

### 5.1.3 Actions for Maintaining Reliability of ISO Controlled Grid.

The ISO plans to obtain the control over Generating Units that it needs to control the ISO Controlled Grid and maintain reliability by purchasing Ancillary Services from the market auction for these services. When the ISO responds to events or circumstances, it shall first use the generation control it is able to obtain from the Ancillary Services bids it has received to respond to the operating event and maintain reliability. Only when the ISO has used the Ancillary Services that are available to it under such Ancillary Services bids which prove to be effective in responding to the problem and the ISO is still in need of additional control over Generating Units, shall the ISO assume supervisory control over other Generating Units. It is expected that at this point, the operational circumstances will be so severe that a real-time system problem or emergency condition could be in existence or imminent.

Each Participating Generator shall take, at the direction of the ISO, such actions affecting such Generator as the ISO determines to be necessary to maintain the reliability of the ISO Controlled Grid. Such actions shall include (but are not limited to):

- (a) compliance with the ISO's Dispatch instructions including instructions to deliver Ancillary Services in real time pursuant to the Final Day-Ahead Schedules and Final Hour-Ahead Schedules;
- (b) compliance with the system operation requirements set out in Section 2.3 of this ISO Tariff;
- (c) notification to the ISO of the persons to whom an instruction of the ISO should be directed on a 24-hour basis, including their telephone and facsimile numbers; and
- (d) the provision of communications, telemetry and direct control requirements, including the establishment of a direct communication link from the control room of the Generator to the ISO in a manner that ensures that the ISO will have the ability, consistent with this ISO Tariff and the ISO Protocols, to direct the operations of the Generator as necessary to maintain the reliability of the ISO Controlled Grid, except that a Participating Generator will be exempt from ISO requirements imposed in accordance with this subsection (d)

with regard to any Generating Unit with a rated capacity of less than 10 MW, unless that Generating Unit is certified by the ISO to participate in the ISO's Ancillary Services and/or Imbalance Energy markets.

#### **5.1.4 Generators Connected to UDC Systems.**

A Participating Generator with a Generating Unit directly connected to a UDC system will be exempt from compliance with this Section 5 in relation to that Generating Unit, other than Section 5.6 (System Emergencies) provided that (i) the output of the Generating Unit is less than 10 MW, and (ii) the total output is sold to the interconnecting UDC or to customers connected to the UDC's system. With regard to aAny such Participating Generatoring Unit directly connected to a UDC system, a Participating Generator shall comply with applicable UDC tariffs, interconnection requirements and generation agreements. With regard to a Participating Generator's Generating Units directly connected to a UDC system, the ISO and the UDC will coordinate to develop procedures to avoid conflicting ISO and UDC operational directives. This exemption in no way affects any obligation to pay the appropriate Access Charges or to comply with all the other applicable Sections of this ISO Tariff.

##### **5.1.4.1 Exemption for Generating Units Less Than 1 MW**

A Generator with a Generating Unit directly connected to a UDC system will be exempt from compliance with this Section 5 and with Section MP 2.3.5 of the Metering Protocol in relation to that Generating Unit provided that (i) the rated capacity of the Generating Unit is less than 1 MW, and (ii) the Generator does not use the Generating Unit to participate in the ISO's Ancillary Services and/or Imbalance Energy markets. This exemption in no way affects the calculation of or any obligation to pay the appropriate charges or to comply with all the other applicable Sections of this ISO Tariff.

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**Participating Seller or  
Participating Generator**

A Generator or other seller of Energy or Ancillary Services through a Scheduling Coordinator over the ISO Controlled Grid from a Generating Unit with a rated capacity of 1 MW or greater, or from a Generating Unit providing Ancillary Services and/or Imbalance Energy through an aggregation arrangement approved by the ISO, which has undertaken to be bound by the terms of the ISO Tariff, in the case of a Generator through a Participating Generator Agreement.

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## ANCILLARY SERVICES REQUIREMENTS PROTOCOL APPENDICES A-F

### A 1.1            **Operating Characteristics**

A 1.1.1            the rated capacity of the Generating Unit must be 1 MW or greater unless the Generating Unit is participating in an aggregation arrangement approved by the ISO than 10 MW;

A 1.1.2            the maximum amount of Regulation to be offered must be reached within a period that may range from a minimum of 10 minutes to a maximum of 30 minutes, as such period may be specified by the ISO and published on the ISO's internet "Home Page;"

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B 1.1            the rated capacity of the Generating Unit must be 1 MW or greater unless the Generating Unit is participating in an aggregation arrangement approved by the ISO than 10 MW;

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C 1.1            the rated capacity of the Generating Unit or System Resource must be 1 MW or greater unless the Generating Unit is participating in an aggregation arrangement approved by the ISO than 10 MW;

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D 1.1            the rated capacity of the Generating Unit or System Resource must be 1 MW or greater unless the Generating Unit is participating in an aggregation arrangement approved by the ISO than 10 MW;

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**E 1.1** the rated capacity of the Generating Unit must be 1 MW or greater unless the Generating Unit is participating in an aggregation arrangement approved by the ISO~~than 10MW~~;

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**F 1** A Generator wishing to provide Black Start capacity from a Generating Unit as an Ancillary Service must meet the requirements stated in Appendix D of the ISO Tariff in order to be certified by the ISO to provide Black Start capacity. In addition, the Generating Unit must have a rated capacity 1 MW or greater unless the Generating Unit is participating in an aggregation arrangement approved by the ISO~~than 10 MW~~.

