

- **3.1.1** Facilities Under ISO Operational Control. Parties shall identify on Schedule 1 those facilities of the UDC that the Parties mutually agree will be placed under the ISO's operational control pursuant to section 4.9 of the ISO Tariff. In the event that a Party invokes the dispute resolution provision identified in Section 7.1 of this Operating Agreement, such dispute shall be resolved based upon whether the ISO's control over such disputed facilities is essential to meeting the Applicable Reliability Criteria, as defined in the ISO Tariff. With respect to each facility identified in Schedule 1, the Parties shall negotiate the extent of the ISO's operational control in order to meet said standard.
- **3.1.2** Facilities Financed by Local Furnishing Bonds or Other Tax-Exempt Bonds. This Section 3.1.2 applies only to facilities which are under the operational control of the ISO and are owned by a UDC with Local Furnishing Bonds or other tax-exempt bonds. Nothing in this Operating Agreement shall compel (and the ISO is not authorized to request) any UDC with Local Furnishing Bonds, or other tax-exempt bonds, to violate restrictions applicable to facilities which are part of a system that was financed in whole or part with Local Furnishing Bonds or other tax-exempt bonds. The UDC shall cooperate with and provide all necessary assistance to the ISO in developing specific schedules to be included in executed Operating Agreements with such UDC to meet the intent of Section 3.1.1 of this Operating Agreement.

- **3.2** Agreement Subject to ISO Tariff. This Operating Agreement shall be subject to the provisions of the ISO Tariff which shall be deemed to be incorporated by reference herein, as the same may be changed or superseded from time to time pursuant to Sections 16.1 and 20.1.3 of the ISO Tariff. The Parties agree that they will comply with Section 4, and any other applicable provisions, of the ISO Tariff.
- **3.3 Operation of ISO Controlled Grid.** The ISO shall operate the ISO Controlled Grid in accordance with the ISO Tariff and the Transmission Control Agreement to which it is a party.
- **3.4.1** Compliance with ISO Specifications and ISO Operating Procedure. The UDC will abide by and will perform all of the obligations under the ISO Specifications and the ISO Operating Procedure placed on UDCs in respect of all matters set forth therein as the same may be changed or superseded from time to time pursuant to the procedures set forth in Sections 16.1 and 20.1.3 of the ISO Tariff. In the event of any conflict or dispute over interpretation, the ISO Tariff shall, at all times, take precedence over the ISO Specifications and ISO Operating Procedure. The ISO shall not implement any reliability requirements, operating requirements or performance standards that would impose increased costs on the UDC without giving due consideration to whether the benefits of such requirements or standards are sufficient to justify such increased costs. In any proceeding concerning the cost recovery by the UDC of capital and operation and maintenance costs incurred to comply with ISO Specifications and Operating Procedure, the ISO shall, at the request of the UDC, provide specific information regarding the nature of, and need for, the ISO-imposed requirements or standards to enable the UDC to use this information in support of cost recovery through rates and tariffs.
- **3.4.2** Review of Specifications and Operating Procedure. The ISO shall periodically review with the UDC the ISO Specifications and Operating Procedure and, through the Grid Reliability and Operations Committee process, shall modify the specifications and/or Operating Procedure as necessary.
- **3.4.3 Periods When Compliance is Required.** While awaiting dispute resolution or regulatory review, the UDC shall not be required to comply with changes to the ISO Specifications and/or Operating Procedure, except where compliance is necessary in order to prevent or remedy an imminent System Emergency.
- **3.5** Scheduling Coordinator Certification. The UDC shall ensure that any Scheduling Coordinator through which it schedules Energy and Ancillary Services to or from the ISO Controlled Grid is appropriately certified in accordance with Section 2.2.3 and 2.2.4 of the ISO Tariff in accordance with the list of Scheduling Coordinators established by the ISO on WEnet.
- **3.6 Single Point of Contact.** The ISO and the UDC shall each provide a single point of contact on a 24-hour, 7-day basis for the exchange of operational procedures and information. In the case of a UDC that is also a Participating TO, there may be only one single point of contact required and, in the reasonable discretion of the ISO, duplicative reporting requirements and functions may be waived. Details of requirements relating to and the identity of the initial points of contact are set forth in Schedule 2.
- **3.7** Delegated Operational Responsibilities. The UDC undertakes to perform all operational responsibilities delegated to the UDC by the ISO in accordance with Section 4.1.2 of the ISO Tariff and described in Schedule 3.

#### ARTICLE IV OPERATIONAL COORDINATION

The Parties will perform the operational coordination obligations and responsibilities assigned to them under the ISO Tariff, the ISO Operating Procedures, and the ISO Specifications. The obligations and responsibilities include:

#### 4.1 Maintenance Coordination

- **4.1.1 Maintenance Coordination for Facilities under ISO Control.** The UDC shall schedule with the ISO on an annual basis any maintenance Outages of the equipment included in Schedule 1 pursuant to Schedule 4 in compliance with the Outage Coordination Protocol of the ISO Tariff and shall coordinate its Outage requirements with the Participating TO with which it is interconnected.
- **4.1.2 Maintenance Coordination for Other Facilities.** With respect to other facilities which may affect the reliability of the UDC Interconnection, the UDC shall coordinate its Outage requirements with the Participating TO with which it is interconnected.
- **4.2 System Emergencies.** The responsibilities of the Parties in relation to System Emergencies are stated in Section 4.4 of the ISO Tariff, the Dispatch Protocol of the ISO Tariff and in Schedule 5. The ISO shall adopt fair and non-discriminatory procedures among the UDCs to ensure that no UDC bears a disproportionate share of the ISO's Load Shedding program.
- **4.2.1 Underfrequency Load Shedding (UFLS).** The responsibilities of the Parties in relation to UFLS are stated in Sections 2.3.2 and 4.4.3 of the ISO Tariff, the ISO Operating Procedure, the ISO Specifications and in Schedule 6.
- **4.2.2** Other Automatic Load Shedding. The responsibilities of the Parties in relation to automatic Load Shedding as a function of voltage and other parameters are stated in the ISO Operating Procedure, the ISO Specifications and in Schedule 7.
- **4.2.3 Manual Load Shedding.** The responsibilities of the Parties to direct and to accept direction for manual disconnection of Load, under EEP, Load curtailment programs or other emergency plans, are stated in Section 2.3 and Section 4.4.4 of the ISO Tariff, the ISO Operating Procedure, the ISO Specifications and in Schedule 8.
- **4.3** Electrical Emergency Plan (EEP). The responsibilities of the Parties in relation to the EEP are stated in Section 4.5 of the ISO Tariff, the ISO Operating Procedure, the ISO Specifications and in Schedule 9.
- **4.4 Load Restoration.** The responsibilities of the Parties for restoring Load following a system disturbance are stated in Section 4.4.4 of the ISO Tariff, the ISO Operating Procedure, the ISO Specifications and in Schedule 10.
- **4.5 Records, Information and Reports.** The Parties are required to maintain such records, to share information, and to make such reports as are stated in Section 4.1.2, 4.6 and 4.8 of the ISO Tariff, the ISO Operating Procedure, the ISO Specifications, and in Schedule 11. Additionally, the Parties shall jointly perform a review following a major Outage as provided in Section 2.3.2.9.1 of the ISO Tariff.

- **4.6** Interconnection Operation Standards. The ISO and UDC shall maintain stable established operating parameters and control power and reactive flow within standards stated in the ISO Specifications and in Schedule 12.
- **4.7 Critical Protective Systems.** The UDC shall (in accordance with Section 11.2 of this Operating Agreement) notify the ISO as soon as is reasonably practicable of any condition that it becomes aware of that may compromise the ISO Controlled Grid Critical Protective Systems in accordance with Section 4.3 of the ISO Tariff and Schedule 13.
- **4.8 UDC Distribution Systems.** The ISO shall (in accordance with Section 11.2 of this Operating Agreement) notify the UDC as soon as is reasonably practicable of any condition which the ISO becomes aware that may compromise the operation and reliability of the UDC Distribution System.

#### ARTICLE V ACCESS TO FACILITIES

- **5.1 Access Rights.** Pursuant to Section 4.8.4 of the ISO Tariff and Schedule 14 of this Operating Agreement, the ISO and the UDC shall each have the right to install or to have installed equipment or other facilities, including metering equipment, on the electric utility property of the other necessary for the implementation of this Operating Agreement. The ISO's installation of equipment on the property of the UDC shall comply with Local Regulatory Authority regulations, except where compliance with Local Regulatory Authority regulations would cause the ISO to violate the ISO Tariff, and with all relevant safety standards. In such case, the UDC and ISO will work together to resolve the conflict between the Local Regulatory Authority regulations and the ISO Tariff.
- **5.2 Meter Testing.** The UDC shall, at the request of the ISO and upon reasonable notice, provide access to its facilities necessary to permit the ISO or an ISO-approved meter inspector to perform such testing as necessary in accordance with Section 4.8.4 of the ISO Tariff and the procedures set forth in Schedule 14.
- **5.3 Emergency Access Rights.** Section 4.8.4.3 of the ISO Tariff shall govern the ISO's right to access the UDC's equipment or other facilities during a System Emergency or where access is needed in connection with an audit function. In a System Emergency, the UDC shall have a right of access to ISO equipment on UDC property and UDC equipment on ISO property without notice.

#### ARTICLE VI COSTS

- **6.1 UDC Operating and Maintenance Costs.** The UDC shall be responsible for all costs incurred in connection with procuring, installing, operating and maintaining its facilities identified in Schedule 1 for the purpose of meeting its obligations under this Operating Agreement.
- **6.2 ISO Operating and Maintenance Costs.** The ISO shall be responsible for the procurement, installation, operation and maintenance costs of ISO equipment set out in Article V of this Operating Agreement installed on UDC property.