**2.2.12.2 Reliability Must Run Information.** By no later than two hours before the close of the PX Day-Ahead Market for the Trading Day, the ISO will notify Scheduling Coordinators for Reliability Must-Run Units of the amount and time of Energy requirements from specific Reliability Must-Run Units that the ISO requires to deliver Energy in the Trading Day to the extent that the ISO is aware of such requirements (the “RMR Dispatch Notice”). The Energy to be delivered for each hour of the Trading Day pursuant to the RMR Dispatch Notice (including Energy the RMR Owner is entitled to substitute for Energy from the Reliability Must-Run Unit pursuant to the RMR Contract) shall be referred to as the “RMR Energy”.

**2.2.12.2.1** No later than one hour before the close of the PX Day-Ahead Market for the Trading Day, any RMR Owner receiving an RMR Dispatch Notice as indicated in this Section 2.2.12.2 (the “Applicable RMR Owner”) must notify the ISO through the RMR Owner’s Scheduling Coordinator (the “Applicable RMR SC”), with regard to each hour of the Trading Day identified in the RMR Dispatch Notice, ~~of, whether it intends to satisfy its obligation to deliver RMR Energy~~ (i) the amount of its obligation to deliver RMR Energy that it intends to satisfy by delivering the RMR Energy pursuant to a market transaction, and receiving only market compensation therefor (the “RMR Market ~~Option~~Energy”), ~~or~~ and (ii) the amount of its obligation to deliver RMR Energy that it intends to satisfy by delivering the RMR Energy as a contract transaction, and accepting payment under the relevant RMR Contract (the “RMR Contract ~~Energy~~Option”). If the

Applicable RMR Owner so notifies the ISO by March 1, 2001, for calendar year 2001, and by January 1 of any subsequent calendar year, the RMR Owner may during that calendar year notify the ISO directly of its choice of payment option, rather than through the Applicable RMR Owner's Scheduling Coordinator. If the Applicable RMR Owner elects to provide notice of its choice of payment option directly, the ISO will not accept notice from the Applicable RMR Owner's Scheduling Coordinator during the relevant calendar year. Notwithstanding anything to the contrary in any RMR Contract, the Applicable RMR Owner may not elect to satisfy its obligation to deliver the RMR Energy specified in the RMR Dispatch Notice by delivering that RMR Energy pursuant to a transaction in the Real Time Market.

**2.2.12.2.2 RMR Contract *EnergyOption*** – For each hour specified in the RMR Dispatch Notice, for which the Applicable RMR Owner elects the RMR Contract Option (“Contract Hour”), it shall bid the entire amount of the RMR Contract Energy for that hour into the PX Day-Ahead Market at zero dollars per MWh. ~~The Applicable RMR SC shall include in its Preferred Day-Ahead Schedule the total amount of the RMR Energy for each Contract Hour, unless the Applicable RMR Owners's total Energy award in PX Day-Ahead Market for that Contract Hour is less than the total amount of RMR Energy for that Contract Hour, in which case the Preferred Day-Ahead Schedule shall include that lesser amount. If the Applicable RMR Owner's total Energy award in the PX Day-Ahead Market for any Contract Hour is less than the full amount of the RMR Energy for that Contract Hour, the Applicable RMR Owner shall bid the remaining RMR Energy for that~~

~~Contract Hour into the next PX Market for such Contract Hour at zero dollars per MWh. The Applicable RMR SC shall include the entire RMR Energy for each Contract Hour in its Preferred Hour-Ahead Schedule for each such hour, unless the Applicable RMR Owner's Energy award in the PX markets for that Contract Hour is less than the total RMR Energy for such hour, in which case the Applicable RMR SC shall include that lesser amount. Whether or not the RMR Energy is in the Final Schedule, the Applicable RMR Owner must deliver the RMR Energy pursuant to the RMR Dispatch Notice. Notwithstanding anything to the contrary in the RMR Contract, neither the Applicable RMR Owner nor the Applicable RMR SC shall be entitled to any payment from any source for RMR Energy that is not bid and scheduled as required by this Section 2.2.12.2.2. All RMR Energy delivered under this option shall be deemed delivered under a Nonmarket Transaction for the purposes of the RMR Contract.~~

~~**2.2.12.2.3 RMR Market EnergyOption** – This Section 2.2.12.2.3 provides how an Applicable RMR Owner electing the RMR Market Option shall satisfy its obligation to deliver RMR Energy.~~

~~**2.2.12.2.3.1** For each hour specified in the RMR Dispatch Notice, for which an Applicable RMR Owner has selected the Market Option (“Market Hour”), the Applicable RMR Owner (i) may bid into the PX Day-Ahead Market any amount of the RMR Market Energy for that hour and (ii) may schedule as a bilateral Day-Ahead transaction any amount of RMR Energy for that hour.~~

~~**2.2.12.2.3.1 [Not Used]**~~

~~**2.2.12.2.3.1.1** The Preferred Day-Ahead Schedule of the Applicable RMR SC shall include as RMR Energy for each hour Market Hour no less than the sum of the RMR Contract Energy for that amount awarded to the Applicable RMR Owner in the PX Day-Ahead Market for that Market Hour~~



and the amount of RMR Market Energy scheduled as a bilateral Day-Ahead transaction for that Market Hhour, unless the amount awarded in the PX Day-Ahead Market is less than the amount of the RMR Contract Energy, in which case the Preferred Day-Ahead Schedule shall include the sum of that lesser amount and the amount of RMR Market Energy scheduled as a bilateral Day-Ahead transaction for that hour. If the Preferred Day-Ahead Schedule of the Applicable RMR SC for any Market Hhour includes Adjustment Bids for the RMR Unit, the Adjustment Bid shall specify the RMR Energy as the minimum MW output to which the Applicable RMR SC will allow the RMR Unit to be redispatched for that Market Hhour.

Notwithstanding anything to the contrary in the RMR Contract, neither the Applicable RMR Owner nor the Applicable RMR SC shall be entitled to any payment from any source for RMR Energy that is not bid and scheduled as required by this Section 2.2.12.2.2. In the event that the RMR Energy is not delivered, (i) if the RMR Energy had been scheduled, the Applicable RMR Owner shall not be entitled to an Availability Payment under the RMR Contract and the Applicable RMR SC shall pay for the Imbalance Energy necessary to replace that RMR Energy, or (ii) if the RMR Energy had not been scheduled, the Applicable RMR Owner shall not be entitled to an Availability Payment under the RMR Contract and, if the variable costs saved by the Owner's failure to deliver the RMR Energy (which shall be equal to the Variable Cost Payment determined pursuant to Schedule C in the RMR Contract) are greater than the foregone Availability Payment under the RMR Contract, the Applicable RMR Owner shall pay the difference between the variable costs saved and the Availability Payment.

**2.2.12.2.3.2** If the Applicable RMR SC's Preferred Day-Ahead Schedule does not include the entire amount of RMR Energy for any **Market Hour**, the Applicable RMR Owner shall bid all remaining RMR Energy for that **Market Hour**, net of any RMR **Market** Energy the Applicable RMR Owner elects to provide through an Hour-Ahead bilateral transaction for that **Market Hour**, into the next available PX Market for such hour at zero dollars per MWh.

**2.2.12.2.3.2.1** \_\_\_\_\_ The Applicable RMR SC's Preferred Hour-Ahead Schedule for each **Market Hour** shall include all RMR Energy specified in the RMR Dispatch Notice for that **Market Hour**, except for the amount of RMR Energy that the Applicable RMR Owner was required to bid into the PX Markets under this Section 2.2.12.2.3.2 but was not awarded in such PX Markets for such hour. If the Preferred Hour-Ahead Schedule of the Applicable RMR SC for any **Market Hour** includes Adjustment Bids for the RMR Unit, the Adjustment Bid shall specify the RMR Energy as the minimum MW output to which the Applicable RMR SC will allow the RMR Unit to be redispached for that **Market Hour**.

**2.2.12.2.3.3** Whether or not the RMR Energy is in ~~the a~~ Final **Preferred** Schedule, the Applicable RMR Owner must deliver the RMR Energy pursuant to the RMR Dispatch Notice. ~~If the RMR Owner has bid and scheduled the RMR Energy as required by this section 2.2.12.2.3, any RMR Energy provided but not included in the Final Schedule will be paid as Uninstructed Imbalance Energy. Notwithstanding anything to the contrary in the RMR Contract, neither the Applicable RMR Owner nor the Applicable RMR SC shall be entitled to any payment from any source for RMR Energy that is not bid and scheduled as required by this Section 2.2.12.2.3. If the amount of RMR Energy for any hour that is delivered is less than the amount specified for that hour in the RMR Dispatch Notice, the RMR~~

Energy delivered shall be deemed RMR Contract Energy in an amount not to exceed the amount that the Applicable RMR Owner elected to deliver as RMR Contract Energy for that hour; the remainder shall be deemed RMR Market Energy. Notwithstanding anything to the contrary in the RMR Contract, neither the Applicable RMR Owner nor the Applicable RMR SC shall be entitled to any payment from any source for RMR Energy that is not bid and scheduled as required by this Section 2.2.12.2. If the amount of RMR Energy for any hour that is bid and scheduled as required by this Section 2.2.12.2 is less than the amount of RMR Energy specified in the RMR Dispatch Notice for that hour, the RMR Energy bid and scheduled as required shall be deemed RMR Contract Energy in an amount not to exceed the amount that the Applicable RMR Owner elected to deliver as RMR Contract Energy; the remainder shall be deemed RMR Market Energy.