#### ARTICLE VII DISPUTE RESOLUTION

7.1 Alternative Dispute Resolution. The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Operating Agreement. In the event any dispute is not settled, the Parties shall adhere to the ISO ADR Procedures set forth in Section 13 of the ISO Tariff, which is incorporated by reference, except that all reference in Section 13 of the ISO Tariff to Market Participants shall be read as a reference to the UDC and references to the ISO Tariff shall be read as references to this Operating Agreement.

#### ARTICLE VIII REPRESENTATIONS AND WARRANTIES

- **8.1 Representations and Warranties.** Each Party represents and warrants that its execution, delivery and performance of this Operating Agreement has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.
- **8.2 Necessary Approvals.** Each Party represents that all necessary approvals, permits, licenses, easements, right of way or access to install, own and operate its facilities subject to this Operating Agreement have been obtained prior to the effective date of this Operating Agreement.

#### ARTICLE IX LIABILITY

**9.1 Extent of Liability.** The provisions of Section 14 of the ISO Tariff will apply to liability arising under this Operating Agreement, except that all references in Section 14 of the ISO Tariff to Market Participants shall be read as references to the UDC and references to the ISO Tariff shall be read as references to this Operating Agreement.

#### ARTICLE X UNCONTROLLABLE FORCES

**10.1 Uncontrollable Forces Tariff Provisions.** Section 15 of the ISO Tariff shall be incorporated by reference into this Operating Agreement, except that all references in Section 15 of the ISO Tariff to Market Participants shall be read as a reference to the UDC and references to the ISO Tariff shall be read as references to this Operating Agreement.

#### ARTICLE XI MISCELLANEOUS

- **11.1 Assignments.** Either Party may assign its obligations under this Operating Agreement, with the other Party's prior written consent, in accordance with Section 17 of the ISO Tariff, which is incorporated by reference into this Operating Agreement. Such consent shall not be unreasonably withheld.
- **11.2 Notices.** Any notice, demand or request which may be given to or made upon either Party regarding this Operating Agreement shall be made in accordance with Section 20.1 of the ISO Tariff, which is incorporated by reference, except that all reference in Section 20.1 to Market Participants shall be read as a reference to the UDC. A Party must update the information relating to its address as that information changes in accordance with Section 20.1 of the ISO Tariff. Such changes will not constitute an amendment to this Operating Agreement.

Issued by: Charles F. Robinson, Vice President and General Counsel Issued on: April 12, 2005

- **11.3 Waivers.** Any waiver at any time by either Party of its rights with respect to any default under this Operating Agreement, or with respect to any other matter arising in connection with this Operating Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or matter arising in connection with this Operating Agreement. Any delay short of the statutory period of limitations, in asserting or enforcing any right under this Operating Agreement, shall not constitute or be deemed a waiver with respect to any subsequent statutory period of limitations, in asserting or enforcing any right under this Operating Agreement, shall not constitute or be deemed a waiver of such right.
- **11.4 Governing Law and Forum.** This Operating Agreement shall be deemed to be a contract made under and for all purposes shall be governed by and construed in accordance with the laws of the State of California except in its conflict of laws provisions. The Parties irrevocably consent that any legal action or proceeding arising under or in relation to this Operating Agreement to which the ISO ADR Procedures do not apply, shall be brought in any of the following forums, as appropriate: any court of the State of California, any federal court of the United States of America located in the State of California or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.

#### 11.5 Consistency with Federal Laws and Regulations.

- (a) Nothing in this Operating Agreement shall compel any person or federal entity to: (1) violate federal statutes or regulations; or (2) in the case of a federal agency, to exceed its statutory authority, as defined by any applicable federal statutes, regulations, or orders lawfully promulgated thereunder. If any provision of this Operating Agreement is inconsistent with any obligation imposed on any person or federal entity by federal law or regulation to that extent, it shall be inapplicable to that person or federal entity. No person or federal entity shall incur any liability by failing to comply with this Operating Agreement that is inapplicable to it by reason of being inconsistent with any federal statutes, regulations, or orders lawfully promulgated thereunder; provided, however, that such person or federal entity shall use its best efforts to comply with the ISO Tariff to the extent that applicable federal laws, regulations, and orders lawfully promulgated thereunder permit it to do so.
- (b) If any provision of this Operating Agreement requiring any person or federal entity to give an indemnity or impose a sanction on any person is unenforceable against a federal entity, the ISO shall submit to the Secretary of Energy or other appropriate Departmental Secretary a report of any circumstances that would, but for this provision, have rendered a federal entity liable to indemnify any person or incur a sanction and may request the Secretary of Energy or other appropriate Departmental Secretary to take such steps as are necessary to give effect to any provisions of this Operating Agreement that are not enforceable against the federal entity.
- **11.6 Integration.** This Operating Agreement constitutes the full agreement of the Parties with respect to the subject matter hereto and supercedes all prior agreements, whether written or oral, with respect to such subject matter.
- **11.7 Severability.** If any term, covenant, or condition of this Operating Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Operating Agreement and their application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Operating Agreement.

- **11.8 Penalties.** Any penalties to be levied under this Operating Agreement shall be established in accordance with the ISO Tariff after consultation between the UDC and the ISO, and approval by the FERC, and shall be set out in Schedule 15. No penalties or sanctions may be imposed under this Operating Agreement unless a Schedule providing for such penalties or sanctions has first been filed with and made effective by FERC. Nothing in this Operating Agreement, with the exception of the provisions relating to ADR, shall be construed as waiving the rights of the UDC to oppose or protest any penalty proposed by the ISO to the FERC or the specific imposition by the ISO of any FERC-approved penalty on the UDC.
- **11.9** Section Headings: Section headings provided in this Operating Agreement are for ease of reading and are not meant to interpret the text in each Section.
- **11.10 Amendments.** This Operating Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. If the amendment does not require FERC approval, the amendment will be filed with FERC for information.
- **11.11 Counterparts.** This Operating Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Operating Agreement.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Operating Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date hereinabove written.

#### California Independent System Operator Corporation

By:	
Name:	
Title:	
Date:	

#### [Full Name of UDC]

By:	
Name:	
Title:	

Date:

#### FACILITIES UNDER ISO CONTROL

The UDC will supply a list of UDC facilities that are placed under the operational control of the ISO in Schedule 1.

There are no UDC facilities to be listed here at present.

#### **OPERATIONAL CONTACT**

ISO:

Fax:

Transmission Dispatcher (Folsom): Transmission Dispatcher (Alhambra): Shift Supervisor: Manager of Dispatch and Security Coordination: City/State/Zip Code

Other ISO Dispatch Operations Phones:

Generation Dispatcher (Folsom)

Generation Dispatcher (Alhambra)

Security Coordinator

<u>UDC:</u> Name of Primary Representative:		
Name of Alternative Representative:		
Title:		
	Operations Shift Supervisor	
Address:		
City/State/Zip Code		
Email address:		
Phone:		

The information to be contained in this Schedule may be subject to additional filing due to subsequent revisions as these may be required from time to time.

#### DELEGATED OPERATIONAL RESPONSIBILITIES

Currently the ISO has not delegated any operational responsibilities to the UDC in accordance with Section 4.1.2 of the ISO Tariff. If such a delegation occurs, they will be identified in this Schedule 3.

#### MAINTENANCE COORDINATION

By October 1st of each year, the UDC will exchange with the ISO a provisional planned outage program for all lines and equipment in Schedule 1. That document will be updated quarterly or as changes occur to the proposed schedule.

The ISO will approve all outages on equipment and lines transferred to ISO operational control.

Applications for scheduled work will be submitted to the ISO by \_\_\_\_\_'s Grid Operations group via means to be agreed to by both Parties. The UDC documents will record the details for all work and become the data base for reporting and recording outage information.

#### SYSTEM EMERGENCIES

The ISO will notify the UDC's operational contact (Operations Shift Supervisor - Grid Control), as identified in <u>Schedule 2</u>, of the emergency, including information regarding the cause, nature, extent, and potential duration of the emergency. The Operations Shift Supervisor will add any relevant data and will notify Distribution Operations. Distribution Operations will make the appropriate notifications within the UDC organization. The Operations Shift Supervisor and Distribution Control Shift Supervisor will then take such actions as are appropriate for the emergency.

The UDC will make requests for information from the ISO regarding emergencies through the Operations Shift Supervisor, or the UDC Communication Coordinator may coordinate public information with the ISO Communication Coordinator.

The UDC is required to estimate service restoration by geographic areas, and will use its call center and the media to communicate with customers during service interruptions. The UDC is also required to communicate the same information to appropriate state and local governmental entities. For transmission system caused outages the Operations Shift Supervisor will notify Distribution Operations Control Center of any information related to the outage such as cause, nature, extent, potential duration and customers affected.

Distribution Control and Grid Control Center logs, Electric Switching Orders and Energy Management System temporal data base will be used in preparation of outage reviews. These documents are defined as the chronological record of the operation of the activities which occur with the portion of the electrical system assigned to that control center. The log shall contain all pertinent information, including orders received and transmitted, relay operations, messages, clearances, accidents, trouble reports, daily switching program, etc.

The UDC will retain records in accordance with its Corporate Standard Practice for six years.