**2.2.12.2.4** If, at any time after two hours before the close of the PX Day-Ahead Market for the Trading Day, the ISO determines that it requires additional Energy from specific Reliability Must-Run Units during the Trading Day, the ISO will notify Scheduling Coordinators for such Reliability Must-Run Units of the amount and time of the additional Energy requirements from such Reliability Must-Run Units (the “Supplemental RMR Dispatch Notice”). No later than one hour before the close of the next PX Market for each hour specified in the Supplemental RMR Dispatch Notice, the Applicable RMR Owner must notify the ISO through the the Applicable

RMR SC, with regard to each such hour, of (i) the amount of its obligation to deliver RMR Energy specified in the Supplemental RMR Dispatch Notice that it intends to satisfy by delivering RMR Contract Energy, and (ii) the amount of its obligation to deliver RMR Energy that it intends to satisfy by delivering RMR Market Energy. The Energy specified in the Supplemental Dispatch Notice shall be subject to the same bidding, scheduling, and delivery requirements and pricing provisions specified in this [Section 2.2.12.2](#) as is RMR Energy not included in the Day-Ahead Schedule. If the ISO issues the Supplemental RMR Dispatch Notice less than two hours before the close of the last PX Market for any particular hour of the Trading Day, the Energy specified in the Supplemental Dispatch Notice for such particular hour shall be exempt from the bidding and scheduling requirements and the pricing provisions of this [Section 2.2.12.2](#), ~~except that, if the owner of the RMR Unit has already selected a payment option for any hour, the RMR Owner will be paid for that Energy in that particular hour according to that payment option. If the owner of the RMR Unit specified in the Supplemental RMR Dispatch Notice has not already notified the ISO of a payment option for any hour of the Trading Day included in the Supplemental Dispatch Notice at the time the Supplemental Dispatch Notice is issued, the RMR Owner shall do so no later than one hour before the close of the next PX Market for the Energy specified in the~~

~~Supplemental RMR Dispatch Notice and the elected payment option for such hour shall apply to RMR Energy bid into that and subsequent PX Markets for such hour during the Trading Day.~~

#### **5.2.8.1 Responsibility for Reliability Must-Run Charges Associated with SONGS.**

If the ISO procures Reliability Must-Run Generation from the San Onofre Nuclear Generation Station Units 2 or 3, it shall determine prior to the operation of such facilities as Reliability Must-Run Generation the appropriate allocation of associated charges, if any, among Responsible Utilities. The allocation of such charges shall be based on the reliability benefits that the ISO reasonably identifies through studies and analysis as accruing to the respective Service Areas of the Responsible Utilities.

#### **5.3 Identification of Generating Units.**

Each Generator shall provide data identifying each of its Generating Units and such information regarding the capacity and the operating characteristics of the Generating Unit as may be reasonably requested from time to time by the ISO.

#### **5.4 WSCC Requirements.**

##### **5.4.1 Generator Performance Standard.**

Participating Generators shall, in relation to each of their Generating Units, meet all applicable WSCC standards including any standards regarding governor response capabilities, use of power system stabilizers, voltage control capabilities and hourly Energy delivery. Unless otherwise agreed by the ISO, a Generating Unit must be capable of operating at capacity registered in the ISO Controlled Grid interconnection data, and shall follow the voltage schedules issued by the ISO from time to time.

##### **5.4.2 Reliability Criteria.**

Participating Generators shall comply with the requirements of the WSCC Reliability Criteria Agreement, including the applicable WSCC reliability criteria set forth in Section IV of Annex A thereof. In the event that a Participating Generator fails to comply, it will be subject to the sanctions applicable to such failure. Such sanctions shall be

assessed pursuant to the procedures contained in the WSCC Reliability Criteria Agreement. Each and all of the provisions of the WSCC Reliability Criteria Agreement are hereby incorporated by reference into this Section 5.4.2 as though set forth fully herein, and Participating Generators shall for all purposes be considered Participants as defined in that Agreement, and shall be subject to all of the obligations of Participants, under and in connection with the WSCC Reliability Criteria Agreement. The Participating Generators shall copy the ISO on all reports supplied to the WSCC in accord with Section IV of Annex A of the WSCC Reliability Criteria Agreement.