#### UNDERFREQUENCY LOAD SHEDDING

The objective of the Underfrequency Load Shedding (UFLS) program is to provide security and protection to the interconnected bulk power network by arresting frequency decay during periods of insufficient resources

This plan establishes Underfrequency Load Shedding objectives consistent with the load shedding policies of the Western Systems Coordinating Council, the North American Electric Reliability Council and the UDC. The UDC's load shedding program will be in accordance with the WSCC Off-nominal Frequency Report requirements.

#### OTHER AUTOMATIC LOAD SHEDDING

In addition to underfrequency relay load reduction, any undervoltage relay protection that is utilized in the UDC will be identified in the Attachment to this Schedule 7.

#### MANUAL LOAD SHEDDING

[Note: Schedule 8 will detail the criteria governing the implementation of manual Load Shedding and/or interruptible Loads, and will describe the UDC's means of effecting Load Shedding and the estimated associated MW values of various UDC Loads to be shed. For Load curtailment programs Schedule 8 will also contain the UDC's capabilities until October 1 and thereafter annually.]

#### SCHEDULE 8A

#### ROTATING LOAD CURTAILMENT PROCEDURES

#### SCHEDULE 8B

#### **INTERRUPTIBLE LOAD**

#### ELECTRICAL EMERGENCY PLAN

The ISO Specifications will outline the basic criteria for the development, coordination, and implementation of the UDC EEP and the requirements for coordination with the ISO EEP. Schedule 9 will include the UDC EEP as coordinated with the ISO EEP.

#### LOAD RESTORATION

The UDC will follow the procedures set forth below in this Schedule 10 in promoting orderly, coordinated restoration of electric systems after a major system disturbance has occurred which resulted in load shedding by frequency relays in California.

1. Immediately after load shedding by frequency relay has occurred in the UDC, the UDC will remain in contact with their respective Participating Transmission Owner (PTO) Area Control Center (ACC) until normal frequency has been restored throughout the ISO Control Area or the ISO Shift Supervisor has concluded that such full-time communications can be terminated. Emergency communications over the California ACC Hot-line will be under the direction of the ISO Shift Supervisor and the senior dispatcher present at the affected PTO ACC(s).

2. Manual load restoration will not normally be initiated until the California ACC Hot Line is attended. No load is to be manually restored unless directed by the ISO after the frequency has recovered and there is indication that the frequency can be maintained. The UDC will await direction from their respective PTO ACC who will be in contact with the ISO Shift Supervisor. The ISO Shift Supervisor will determine whether adequate generation resources are available on line to support the load to be restored.

3. Any UDC automatic load restoration will be consistent with the WSCC Coordinated Off-Nominal Frequency Load Shedding and Restoration Plan.

4. If the ISO cannot meet the WSCC and NERC Control Area Disturbance Control Standard or the Control Performance Standard post disturbance, no manual load restoration will be permitted. If the frequency is such that automatic load restoration occurs under these conditions, the UDC(s) which has restored load automatically will manually shed an equivalent amount of load to offset the load which was automatically restored.

5. Restoration of ties and off-site power supply to nuclear generating facilities should be given top priority. Manual load restoration will be deferred during periods of tie restoration. The UDC should be equipped and prepared to drop load manually when necessary to allow frequency recovery sufficient to re-establish ISO intra-area ties and ties between the ISO Control Area and outside systems. Where manual load shedding is required, the ISO shall make reasonable efforts to allocate the load shedding requirement equitably among the UDCs where load shedding will be beneficial.

6. The UDC will use its existing plans and priorities to restore load within the parameters given by the ISO, giving the appropriate priority to essential services such as military, public safety agencies, water treatment plants, sewage treatment plants, etc.

#### **RECORDS, INFORMATION, REPORTS**

The ISO and UDC will jointly develop any necessary forms and procedures for collection, study and transmittal of system data, information, reports, and forecasts.

#### INTERCONNECTION OPERATION STANDARDS

The ISO and UDC shall jointly maintain stable operating parameters and control power and reactive flow in accordance with the ISO Tariff and the following Interconnection Operation Standards.

#### **UDC Responsibilities**

- 1.0 The UDC shall operate its facilities at each point of interconnection with the ISO Controlled Grid in such manner as to avoid any material or adverse impact on the ISO Controlled Grid. In accordance with this performance goal, the UDC shall:
- 1.1 Operate its facilities at each point of interconnection with the ISO Controlled Grid within established operating parameters including normal ratings, emergency ratings, voltage limits, and balance of load between electrical phases.
- 1.2 Maintain primary and backup protective systems such that faults on UDC facilities will be cleared with minimal impact on the ISO Controlled Grid.
- 1.3 Maintain load power factor at each point of interconnection with the ISO Controlled Grid as close as possible to unity power factor and pursuant to Section 2.5.3.4 of the ISO Tariff.

#### ISO Responsibilities

- 2.0 The ISO shall operate the ISO Controlled Grid at each point of interconnection with the UDC in such manner as to avoid any material or adverse impact on the UDC facilities. In accordance with this performance goal, the ISO shall:
- 2.1 Participate with the UDC and TO in the development of joint power quality performance standards and jointly maintain compliance with such standards.
- 2.2 Observe UDC grid voltage limits specified in Attachment 7 including requirements for reduced voltage on ISO Controlled Grid facilities which apply during heavy fog (or other unusual operating conditions) as needed to minimize the risk of insulator flashover.
- 2.3 Approve transmission owner maintenance requests in a timely manner, and shall not unreasonably withhold approval of TO requests for authorization to perform energized insulator washing work or to take planned Outages needed to replace or insul-grease insulators.

- 2.4 Support UDC investigation of power quality incidents, and provide related data to the UDC in a timely manner.
- 2.5 Support installation of apparatus on the ISO Controlled Grid to improve power quality, and take all reasonable measures to investigate and mitigate power quality concerns caused by actions or events in neighboring systems or control areas.
- 2.6 Maintain load power factor at each UDC Interconnection as close as possible to unity power factor and pursuant to Section 2.5.3.4 of the ISO Tariff.

#### **CRITICAL PROTECTION SYSTEMS**

Distribution protective relay schemes affecting the ISO Controlled Grid are those associated with transformers that would trip transmission breakers and/or busses at UDC Interconnection point when activated. These would include any of the following:

- 1. High Side Overcurrent Relays
- 2. Differential Overcurrent Relays
- 3. Sudden Pressure Relays
- 4. Low Oil Relays
- 5. Neutral Ground Overcurrent Relays
- 6. On fuse protected transformers, it would be the high-side fuses.

#### **RIGHTS OF ACCESS TO FACILITIES**

14.1 Equipment Installation. In order to give effect to this Operating Agreement, a Party that requires to use particular equipment (the equipment owner) may require installation of such equipment on property owned by the other Party (the property owner), provided that the equipment is necessary to meet the equipment owner's service obligations and that the equipment shall not have a negative impact on the reliability of the service provided, nor prevent the property owner from performing its own obligations or exercising its rights under this Operating Agreement.

14.1.1 Free Access. The property owner shall grant to the equipment owner free of charge reasonable installation rights and rights of access to accommodate equipment inspection, maintenance, repair, upgrading, or removal for the purposes of this Operating Agreement, subject to the property owner's reasonable safety, operational, and future expansion needs.

14.1.2 Notice. The equipment owner shall provide reasonable notice to the property owner when requesting access for site assessment, equipment installation, or other relevant purposes. Such access shall not be provided unless the parties mutually agree to the date, time, and purpose of each access. Agreement on the terms of the access shall not be unreasonably withheld or delayed.

14.1.3 Removal of Installed Equipment. Following reasonable notice, the equipment owner shall be required, at its own expense, to remove or relocate equipment, at the request of the property owner, provided that the equipment owner shall not be required to do so if it would have a negative impact on the reliability of the service provided, or be prevented from performing its own obligations or exercising its rights under this Operating Agreement.

14.1.4 Costs. The equipment owner shall repair at its own expense any property damage it causes in exercising its rights and shall reimburse the property owner for any other reasonable costs that it may be required to incur to accommodate the equipment owner's exercise of its rights under this Section 14.1.

14.2 Rights to Assets. The Parties shall not interfere with each other's assets, without prior written agreement.

14.3 Inspection of Facilities. In order to meet their respective obligations under this Operating Agreement, each Party may view or inspect facilities owned by the other Party. Provided that reasonable notice is given, a Party shall not unreasonably deny access to relevant facilities for viewing or inspection by the requesting Party.

14.4 Access During Emergencies. Either Party shall have rights of access, without prior notice, to the other Party's equipment as necessary during times of a System Emergency.

#### PENALTIES AND SANCTIONS

[Intentionally left blank, initially, in accordance with Section 11.7]

The information to be contained in this Schedule will be filed when complete following current revisions and development and may thereafter be subject to additional filing due to subsequent revisions as these may be required from time to time.

### **ISO TARIFF APPENDIX Q**

### Participating Load Agreement

### CALIFORNIA INDEPENDENT SYSTEM OPERATOR

## AND

## [PARTICIPATING LOAD]

## **PARTICIPATING LOAD AGREEMENT**

Issued by: Charles F. Robinson, Vice President and General Counsel Issued on: April 12, 2005

Original Sheet No. 1049

#### PARTICIPATING LOAD AGREEMENT (PLA)

THIS AGREEMENT is dated this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_ and is entered into, by and between:

(1) **[Full legal name],** having its registered and principal place of business located at [legal address] (the "Participating Load");

and

(2) **California Independent System Operator Corporation,** a California nonprofit public benefit corporation having a principal executive office located at such place in the State of California as the ISO Governing Board may from time to time designate, initially 151 Blue Ravine Road, Folsom, California 95630 (the "ISO").

The Participating Load and the ISO are hereinafter referred to as the "Parties".

#### Whereas:

- **A.** The ISO Tariff provides that the ISO shall not schedule Ancillary Services from a Load interconnected to the ISO Controlled Grid, or to the Distribution System of a Participating TO or of a UDC otherwise than through a Scheduling Coordinator.
- **B.** The ISO Tariff further provides that Curtailable Demand or Dispatchable Load services shall be provided by Participating Loads.
- **C.** The Participating Load desires to provide Curtailable Demand or Dispatchable Load services, intends to submit Adjustment Bids, Supplemental Energy bids or Ancillary Services bids, or self-provided schedules to the ISO through a Scheduling Coordinator and, therefore, represents to the ISO that it will comply with the applicable provisions of the ISO Tariff.
- **D.** The Parties are entering into this Agreement in order to establish the terms and conditions on which the ISO and the Participating Load will discharge their respective duties and responsibilities under the ISO Tariff.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

#### ARTICLE I DEFINITIONS AND INTERPRETATION

- **1.1 Master Definitions Supplement.** All terms and expressions used in this Agreement shall have the same meaning as those contained in the Master Definitions Supplement to the ISO Tariff.
- **1.2 Rules of Interpretation.** The following rules of interpretation and conventions shall apply to this Agreement:
- (a) if there is any inconsistency between this Agreement and the ISO Tariff, the ISO Tariff will prevail to the extent of the inconsistency;
- (b) the singular shall include the plural and vice versa;
- (c) the masculine shall include the feminine and neutral and vice versa;
- (d) "includes" or "including" shall mean "including without limitation";
- (e) references to a Section, Article or Schedule shall mean a Section, Article or a Schedule of this Agreement, as the case may be, unless the context otherwise requires;
- (f) a reference to a given agreement or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made;
- (g) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
- (h) unless the context otherwise requires, any reference to a "person" includes any individual, partnership, firm, company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having separate legal personality;
- (i) unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;
- (j) any reference to a day, week, month or year is to a calendar day, week, month or year; and
- (k) the captions and headings in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement.

#### ARTICLE II ACKNOWLEDGEMENTS OF PARTICIPATING LOAD AND ISO

- 2.1 ISO Responsibility. The Parties acknowledge that the ISO is responsible for the efficient use and reliable operation of the ISO Controlled Grid consistent with achievement of planning and operating reserve criteria no less stringent than those established by the Western Systems Coordinating Council and the North American Electric Reliability Council and further acknowledge that the ISO may not be able to satisfy fully these responsibilities if the Participating Load fails to fully comply with all of its obligations under this Agreement and the ISO Tariff.
- 2.2 Scope of Application to Parties. The Participating Load and ISO acknowledge that all Loads which desire to submit Adjustment Bids, Supplemental Energy bids, or Ancillary Services bids or self-provided schedules to the ISO through a Scheduling Coordinator must be included in Schedule 1 to this Agreement. The Participating Load warrants that it owns, operates, or has sufficient contractual entitlement to provide Curtailable Demand and Dispatchable Load services from such Loads in accordance with the ISO Tariff.

#### ARTICLE III TERM AND TERMINATION

**3.1** Effective Date. This Agreement shall be effective as of the later of the date it is executed by the Parties or the date accepted for filing and made effective by FERC, and shall remain in full force and effect until terminated pursuant to Section 3.2 of this Agreement.

#### 3.2 Termination

- **3.2.1** Termination by ISO. Subject to Section 5.2, the ISO may terminate this Agreement by giving written notice of termination in the event that the Participating Load commits any material default under this Agreement and/or the ISO Tariff which, if capable of being remedied, is not remedied within thirty (30) days after the ISO has given, to the Participating Load, written notice of the default, unless excused by reason of Uncontrollable Forces in accordance with Article X of this Agreement. With respect to any notice of termination given pursuant to this Section, the ISO must file a timely notice of termination with FERC. The filing of the notice of termination by the ISO will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within thirty (30) days of receipt of such request. This Agreement shall terminate upon acceptance by FERC of such a notice of termination.
- **3.2.2** Termination by Participating Load. In the event that the Participating Load no longer wishes to submit Adjustment Bids, Supplemental Energy bids, or Ancillary Service bids or self-provided schedules over the ISO Controlled Grid, it may terminate this Agreement, on giving the ISO ninety (90) days written notice, provided, however, that in accordance with Section 4.4, the Participating Load may modify Schedule 1 to eliminate Load which it no longer provides for and such modification shall be effective upon receipt by the ISO. With respect to any notice of termination given pursuant to this Section, the ISO must file a timely notice of termination with FERC. The filing of the notice of termination by the ISO will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within thirty (30) days of receipt of such request. This Agreement shall terminate upon acceptance by FERC of such a notice of termination.

#### ARTICLE IV GENERAL TERMS AND CONDITIONS

#### 4.1 Technical Characteristics.

- **4.1.1 Curtailable Demand**. As required by Section 2.5.6.1 of the ISO Tariff, the Participating Load shall provide the ISO with all technical and operational information requested in Schedule 1 for each Curtailable Demand that it owns, operates, or has a contractual entitlement to. For those Loads designated by the Participating Load as providing Curtailable Demand, Schedule 1 requires the Participating Load to indicate in Schedule 1 whether the Load can be scheduled or bid as Non-Spinning Reserve or Replacement Reserve. Pursuant to Section 2.5.25 of the ISO Tariff, the ISO may verify, inspect and test the capacity and operating characteristics provided in Schedule 1 for Curtailable Demands.
- **4.1.2 Dispatchable Load**. The Participating Load shall provide the ISO that information required in Schedule 1 which is relevant to the Dispatchable Load that it owns, operates, or has a contractual entitlement to for the provision of Adjustment Bids.

#### 4.2 Metering and Communication.

- **4.2.1 Curtailable Demand**. Pursuant to Sections 2.5.6.2 and 2.5.6.3 of the ISO Tariff, Curtailable Demand that is scheduled or bid as Non-Spinning Reserve or Replacement Reserve is required to comply with the ISO's communication and metering requirements.
- **4.2.2 Dispatchable Load**. The Participating Load shall schedule Dispatchable Load pursuant to Section 2.2.11.1 of the ISO Tariff. Dispatchable Load shall comply with the ISO's communication and metering requirements.
- **4.3 UDC Interruptible Load Programs.** Due to the ISO's reliance on interruptible Loads to relieve System Emergencies and its contractual relationship with each UDC, the ISO will not accept, and the Participating Load shall not submit Adjustment Bids, Supplemental Energy bids, or Ancillary Services bids or self-provided Ancillary Service Schedules from interruptible Loads which are subject to curtailment criteria established under existing retail tariffs, except under such conditions as may be specified in the ISO Tariff.
- 4.4 Notification of Changes. Sixty (60) days prior to changing any technical information in Schedule 1, the Participating Load shall notify the ISO of the proposed change(s). Pursuant to Section 2.5.25 of the ISO Tariff, the ISO may verify, inspect and test the capacity and operating characteristics provided in the revised Schedule 1. The ISO shall post on the ISO Home Page a schedule showing, for at least one year in advance: (i) the proposed dates on which the ISO's Master File will be updated; (ii) the dates on which the information contained in the revised Master File will become effective; and (iii) the deadlines by which changed technical information must be submitted to the ISO in order to be tested and included in the next scheduled update of the ISO's Master File. Unless the Load fails to test at the values in the proposed change(s), the Participating Load's proposed change(s) will become effective upon the effective date for the next scheduled update of the Master File, provided that the Participating Load submits the changed information by the applicable deadline and is tested by the deadline. Subject to such notification this Agreement shall not apply to any Loads identified in Schedule 1 which the Participating Load no longer owns or no longer has a contractual entitlement to.
- **4.5** Agreement Subject to ISO Tariff. The Parties will comply with all applicable provisions of the ISO Tariff, including Sections 2.3.2, 2.5 and 10. This Agreement shall be subject to the ISO Tariff, which shall be deemed to be incorporated herein.

#### 4.6 Obligations Relating to Ancillary Services

- **4.6.1 Submission of Bids and Self-provided Schedules**. When the Scheduling Coordinator on behalf of the Participating Load submits a bid or self-provided schedule for Ancillary Services, the Participating Load will, by the operation of this Section 4.6.1, warrant to the ISO that it has the capability to provide that service in accordance with the ISO Tariff and that it will comply with ISO Dispatch instructions for the provision of the service in accordance with the ISO Tariff.
- **4.6.2 Certification**. The Participating Load shall not use a Scheduling Coordinator to submit a bid for the provision of an Ancillary Service or submit a schedule for the self provision of an Ancillary Service unless the Scheduling Coordinator serving that Participating Load is in possession of a current Ancillary Service certificate pursuant to Sections 2.5.6 and 2.5.24 of the ISO Tariff.
- **4.7 Obligations relating to Major Incidents.** The Participating Load shall promptly provide such information as the ISO may reasonably require in relation to the ISO's investigations of operating situations or events, or for the ISO's reporting to the authorities such as the FERC, California Public Utilities Commission, Western Systems Coordinating Council, or North American Electric Reliability Council.