**5.4.3 Payment of Sanctions.**

Each Participating Generator shall be responsible for payment directly to the WSCC of any monetary sanction assessed against that Participating Generator by the WSCC pursuant to the WSCC Reliability Criteria Agreement. Any such payment shall be made pursuant to the procedures specified in the WSCC Reliability Criteria Agreement.

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## Master Definitions Supplement

### WSCC Reliability Criteria Agreement

The Western Systems Coordinating Council Reliability Criteria Agreement dated June 18, 1999 among the WSCC and certain of its Member transmission operators, as such may be amended from time to time.



**2.2.7.3 Limitation on Trading.** A Scheduling Coordinator, UDC or MSS that does not maintain an Approved Credit Rating, as defined with respect to either payment of the Grid Management Charge, or payment of other charges, shall maintain security in accordance with Section 2.2.3.2. For the avoidance of doubt, the ISO Security Amount is intended to cover the entity's outstanding and estimated liability for either (i) Grid Management Charge; and/or (ii) Imbalance Energy, Ancillary Services, Grid Operations Charge, Wheeling Access Charge, High Voltage Access Charge, Transition Charge, ~~and Usage Charges,~~ and FERC Annual Charges. Each Scheduling Coordinator, UDC or MSS required to provide an ISO Security Amount under Section 2.2.3.2 shall notify the ISO of the initial ISO Security Amount (separated into amounts securing payment of the Grid Management Charge and amounts securing payments of other charges) that it wishes to provide at least fifteen (15) days in advance and shall ensure that the ISO has received such ISO Security Amount prior to the date the Scheduling Coordinator commences trading or the UDC or MSS commences receiving bills for the High Voltage Access Charge and Transition Charge. A Scheduling Coordinator, UDC or MSS may at any time increase its ISO Security Amount by providing additional guarantees or credit support in accordance with Section 2.2.3.2. A Scheduling Coordinator, UDC or MSS may reduce its ISO Security Amount by giving the ISO not less than fifteen (15) days notice of the reduction, provided that the Scheduling Coordinator, UDC or MSS is not then in breach of this Section 2.2.7.3. The ISO shall release, or permit a reduction in the amount of, such guarantees or other credit support required to give effect to a permitted reduction in the ISO Security Amount as the Scheduling Coordinator, UDC or MSS may select. Following the date on which a Scheduling Coordinator commences trading, the Scheduling Coordinator shall not be entitled to submit a Schedule to the ISO and the ISO may reject any Schedule submitted if, at the time of submission, the Scheduling Coordinator's ISO Security Amount is exceeded by the Scheduling Coordinator's estimated aggregate liability for Imbalance Energy, Ancillary Services, Grid Management Charge, Grid Operations Charge, Wheeling Access Charge, ~~and Usage Charges,~~ and FERC Annual Charges on each Trading Day for which Settlement has not yet been made in accordance with Section 11.3.1 and the Scheduling Coordinator's estimated liability for High Voltage Access Charge and Transition Charge for which Settlement has not yet been made in accordance with Section 11.3. The ISO shall notify a Scheduling Coordinator if at any time such outstanding liability exceeds 90% of the relevant portion of the ISO Security Amount. For the purposes of calculating the Scheduling Coordinator's estimated aggregate liability, the estimate shall include (1) outstanding charges for Trading Days for which Settlement data is available, and (2) an estimate of charges for Trading Days for which Settlement data is not yet available. To estimate charges for Trading Days for which Settlement data is not yet available, the ISO will consider available historical Settlement data, appropriately adjusted to reflect recent market prices and trends, or other available information for individual Scheduling Coordinators.

Following the date on which a UDC or MSS commences operation, the UDC's or MSS's Scheduling Coordinator shall not be entitled to submit a Schedule to the ISO and the ISO may reject any Schedule submitted if, at the time of submission, the UDC's or MSS's ISO Security Amount is exceeded by the UDC's or MSS's estimated aggregate liability for Grid Management Charge, and/or High Voltage Access Charges and Transition Charges for which Settlement has not yet been made in accordance with Section 11.3. The ISO shall notify a UDC or MSS if at any time such outstanding liabilities exceed 90% of the relevant portion of the ISO Security Amount. For the purposes of estimating the UDC's or MSS's aggregate liability for High Voltage Access Charges and Transition Charges, the UDC's or MSS's liability shall be equal to the billed Load (in MWh) for a month in the UDC's or MSS's Service Area (including exports from the Service Area) multiplied by the ISO's estimated High Voltage Access Charge and Transition Charge for that month, as such estimated cost is notified by the ISO to UDCs and MSSs from time to time.