#### ARTICLE V PENALTIES AND SANCTIONS

- **5.1 Penalties.** If the Participating Load fails to comply with any provisions of this Agreement, the ISO shall be entitled to impose penalties and sanctions on the Participating Load, including the penalties set forth in Section 2.5.26 of the ISO Tariff. No penalties or sanctions may be imposed under this Agreement unless a Schedule providing for such penalties or sanctions has first been filed with and made effective by FERC. Nothing in this Agreement, with the exception of the provisions relating to ADR, shall be construed as waiving the rights of the Participating Load to oppose or protest any penalty proposed by the ISO to the FERC or the specific imposition by the ISO of any FERC-approved penalty on the Participating Load.
- **5.2 Corrective Measures.** If the Participating Load fails to meet or maintain the requirements set forth in this Agreement and/or the ISO Tariff, the ISO shall be permitted to take any of the measures, contained or referenced in the ISO Tariff, which the ISO deems to be necessary to correct the situation.

#### ARTICLE VI COSTS

**6.1 Operating and Maintenance Costs.** The Participating Load shall be responsible for all its costs incurred in meeting its obligations under this Agreement for the Load identified in Schedule 1.

#### ARTICLE VII DISPUTE RESOLUTION

7.1 **Dispute Resolution.** The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. In the event any dispute is not settled, the Parties shall adhere to the ISO ADR Procedures set forth in Section 13 of the ISO Tariff, which is incorporated by reference, except that any reference in Section 13 of the ISO Tariff to Market Participants shall

be read as a reference to the Participating Load and references to the ISO Tariff shall be read as references to this Agreement.

#### ARTICLE VIII REPRESENTATIONS AND WARRANTIES

- **8.1 Representation and Warranties.** Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.
- **8.2** Necessary Approvals. The Participating Load represents that all necessary leases, approvals, permits, licenses, easements, rights of way or access to install, own and/or operate its Load have been or will be obtained by the Participating Load prior to the effective date of this Agreement.

#### ARTICLE IX LIABILITY

**9.1 Liability.** The provisions of Section 14 of the ISO Tariff will apply to liability arising under this Agreement, except that all references in Section 14 of the ISO Tariff to Market Participants shall be read as references to the Participating Load and references to the ISO Tariff shall be read as references to this Agreement.

#### ARTICLE X UNCONTROLLABLE FORCES

**10.1 Uncontrollable Forces Tariff Provisions.** Section 15 of the ISO Tariff shall be incorporated by reference into this Agreement except that all references in Section 15 of the ISO Tariff to Market Participants shall be read as a reference to the Participating Load and references to the ISO Tariff shall be read as references to this Agreement.

#### ARTICLE XI MISCELLANEOUS

- **11.1 Assignments.** Either Party may assign or transfer any or all of its rights and/or obligations under this Agreement with the other Party's prior written consent in accordance with Section 17 of the ISO Tariff. Such consent shall not be unreasonably withheld. Any such transfer or assignment shall be conditioned upon the successor in interest accepting the rights and/or obligations under this Agreement as if said successor in interest was an original Party to this Agreement.
- **11.2 Notices.** Any notice, demand, or request which may be given to or made upon either Party regarding this Agreement shall be made in accordance with Section 20.1 of the ISO Tariff. A Party must update the information in Schedule 3 of this Agreement as information changes. Such changes shall not constitute an amendment to this Agreement.

- **11.3 Waivers.** Any waivers at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- **11.4 Governing Law and Forum.** This Agreement shall be deemed to be a contract made under, and for all purposes shall be governed by and construed in accordance with, the laws of the State of California, except its conflict of law provisions. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Agreement to which the ISO ADR Procedures do not apply, shall be brought in any of the following forums, as appropriate: any court of the State of California, any federal court of the United States of America located in the State of California, or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.
- **11.5 Consistency with Federal Laws and Regulations.** This Agreement shall incorporate by reference Section 20.8 of the ISO Tariff as if the references to the ISO Tariff were referring to this Agreement.
- **11.6 Merger.** This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereto and supersedes all prior agreements, whether written or oral, with respect to such subject matter.
- **11.7 Severability.** If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.
- **11.8 Section Headings:** Section headings provided in this Agreement are for ease of reading and are not meant to interpret the text in each Section.
- **11.9 Amendments.** This Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. If the amendment does not require FERC approval, the amendment will be filed with FERC for information. Nothing contained herein shall be construed as affecting in any way the right of the ISO to unilaterally make application to the Federal Energy Regulatory Commission for a change in the rates, terms and conditions under section 205 of the Federal Power Act and pursuant to the Commission's Rules and Regulations promulgated thereunder.
- **11.10 Counterparts.** This Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date herein above written.

#### California Independent System Operator Corporation

By:	
Name:	
Title:	
Date:	

#### **Participating Load**

By:	
Name:	
Title:	
Date:	

Original Sheet No. 1057

#### SCHEDULE 1

Technical Characteristics of Individual or Aggregated Loads Participating under Participating Load Agreement

Name of ALMDS Facility or Individual Load	ISO Resource ID	Present Scheduling Point (i.e. Take Out Point, Load Group, or Demand Zone)	Capacity Available <sup>1</sup> (MW)	Minimum Operating Level <sup>1</sup> (MW)	Maximum Operating Level <sup>1,2</sup> (MW)	Decremental Ramp Rate <sup>1,2</sup> (MW/min)	Ancillary Service Provider (Yes or No)	Participant in UDC Interruptible Program (Yes or No)	Limitations <sup>3</sup> (Yes or No)

<sup>&</sup>lt;sup>1</sup> Current effective values for purposes of scheduling Energy and bidding to provide Energy and/or Ancillary Services in ISO markets may differ from those set forth in this Schedule 1, depending on the results of ISO performance testing pursuant to Sections 2.5.24 and 2.5.25 of the ISO Tariff and Section 9 of the ISO Ancillary Services Requirements Protocol.

<sup>&</sup>lt;sup>2</sup> These values are subject to certification by the ISO in accordance with Section 4.6.2 of the Participating Load Agreement. <sup>3</sup> If "Yes," limitations should be specified in the Participating Load's implementation plan.

#### ISO IMPOSED PENALTIES AND SANCTIONS [Section 5.1]

[TO BE INSERTED UPON FERC APPROVAL]

#### NOTICES (Section 10.2)

#### **Participating Load**

Name of Primary	
-----------------	--

Representative:

Title:

Address:

City/State/Zip Code

Email Address:

Phone:

Fax No:

Name	of	Alternative

Representative:

Title:

Address:

City/State/Zip Code

Email Address:

Phone:

Fax No:

ISO

Name of Primary

Representative:

Title:

Address:

City/State/Zip Code

Email Address:

Phone:

Fax No:

Name of Alternative

Representative:

Title:

Address:

City/State/Zip Code

Email Address:

Phone:

Fax No:

### **ISO TARIFF APPENDIX R**

### **Dynamic Scheduling Agreement for Scheduling Coordinators**

### CALIFORNIA INDEPENDENT SYSTEM OPERATOR

### AND

## [SCHEDULING COORDINATOR]

# DYNAMIC SCHEDULING AGREEMENT FOR SCHEDULING COORDINATORS

Issued by: Charles F. Robinson, Vice President and General Counsel Issued on: April 12, 2005

#### DYNAMIC SCHEDULING AGREEMENT FOR SCHEDULING COORDINATORS

THIS AGREEMENT is dated this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_ and is entered into, by and between:

(1) **[Full Legal Name]** having its registered and principal place of business located at **[Address]** (the "Scheduling Coordinator");

and

(2) **California Independent System Operator Corporation,** a California nonprofit public benefit corporation having a principal executive office located at such place in the State of California as the ISO Governing Board may from time to time designate, initially 151 Blue Ravine Road, Folsom, California 95630 (the "ISO").

The Scheduling Coordinator and the ISO are hereinafter referred to as the "Parties".

#### Whereas:

- A. The ISO Tariff provides that a Scheduling Coordinator may submit dynamic schedules to the ISO from System Resources.
- **B.** The Scheduling Coordinator is currently Scheduling Coordinator for a System Resource associated with a power plant(s) interconnected in a Control Area other than the ISO Control Area (the "Host Control Area").
- **C.** The Scheduling Coordinator wishes to implement and operate a dynamic functionality that allows scheduling of Energy, Supplemental Energy, and Energy associated with Spinning Reserve and Non-Spinning Reserve dynamically from a System Resource into the ISO Control Area from the Host Control Area and, therefore, wishes to undertake to the ISO that it will comply with the applicable provisions of the ISO Tariff.
- **D.** The Parties are entering into this Agreement in order to establish the terms and conditions on which the ISO and the Scheduling Coordinator will discharge their respective duties and responsibilities under the ISO Tariff.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

#### ARTICLE I DEFINITIONS AND INTERPRETATION

- **1.1 Master Definitions Supplement.** All terms and expressions used in this Agreement shall have the same meaning as those contained in the Master Definitions Supplement to the ISO Tariff.
- **1.2 Rules of Interpretation.** The following rules of interpretation and conventions shall apply to this Agreement:
  - (a) if there is any inconsistency between this Agreement and the ISO Tariff, the ISO Tariff will prevail to the extent of the inconsistency;
  - (b) the singular shall include the plural and vice versa;

Issued by: Charles F. Robinson, Vice President and General Counsel Issued on: April 12, 2005

- (c) the masculine shall include the feminine and neutral and vice versa;
- (d) "includes" or "including" shall mean "including without limitation";
- (e) references to a Section, Article or Schedule shall mean a Section, Article or a Schedule of this Agreement, as the case may be, unless the context otherwise requires;
- (f) a reference to a given agreement or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made;
- (g) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
- unless the context otherwise requires, any reference to a "person" includes any individual, partnership, firm, company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having separate legal personality;
- (i) unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;
- (j) any reference to a day, week, month or year is to a calendar day, week, month or year; and
- (n) the captions and headings in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement.

#### ARTICLE II ACKNOWLEDGEMENTS OF SCHEDULING COORDINATOR AND ISO

2.1 ISO Responsibility. The Parties acknowledge that the ISO is responsible for the efficient use and reliable operation of the ISO Controlled Grid consistent with achievement of planning and operating reserve criteria no less stringent than those established by the Western Electricity Coordinating Council and the North American Electric Reliability Council and further acknowledges that the ISO may not be able to satisfy fully these responsibilities if the Scheduling Coordinator fails to fully comply with all of its obligations under this Agreement and the ISO Tariff.

#### ARTICLE III TERM AND TERMINATION

**3.1** Effective Date. This Agreement shall be effective as of the date set forth above, unless accepted for filing and made effective by FERC on some other date, if FERC filing is required, and shall remain in full force and effect until terminated pursuant to Section 3.2 of this Agreement.

#### 3.2 Termination

- 3.2.1 **Termination by ISO.** Subject to Section 3.2.2, the ISO may terminate this Agreement by giving written notice of termination in the event that the ISO's agreement with the Host Control Area has terminated or the Scheduling Coordinator commits any material default under this Agreement and/or the ISO Tariff which, if capable of being remedied, is not remedied within thirty (30) days after the ISO has given, to the Scheduling Coordinator, written notice of the default, unless excused by reason of Uncontrollable Forces in accordance with Article X of this Agreement. With respect to any notice of termination given pursuant to this Section, the ISO must file a timely notice of termination with FERC, if this Agreement has been filed with FERC, or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the ISO will be considered timely if: (1) the filing of the notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within sixty (60) days after issuance of the notice of default. This Agreement shall terminate upon acceptance by FERC of such a notice of termination, if filed with FERC, or thirty (30) days after the date of the ISO's notice of default, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders.
- **3.2.2** Limitation on ISO Termination. Notwithstanding the provisions of Section 3.2.1, in the event of noncompliance with the provisions of the ISO Dynamic Scheduling Protocol, the ISO shall have the right to terminate this Agreement after three (3) instances of noncompliance. In the event that the ISO determines that the Scheduling Coordinator has failed to comply with the ISO Dynamic Scheduling Protocol, the ISO will provide written notice to that effect to the Scheduling Coordinator, and the Scheduling Coordinator shall have seven (7) days to correct the non-compliant condition(s). If the ISO determines that Scheduling Coordinator has not corrected the non-compliant condition(s) within seven (7) days after the third notice of noncompliance, the ISO may, by further written notice to the Scheduling Coordinator, terminate this Agreement and the existing functionality and arrangements described herein pursuant to Section 3.2.1, but without providing for the additional thirty (30)-day cure period otherwise provided in Section 3.2.1.
- **3.2.3** Termination by Scheduling Coordinator. In the event that the Scheduling Coordinator no longer wishes to submit dynamic schedules to the ISO, it may terminate this Agreement, on giving the ISO ninety (90) days written notice. With respect to any notice of termination given pursuant to this Section, the ISO must file a timely notice of termination with FERC, if this Agreement has been filed with FERC, or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the ISO will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within thirty (30) days of receipt of such request. This Agreement shall terminate upon acceptance by FERC of such a notice of termination, if such notice is required to be filed with FERC, or upon ninety (90) days after the ISO's receipt of the Scheduling Coordinator's notice of default, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders.

#### ARTICLE IV GENERAL TERMS AND CONDITIONS

#### 4.1 Dynamic Scheduling Requirements and Obligations

**4.1.1** The dynamic functionality established under this Agreement shall be implemented and operated in accordance with ISO Tariff Section 2.2.7.6, other applicable provisions of the ISO Tariff, all applicable NERC and WECC policies, requirements, and provisions, and the ISO Dynamic Scheduling Protocol.

Issued by: Charles F. Robinson, Vice President and General Counsel Issued on: May 9, 2005

- **4.1.2** The maximum allowable dynamic power transfer (in MW) from the Scheduling Coordinator's System Resource(s) shall be as set forth in Schedule 1 and will be referred to as "Pmax" in all ISO scheduling and control systems.
- **4.1.3** The Scheduling Coordinator warrants that the power plant(s) listed in Schedule 1 is interconnected within the Host Control Area specified in Schedule 1, placing both the plant(s) as well as the associated System Resource under the operational jurisdiction of the Host Control Area.
- **4.1.4** The ISO intertie associated with the System Resource(s) is set forth in Schedule 1. The Scheduling Coordinator may request, and the ISO may agree, at its sole discretion, to change the foregoing ISO intertie association, subject to any limitations set forth in the ISO Dynamic Scheduling Protocol.
- **4.1.5** Unless explicitly agreed otherwise, dynamic functionalities implemented between the ISO and the Scheduling Coordinator may provide only for imports from the System Resource(s) listed in Schedule 1 to the ISO.
- **4.1.6** Identification of System Resources. The Scheduling Coordinator has identified the System Resources that it represents in Schedule 1.
- **4.1.7** Notification of Changes. Sixty (60) days prior to changing any technical information in Schedule 1, the Scheduling Coordinator shall notify the ISO of the proposed changes. Pursuant to Section 2.5.25 of the ISO Tariff, the ISO may verify, inspect and test the capacity and operating characteristics provided in the revised Schedule 1. Unless the Scheduling Coordinator fails to test at the values in the proposed change(s), the change will become effective upon the effective date for the next scheduled update of the ISO's Master File, provided the Scheduling Coordinator submits the changed information by the applicable deadline and is tested by the deadline.
- **4.2** Agreement Subject to ISO Tariff. The Parties will comply with all applicable provisions of the ISO Tariff, including Sections 2.2.7.6 and 2.5.6.2. This Agreement shall be subject to the ISO Tariff, which shall be deemed to be incorporated herein.
- 4.3 Obligations Relating to Ancillary Services
- **4.3.1 Submission of Bids.** When the Scheduling Coordinator submits a bid for Ancillary Services, the Scheduling Coordinator will, by the operation of this Section 4.3.1, warrant to the ISO that it has the capability to provide that service in accordance with the ISO Tariff and that it will comply with ISO Dispatch Instructions for the provision of the service in accordance with the ISO Tariff.

#### ARTICLE V PENALTIES AND SANCTIONS

**5.1 Uninstructed Deviations.** Except for operating emergency situations, real time Energy transfers may not vary from the Final Hour Ahead Schedule as adjusted by any Dispatch Instructions by more than the greater of five (5) MW or three percent (3%) of the net dependable capacity (Pmax) of the System Resource, integrated across a ten-minute interval. If such defined performance band is exceeded by any amount in more than five percent (5%) of the ten-minute intervals on three successive days, then such deviations shall constitute one event of non-compliance with the ISO Dynamic Scheduling Protocol pursuant to Section 3.2.2. Deviations from dynamic Energy schedules will also be subject to Uninstructed Deviation Penalties pursuant to Section 11.2.4.1.2 and related provisions of the ISO Tariff.

**5.2 General.** The Scheduling Coordinator shall be subject to all penalties made applicable to dynamic imports from System Resources set forth in the ISO Tariff.

**5.2 General.** The Scheduling Coordinator shall be subject to all penalties made applicable to dynamic imports from System Resources set forth in the ISO Tariff.

#### ARTICLE VI COSTS

**6.1 Operating and Maintenance Costs.** The Scheduling Coordinator shall be responsible for all its costs incurred in connection with dynamic scheduling and compliance by the System Resources identified in Schedule 1 for the purpose of meeting its obligations under this Agreement.

#### ARTICLE VII DISPUTE RESOLUTION

7.1 **Dispute Resolution.** The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. In the event any dispute is not settled, the Parties shall adhere to the ISO ADR Procedures set forth in Section 13 of the ISO Tariff, which is incorporated by reference, except that any reference in Section 13 of the ISO Tariff to Market Participants shall be read as a reference to the Scheduling Coordinator and references to the ISO Tariff shall be read as references to this Agreement.

#### ARTICLE VIII REPRESENTATIONS AND WARRANTIES

**8.1 Representation and Warranties.** Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.

#### ARTICLE IX LIABILITY

**9.1 Liability.** The provisions of Section 14 of the ISO Tariff will apply to liability arising under this Agreement, except that all references in Section 14 of the ISO Tariff to Market Participants shall be read as references to the Scheduling Coordinator and references to the ISO Tariff shall be read as references to this Agreement.

#### ARTICLE X UNCONTROLLABLE FORCES

**10.1 Uncontrollable Forces Tariff Provisions.** Section 15 of the ISO Tariff shall be incorporated by reference into this Agreement except that all references in Section 15 of the ISO Tariff to Market Participants shall be read as a reference to the Scheduling Coordinator and references to the ISO Tariff shall be read as references to this Agreement.