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## **7. TRANSMISSION PRICING.**

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### **7.5 FERC Annual Charges.**

#### **7.5.1 Obligation for FERC Annual Charges.**

**7.5.1.1** Each Scheduling Coordinator shall be obligated to pay for the FERC Annual Charges for its use of the ISO Controlled Grid to transmit electricity, including any use of the ISO Controlled Grid through Existing Contracts scheduled by the Scheduling Coordinator. Any FERC Annual Charges to be assessed by FERC against the ISO for such use of the ISO Controlled Grid shall be assessed against Scheduling Coordinators at the FERC Annual Charge Recovery Rate, as determined in accordance with this Section 7.5. Such assessment shall be levied monthly against all Scheduling Coordinators based upon each Scheduling Coordinator's metered Demand and exports.

**7.5.1.2** Scheduling Coordinators may elect, each year, to pay the FERC Annual Charges assessed against them by the ISO either on a monthly basis or an annual basis. Scheduling

Coordinators that elect to pay FERC Annual Charges on a monthly basis shall make payment for such charges within five (5) Business Days after issuance of the Preliminary Settlement Statement for the last day of the relevant calendar month. Scheduling Coordinators that elect to pay FERC Annual Charges on an annual basis shall make payment for such charges within five (5) Business Days after the ISO issues a notice that it has received a FERC Annual Charge assessment for the relevant year from the FERC. Scheduling Coordinators that elect to pay FERC Annual Charges on an annual basis shall maintain either an Approved Credit Rating, as defined with respect to either payment of the Grid Management Charge, or payment of other charges, or shall maintain security in accordance with Section 2.2.3.2.

#### **7.5.2 FERC Annual Charge Trust Account.**

All funds collected by the ISO for FERC Annual Charges shall be deposited in the FERC Annual Charge Trust Account. The FERC Annual Charge Trust Account shall be an interest-bearing account separate from all other accounts maintained by the ISO, and no other funds shall be commingled in it at any time. The ISO shall disburse funds from the FERC Annual Charge Trust Account in order to pay the FERC any and all FERC Annual Charges assessed against the ISO.

#### **7.5.3 Determination of the FERC Annual Charge Recovery Rate.**

**7.5.3.1** The FERC Annual Charge Recovery Rate shall be set at the projected total FERC Annual Charge obligation with regard to transactions on the ISO Controlled Grid during the year in which the FERC Annual Charge Recovery Rate is collected, adjusted for interest projected to be earned on the monies in the FERC Annual Charge Trust Account (“Annual Charge Obligation”), divided by the projected Demand and exports during that year for all entities subject to assessment of FERC Annual Charges by the ISO (“Annual Charge Demand”). The FERC Annual Charge Recovery Rate for the period from January 1, 2001 until the first adjustment of the FERC Annual Charge Recovery Rate goes into effect shall be posted on the ISO Home Page at least fifteen (15) days in advance of the date on which the initial rate will go into effect.

**7.5.3.2** The ISO may adjust the FERC Annual Charge Recovery Rate on a quarterly basis, as necessary, to reflect the net effect of the following:

- (a) the difference, if any, between actual Annual Charge Demand and projected Annual Charge Demand during the year-to-date;

- (b) the difference, if any, between the projections of the Annual Charge Obligation and the Annual Charge Demand upon which the charge for the year is based and the ISO's most current projections of those values, provided that the projection of the Annual Charge Obligation may only be adjusted on an annual basis for changes in the Federal Energy Regulatory Commission's budget for its electric regulatory program or changes in the projected total transmission volumes subject to assessment of FERC Annual Charges;
- (c) the difference, if any, between actual and projected interest earned on funds in the FERC Annual Charge Trust Account; and
- (d) any positive or negative balances of funds collected for FERC Annual Charges in a previous year after all invoices for FERC Annual Charges for that year have been paid by the ISO, other than those that are addressed through the mechanism described in Section 7.5.3.4.

7.5.3.3 The adjusted FERC Annual Charge Recovery Rate shall take effect on the first day of the calendar quarter. The ISO shall publish all data and calculations used by the ISO as a basis for such an adjustment on the ISO Home Page at least fifteen (15) days in advance of the date on which the new rate shall go into effect.

7.5.3.4 If the FERC Annual Charges assessed by FERC against the ISO for transactions on the ISO Controlled Grid during any year exceed or fall short of funds collected by the ISO for FERC Annual Charges with respect to that year by a range of 10% or less, the ISO shall take such under- or over-recovery into account through an adjustment to the FERC Annual Charge Recovery Rate in accordance with Section 7.5.3.2. Any deficiency of available funds necessary to pay for any assessment of FERC Annual Charges payable by the ISO may be covered by an advance of funds from the ISO's Grid Management Charge, provided any such advanced funds will be repaid. If the ISO's collection of funds for FERC Annual Charges with respect to any year results in an under- or over-recovery of greater than 10%, the ISO shall either assess a surcharge against all active Scheduling Coordinators for the amount under-recovered or shall issue a credit to all active Scheduling Coordinators for the amount over-recovered. Such surcharge or credit shall be allocated among all active Scheduling Coordinators based on the percentage of each active Scheduling Coordinator's metered Demand and exports during the relevant year. For purposes of this section, an "active Scheduling Coordinator" shall be a Scheduling Coordinator certified by the ISO in accordance with Section 2.2 of this ISO Tariff at the time the ISO issues a

surcharge or credit under this section. The ISO will issue any surcharges or credits under this section within 60 days of receiving a FERC Annual Charge assessment from the FERC.