#### ARTICLE XI MISCELLANEOUS

- **11.1 Assignments.** Either Party may assign or transfer any or all of its rights and/or obligations under this Agreement with the other Party's prior written consent in accordance with Section 17 of the ISO Tariff. Such consent shall not be unreasonably withheld. Any such transfer or assignment shall be conditioned upon the successor in interest accepting the rights and/or obligations under this Agreement as if said successor in interest was an original Party to this Agreement.
- **11.2 Notices.** Any notice, demand or request which may be given to or made upon either Party regarding this Agreement shall be made in accordance with Section 20.1 of the ISO Tariff. A Party must update the information in Schedule 2 of this Agreement as information changes. Such changes shall not constitute an amendment to this Agreement.
- **11.3 Waivers.** Any waivers at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- **11.4 Governing Law and Forum.** This Agreement shall be deemed to be a contract made under, and for all purposes shall be governed by and construed in accordance with, the laws of the State of California, except its conflict of law provisions. The Parties irrevocably consents that any legal action or proceeding arising under or relating to this Agreement to which the ISO ADR Procedures do not apply, shall be brought in any of the following forums, as appropriate: any court of the State of California, any federal court of the United States of America located in the State of California, or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.
- **11.5 Consistency with Federal Laws and Regulations.** This Agreement shall incorporate by reference Section 20.8 of the ISO Tariff as if the references to the ISO Tariff were referring to this Agreement.
- **11.6 Merger.** This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereto and supersedes all prior agreements, whether written or oral, with respect to such subject matter.
- **11.7** Severability. If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.
- **11.8** Section Headings. Section headings provided in this Agreement are for ease of reading and are not meant to interpret the text in each Section.
- **11.9 Amendments.** This Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. If the amendment does not require FERC approval, the amendment will be filed with FERC for information. Nothing contained herein shall be construed as affecting in any way the right of the ISO to unilaterally make application to FERC for a change in the rates, terms and

conditions of this Agreement under Section 205 of the FPA and pursuant to FERC's rules and regulations promulgated thereunder.

**11.10 Counterparts.** This Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date hereinabove written.

#### California Independent System Operator Corporation

By:	
Name:	
Title:	
Date:	

#### [NAME OF SCHEDULING COORDINATOR]

By:	
Name:	
Title:	
Date:	

#### SCHEDULE 1

#### SYSTEM RESOURCES AND CONTROL AREA INFORMATION [Sections 4.1.2, 4.1.3, 4.1.5]

Description of System Resource(s), including Associated Power Plants and Pmax Values:

**ISO Intertie:** 

**Host Control Area:** 

**Intermediate Control Areas:** 

#### SCHEDULE 2

#### NOTICES [Section 11.2]

#### Scheduling Coordinator

Name of Primary Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code	
Email Address:	
Phone:	
Fax No:	
Name of Alternative Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code	
Email Address:	
Phone:	
Fax No:	

ISO

Name of Primary	
Representative:	
Title:	
Address:	
City/State/Zip Code	
Email Address:	
Phone:	
Fax No:	
Name of Alternative	
Representative:	
Title:	
Address:	
City/State/Zip Code	
Email Address:	
Phone:	
Fax No:	

### **ISO TARIFF APPENDIX S**

## **Dynamic Scheduling Host Control Area Operating Agreement**

## CALIFORNIA INDEPENDENT SYSTEM OPERATOR

AND

# [CONTROL AREA]

# DYNAMIC SCHEDULING HOST CONTROL AREA OPERATING AGREEMENT

Issued by: Charles F. Robinson, Vice President and General Counsel Issued on: April 12, 2005

#### DYNAMIC SCHEDULING HOST CONTROL AREA OPERATING AGREEMENT

#### THIS DYNAMIC SCHEDULING HOST CONTROL AREA OPERATING AGREEMENT

("AGREEMENT") is established this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_ and is accepted by and between:

[Full legal name] ("Host Control Area"), having its registered and principal executive office at [address],

and

**California Independent System Operator Corporation** ("ISO"), a California nonprofit public benefit corporation having a principal executive office located at such place in the State of California as the ISO Governing Board may from time to time designate, initially 151 Blue Ravine Road, Folsom, California 95630.

The Host Control Area and the ISO are hereinafter referred to as the "Parties".

#### Whereas:

- **A.** The Parties named above operate Control Areas.
- **B.** The Parties wish to coordinate operation of dynamic scheduling functionality to satisfy North American Electric Reliability Council ("NERC") policies, Western Electricity Coordinating Council ("WECC") Minimum Operating Reliability Criteria ("MORC"), and Good Utility Practice.
- **C.** The Host Control Area does not have an Interconnected Control Area Operating Agreement ("ICAOA") with the ISO and desires to implement an agreement to facilitate dynamic scheduling from System Resources in its Control Area to the ISO Control Area without an ICAOA.
- **D.** The Parties wish to enter into this Agreement to establish the terms and conditions for the operation of the dynamic scheduling functionality from Host Control Area's Control Area to the ISO Control Area.
- E. The ISO has certain statutory obligations under California law to maintain power system reliability.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

#### 1. Term and Termination

#### 1.1 Effective Date

This Agreement shall be effective as of the date set forth above, unless this Agreement is accepted for filing and made effective by the Federal Energy Regulatory Commission ("FERC") on some other date, if FERC filing is required, and shall continue in effect until terminated.

#### 1.2 Termination

This Agreement may be terminated by either Party upon thirty (30) days written notice to the other Party or upon mutual consent of both Parties. For entities subject to FERC jurisdiction, termination will be effective upon acceptance by FERC of notice of termination, if this Agreement has been filed with FERC, or thirty (30) days after the date of the notice of default, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders. The ISO shall timely file any required notice of termination with FERC. The filing of the notice of termination is made after the preconditions for termination have been met, and (2) the ISO files the notice of termination within sixty (60) days after issuance of the notice of default.

#### 2. Definitions

#### 2.1 WECC Definitions

Except as defined below, terms and expressions used in this Agreement shall have the same meanings as those contained in the WECC MORC Definitions.

#### 2.2 Specific Definitions

- **2.2.1 Good Utility Practice:** Any of the practices, methods, and acts engaged in or approved by a significant portion of the electric utility industry in the WECC region during the relevant time period, or any of the practices, methods, and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.
- 2.2.2 ISO Dynamic Scheduling Protocol: The ISO's Dynamic Scheduling Protocol, which is part of the ISO Tariff.
- **2.2.3 ISO Tariff:** ISO Operating Agreement, Protocols, and Tariff as amended from time to time, together with any appendices or attachments thereto.
- **2.2.4 Point of Contact:** A person or entity having the authority to receive and act upon scheduling or dispatch communications from the other Control Area operator and available through a communications device mutually agreed upon on a 24-hour, 7-day basis.
- **2.2.5 Scheduling Coordinator:** An entity certified by the ISO for the purposes of undertaking the functions of: submitting schedules for energy, generation, transmission losses, and ancillary services; coordinating generation; tracking, billing, and settling trades with other Scheduling Coordinators; submitting forecast information; paying the ISO's charges; and ensuring compliance with ISO protocols.
- **2.2.6** System Resource: "System Resource" is defined in the ISO Tariff and, in the context of this Agreement, may include combinations of resources as described in the ISO Dynamic Scheduling Protocol.

#### 3. General

#### 3.1 Purpose

This Agreement sets forth the requirements that must be satisfied by the Host Control Area should it elect to support Scheduling Coordinators' requests for implementation of a dynamic scheduling functionality and delivery of energy, supplemental energy, and energy associated with ancillary services (except regulation service) into the ISO Control Area. The requirements encompass technical (energy management system ("EMS")/ automatic generation control ("AGC") and communications), interchange scheduling, telemetry, and aspects of Control Area operations.

#### 3.2 NERC/WECC Operating Standards Observed

Nothing in this Agreement is intended to change, supercede, or alter either Party's obligations to abide by NERC standards and policies and WECC criteria.

#### 3.3 Applicable Standards

This Agreement incorporates, by reference, the ISO Dynamic Scheduling Protocol.

#### 3.4 Communication

The ISO and the Host Control Area shall each operate and maintain a 24-hour, 7-day control center with real time scheduling and control functions. Appropriate control center staff will be provided by each Party who shall be responsible for operational communications and who shall have sufficient authority to commit and bind that Party. The ISO and the Host Control Area shall jointly develop communication procedures necessary to support scheduling and dispatch functions. The Points of Contact and the procedures for insuring reliable communication are identified in Schedule 1.

#### 4. Telecommunications Requirements

The ISO and Host Control Area shall establish and maintain real time, redundant, diversely routed, communications links between the ISO EMS and the Host Control Area EMS, with the primary link utilizing the standard inter-control center communications protocol ("ICCP") in accordance with the ISO Dynamic Scheduling Protocol for the dynamically scheduled System Resources listed in Schedule 2.

#### 5. Telemetry

For each operating hour for which a System Resource is scheduled to deliver energy, supplemental energy, and/or energy associated with any of the non-regulating ancillary services to the ISO Control Area, the Host Control Area shall provide, via the ICCP communication links to the ISO EMS, the data for each System Resource, as set forth in the ISO Dynamic Scheduling Protocol.

#### 6. Interchange Scheduling Requirements

#### 6.1 Dynamic Scheduling

The Host Control Area shall support Scheduling Coordinators' requests to arrange dynamic interchange schedules for the delivery of energy to the ISO Control Area, reflecting the System Resource's instantaneous energy production or allocation level and taking into account available transmission capacity.

#### 6.2 Treatment of Area Control Error ("ACE")

The Host Control Area shall instantaneously compensate its AGC for the System Resource's energy output that is generated or allocated for establishing the dynamic schedule to the ISO such that the System Resource energy production or allocation changes have an equal in magnitude and opposite in sign effect on the Host Control Area's ACE.

#### 6.3 Integration of Dynamic Scheduling

For each operating hour during which energy was dynamically scheduled for delivery to the ISO Control Area, the Host Control Area shall compute an integrated amount of interchange based on the System Resource's integrated energy production, by integrating the instantaneous System Resource production levels. Such integrated MWH value shall be agreed to hourly by the real time schedulers.

#### 6.4 Delivery of Megawatts ("MW")

The Host Control Area shall not be obligated to make up any difference between the dynamic energy schedule and the MW being generated or allocated by the System Resource.