#### **7.5.4 Credits and Debits of FERC Annual Charges Collected from Scheduling Coordinators.**

In addition to the surcharges or credits permitted under Sections 7.5.3 or 11.6.3.3 of this ISO Tariff, the ISO shall credit or debit, as appropriate, the account of a Scheduling Coordinator for any over- or under-assessment of FERC Annual Charges that the ISO determines occurred due to the error, omission, or miscalculation by the ISO or the Scheduling Coordinator.

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#### **11.2.10 Payments Under Section 2.3.5.1 Contracts**

The ISO shall calculate and levy charges for the recovery of costs incurred under contracts entered into by the ISO under the authority granted in Section 2.3.5.1 in accordance with Section 2.3.5.1.8 of this ISO Tariff.

#### **11.2.11 FERC Annual Charge Recovery Rate**

The ISO shall calculate and levy the rates for recovery of FERC Annual Charges in accordance with Section 7.5 of this ISO Tariff.

#### **11.3 Billing and Payment Process.**

**11.3.1** The billing and payment process shall be based on the issuance of Preliminary and Final Settlement Statements for each Settlement Period in each Trading Day.

**11.3.2** Payment for the charges referred to in Section 11.1.6 of the ISO Tariff (except for the charges payable under long term contracts) for each Trading Day in each calendar month shall be made five (5) Business Days after issuance of the Preliminary Settlement Statement for the last day of the relevant calendar month. Payment for adjustments will be made five (5) Business Days after issuance of the Final Settlement Statement for the last day of the relevant month.

Payments for FERC Annual Charges will be made in accordance with Section 7.5 of this ISO Tariff.

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## ISO TARIFF APPENDIX A

### Master Definitions Supplement

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#### **FERC Annual Charges**

Those charges assessed against a public utility by the FERC pursuant to 18 C.F.R. § 382.201 and any related statutes or regulations, as they may be amended from time to time.

#### **FERC Annual Charge Recovery Rate**

The rate to be paid by Scheduling Coordinators for recovery of FERC Annual Charges assessed against the ISO for transactions on the ISO Controlled Grid.

#### **FERC Annual Charge Trust Account**

An account to be established by the ISO for the purpose of maintaining funds collected from Scheduling Coordinators for FERC Annual Charges and disbursing such funds to the FERC.

## ISO TARIFF APPENDIX F

### Rate Schedules

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### Schedule 2

### Other Charges

#### Voltage Support Service

The user rate per unit of purchased Voltage Support will be calculated in accordance with the formula in ISO Tariff Section 2.5.28.5.

#### Regulation Service

Regulation Obligation:

The amount of Regulation required will be calculated in accordance with Section 4.1 of the Ancillary Services Requirements Protocol (ASRP).

Regulation Rates:

The formulas for calculating the amount of and charges for Regulation Service are referenced in ISO Tariff Sections 2.5.20.1, 2.5.27, and 2.5.28.

The ISO will calculate the user rate for Regulation in each Zone for each Settlement Period in accordance with Section 2.5.28.1.

#### Spinning Reserve Service

Spinning Reserve Obligation:

The amount of Spinning Reserve required as a component of Operating Reserves is specified in Section 5.1 of the Ancillary Services Requirements Protocol (ASRP).

Spinning Reserve Rates:

The formulas for calculating the amount of and charges for Spinning Reserve Service are referenced in ISO Tariff Sections 2.5.27.2, 2.5.28.2.

The ISO will calculate the user rate for Spinning Reserve in each Zone for each Settlement Period in accordance with ISO Tariff Section 2.5.28.2.

#### Non-Spinning Reserve Service

Non-Spinning Reserve Obligation:

The amount of Non-Spinning Reserve required as a component of Operating Reserves is specified in Section 5.1 of the Ancillary Services Requirements Protocol (ASRP).

Non-Spinning Reserve Rates:

The formulas for calculating the amount of and charges for Non-Spinning Reserve Service are referenced in ISO Tariff Sections 2.5.27.3, 2.5.28.3.

The ISO will calculate the user rate for Non-Spinning Reserve in each Zone for each Settlement Period in accordance with ISO Tariff Section 2.5.28.3.

### **Replacement Reserves**

The formulas for calculating the amount of and charges for Replacement Reserve Service are referenced in ISO Tariff Sections 2.5.27.4 and 2.5.28.4.

### **Black Start Capability**

The user rate per unit of purchased Black Start Capability for each Settlement Period will be calculated in accordance with ISO Tariff Section 2.5.28.6.