#### 6.5 Access to Information

The Parties agree to exchange information related to telemetry sent and received with respect to the delivery of energy (i) at the request of the other Party for purposes of after-the-fact interchange accounting or (ii) on demand for any other purpose.

#### 7. Other Host Control Area Responsibilities

#### 7.1 Operational Jurisdiction

The Host Control Area will have, at a minimum, the level of operational jurisdiction over the System Resource and the associated dynamic schedule that NERC and WECC vest in Host Control Areas.

#### 7.2 E-Tagging

The Host Control Area must support associated e-tagging as described in the ISO Dynamic Scheduling Protocol and deemed to be consistent with NERC and/or WECC requirements.

#### 7.3 Real-Time Adjustments

The Host Control Area must have a means to manually override and/or otherwise adjust the dynamic signal in real time, if needed.

#### 7.4 Coordination with Other Control Areas

The Host Control Area must provide in real time the instantaneous value of each dynamic schedule to every intermediary Control Area through whose systems such dynamic schedule may be implemented to the ISO.

#### 8. Other

#### 8.1 Losses

The ISO shall not be responsible for transmission losses caused by transmitting energy dynamically within or across the Host Control Area for delivery to the ISO.

#### 8.2 Certification

Only ISO-certified System Resource/Host Control Area arrangements will be allowed to bid or self provide ancillary services in the ISO's ancillary services market through an ISO-certified Scheduling Coordinator.

#### 8.3 No Guarantee of Award

Certification of a System Resource/Host Control Area arrangement allows for bidding of supplemental energy and/or certain ancillary services into the ISO market; it does not, however, guarantee selection of such bid.

#### 8.4 Performance Assessment

The ISO will monitor and measure dynamically imported ancillary services, whether bid or selfprovided, against the performance benchmarks described in the ISO Dynamic Scheduling Protocol.

#### 8.5 Description of System Resources

Each dynamically scheduled System Resource permitted pursuant to this Agreement is described in Schedule 2.

#### 9. Notifications

The ISO and the Host Control Area shall jointly develop methods for coordinating the notification of all affected scheduling entities within their respective Control Areas regarding schedule changes in emergency or curtailment conditions.

#### 10 Liability

#### 10.1 Uncontrollable Forces

An Uncontrollable Force means any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm, flood, earthquake, explosion, any curtailment, order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond the reasonable control of a control area operator which could not be avoided through the exercise of Good Utility Practice.

Neither the ISO nor the Host Control Area will be considered in default of any obligation under this Agreement or liable to the other for direct, indirect, and consequential damages if prevented from fulfilling that obligation due to the occurrence of an Uncontrollable Force.

In the event of the occurrence of an Uncontrollable Force, which prevents either the ISO or the Host Control Area from performing any obligations under this Agreement, the affected entity shall not be entitled to suspend performance of its obligations in any greater scope or for any longer duration than is required by the Uncontrollable Force. The ISO and the Host Control Area shall each use its best efforts to mitigate the effects of such Uncontrollable Force, remedy its inability to perform, and resume full performance of its obligations hereunder.

#### 10.2 Liability To Third Parties

Except as otherwise expressly provided herein, nothing in this Agreement shall be construed or deemed to confer any right or benefit on, or to create any duty to, or standard of care with reference to any third party, or any liability or obligation, contractual or otherwise, on the part of ISO or the Host Control Area.

#### **10.3 Liability Between the Parties**

The Parties' duties and standard of care with respect to each other, and the benefits and rights conferred on each other, shall be no greater than as explicitly stated herein. Neither Party, its directors, officers, employees, or agents, shall be liable to the other Party for any loss, damage, claim, cost, charge, or expense, whether direct, indirect, or consequential, arising from the Party's performance or nonperformance under this Agreement, except for a Party's gross negligence, or willful misconduct.

#### 11 Miscellaneous

#### 11.1 Assignments

Either Party to this Agreement may assign its obligations under this Agreement, with the other Party's prior written consent. Such consent shall not be unreasonably withheld.

Obligations and liabilities under this Agreement shall be binding on the successors and assigns of the Parties. No assignment of this Agreement shall relieve the assigning Party from any obligation or liability under this Agreement arising or accruing prior to the date of assignment.

#### 11.2 Notices

Any notice, demand, or request which may be given to or made upon either Party regarding this Agreement shall be made in writing and shall be deemed properly served, given, or made: (a) upon delivery if delivered in person, (b) five (5) days after deposit in the mail if sent by first class United States mail, postage prepaid, (c) upon receipt of confirmation by return facsimile if sent by facsimile, or (d) upon delivery if delivered by prepaid commercial courier service. A Party must update the information in Schedule 3 relating to its address as that information changes. Such changes shall not constitute an amendment to this Agreement.

#### 11.3 Waivers

Any waiver at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or matter arising in connection with this Agreement. Any delay short of the statutory period of limitations, in asserting or enforcing any right under this Agreement, shall not constitute or be deemed a waiver of such right.

#### 11.4 Governing Law and Forum

Subject to ICAA 11.5, this Agreement shall be deemed to be a contract made under and for all purposes shall be governed by and construed in accordance with the laws of the State of California. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Agreement shall be brought in any of the following forums, as appropriate: a court of the State of California or any federal court of the United States of America located in the State of California or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission. No provision of this Agreement shall be deemed to waive the right of any Party to protest, or challenge in any manner, whether this Agreement, or any action or proceeding arising under or relating to this Agreement, is subject to the jurisdiction of the Federal Energy Regulatory Commission.

#### 11.5 Consistency with Federal Laws and Regulations

(a) Nothing in this Agreement shall compel any person or federal entity to: (1) violate federal statutes or regulations; or (2) in the case of a federal agency, to exceed its statutory authority, as defined by any applicable federal statutes, regulations, or orders lawfully promulgated thereunder. If any provision of this Agreement is inconsistent with any obligation imposed on any person or federal entity by federal law or regulation to that extent, it shall be inapplicable to that person or federal entity. No person or federal entity shall incur any liability by failing to comply with any provision of this Agreement that is inapplicable to it by reason of being inconsistent with any federal statutes, regulations, or orders lawfully promulgated thereunder; provided, however, that such person or federal entity shall use its best efforts to comply with the ISO Tariff to the extent that applicable federal laws, regulations, and orders lawfully promulgated thereunder permit it to do so.

(b) If any provision of this Agreement requiring any person or federal entity to give an indemnity or impose a sanction on any person is unenforceable against a federal entity, the ISO shall submit to the Secretary of Energy or other appropriate Departmental Secretary a report of any circumstances that would, but for this provision, have rendered a federal entity liable to indemnify any person or incur a sanction and may request the Secretary of Energy or other appropriate Departmental Secretary to take such steps as are necessary to give effect to any provisions of this Agreement that are not enforceable against the federal entity.

#### 11.6 Severability

If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect and the parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.

#### 11.7 Section Headings

Section headings provided in this Agreement are for ease of reading and are not meant to interpret the text in each Section.

#### 11.8 Amendments

This Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that are subject to FERC approval shall not take effect until FERC has accepted such amendments for filing and has made them effective. If the amendment does not require FERC approval, the amendment will be filed with FERC for information. Nothing contained herein shall be construed as affecting in any way the right of the ISO or the Host Control Area to unilaterally make application to FERC for a change in the rates, terms and conditions of this Agreement under Section 205 of the FPA and pursuant to FERC's rules and regulations promulgated thereunder.

#### 11.9 Counterparts

This Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.

#### CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. II

Original Sheet No. 1082

**IN WITNESS WHEREOF**, the Parties hereto have caused this Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date first written above.

#### California Independent System Operator Corporation

By:	
Name:	
Title:	
Date:	

[Full legal name of Host Control Area]

By:	
Name:	
Title:	
Date:	

#### SCHEDULE 1

#### POINTS OF CONTACT [Section 3.4]

#### **OPERATIONAL CONTACT**

ISO: Transmission Dispatcher (Folsom-Primary):	
Transmission Dispatcher (Alhambra-Backup):	
Generation Dispatcher (Folsom-Primary):	
Generation Dispatcher (Alhambra-Backup):	
Real Time Scheduler (Folsom):	
Real Time Scheduler (Alhambra):	
Pre Scheduler:	
Shift Manager:	
Control Room Fax:	
Outage Coordination: Fax:	
Director of Grid Operations:	
WECC Reliability Coordinator:	
Address:	California ISO 151 Blue Ravine Road P.O. Box 639014 Folsom, CA 95763-9014

#### **OPERATIONAL CONTACT**

Host Control Area: Transmission Dispatcher (Primary):	
Transmission Dispatcher (Backup):	
Generation Dispatcher (Primary):	
Generation Dispatcher (Backup):	
Real Time Scheduler:	
Dispatch Supervisor:	
Outage Coordination:	
Fax:	
Chief Dispatcher:	
Address:	

#### SCHEDULE 2

#### DESCRIPTION OF DYNAMICALLY SCHEDULED SYSTEM RESOURCES [Section 4]

#### CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. II

#### **SCHEDULE 3**

#### NOTICES [Section 11.2]

Host Control Area	
Name of Primary	
Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code	
Email Address:	
Phone:	
Fax No:	
Name of Alternative	
Representative:	
Title:	
Company:	
Address:	
City/State/Zip Code	
Email Address:	
Phone:	
Fax No:	

ISO

Name of Primary Representative:	
Title:	
Address:	
City/State/Zip Code	
Email Address:	
Phone:	
Fax No:	
Name of Alternative Representative:	
Title:	
Address:	
City/State/Zip Code	
Email Address:	
Phone:	
Fax No:	