### **Imbalance Energy Charges**

Rates for Imbalance Energy will be calculated in accordance with the formula in ISO Tariff Section 11.2.4.1.

### **Replacement Reserve Charge**

The Replacement Reserve Charge will be calculated in accordance with ISO Tariff Sections 2.5.28.4 and 11.2.4.1.

### **Unaccounted for Energy**

Rates for UFE will be calculated in accordance with ISO Tariff Section 11.2.4.1.

### **Transmission Losses Imbalance Charges**

Transmission Losses for each hour will be calculated in accordance with ISO Tariff Sections 7.4.2.

### **Access Charges**

The High Voltage Access Charge and Transition Charge is set forth in ISO Tariff Schedule 3 of Appendix F. The Low Voltage Access Charge of each Participating TO is set forth in that Participating TO's TO Tariff or comparable document.

### **Usage Charges**

The amount payable by Scheduling Coordinators is determined in accordance with ISO Tariff Section 7.3.1.4.1. Usage Charges will be calculated in accordance with ISO Tariff Section 7.3.1.

### **Default Usage Charge**

The Default Usage Charge will be used in accordance with ISO Tariff Section 7.3.1.3.

### **Grid Operations Charge for Intra-Zonal Congestion**

Intra-Zonal Congestion during the initial period of operation will be managed in accordance with ISO Tariff Sections 7.2.6.2 and 7.2.6.3

### **Wheeling Access Charges**

The Wheeling Access Charge for transmission service is set forth in Section 7.1.4.1 of the ISO Tariff and Appendix II of the TO Tariffs.

### **Charge for Failure to Conform to Dispatch Instructions**

The Charge for Failure to Conform to Dispatch Instructions will be determined in accordance with ISO Tariff Section 2.5.22.11.

### **Reliability Must-Run Charge**

The Reliability Must-Run Charge will be determined in accordance with ISO Tariff Section 5.2.7.

### **FERC Annual Charge Recovery Rate**

The FERC Annual Charge Recovery Rate will be determined in accordance with ISO Tariff Section 7.5.

\* \* \* \* \*



## SETTLEMENT AND BILLING PROTOCOL

### SABP 3.1 Description of Charges to be Settled

The ISO shall, based on the Settlement Quality Meter Data it has received, calculate the following:

- (a) the amount due from each Scheduling Coordinator for its share for the relevant month of the Grid Management Charge in accordance with Appendix A. This Charge shall accrue on a monthly basis.
- (b) the amount due from each Scheduling Coordinator for the Grid Operations Charge in accordance with Appendix B for each of the Settlement Periods of Day 0.
- (c) the amount due from and/or owed to each Scheduling Coordinator for the Charge for each Ancillary Service in accordance with Appendix C, for each of the Settlement Periods of Day 0.
- (d) the amount due from and/or owed to each Scheduling Coordinator for Imbalance Energy in accordance with Appendix D, for each of the Settlement Periods of Day 0.
- (e) the amount due from and/or owed to each Scheduling Coordinator for Usage Charges in accordance with Appendix E, for each of the Settlement Periods of Day 0.
- (f) the amount due from each Scheduling Coordinator for Wheeling Out and Wheeling Through Charges and the amount owed to each Participating TO for these charges in accordance with Appendix F, for each of the Settlement Periods of Day 0.
- (g) the amounts due from/to Scheduling Coordinators for Voltage Support (supplemental reactive power charges) for each of the Settlement Periods of Day 0 in accordance with Appendix G.
- (h) the monthly charges due from/to Scheduling Coordinators for long term voltage support provided by Owners of Reliability Must-Run Units in accordance with Appendix G.
- (i) the amounts due from/to Scheduling Coordinators for the provision of Black Start Energy from Reliability Must-Run Units for each of the Settlement Periods of Day 0 in accordance with Appendix G.
- (j) the amounts due from/to Black Start Generators for the provision of Black Start Energy for each of the Settlement Periods of Day 0 in accordance with Appendix G.
- (k) the amount due from each UDC or MSS, or from a Scheduling Coordinator delivering Energy for the supply of Gross Load not directly connected to the facilities of a UDC or MSS, for the High Voltage Access Charge and Transition Charge in accordance with operating procedures posted on the ISO Home Page. These charges shall accrue on a monthly basis.
- (l) the amounts due from Scheduling Coordinators for FERC Annual Charges.

The ISO shall calculate these amounts using the software referred to in SABP 2.1 except in cases of system breakdown when it shall apply the procedures set out in SABP 9 (Emergency Procedures).

\* \* \* \* \*

**SETTLEMENT AND BILLING PROTOCOL  
APPENDIX I**

**Independent System Operator**

**MARKET INVOICE**

CUSTOMER 1  
101 N. Harbor Blvd.  
Anaheim CA 92808  
Please send payment to:

Invoice: 181  
Date: 20-JUN-97  
Customer Number: 1000

1000 South Fremont Avenue  
Building A-11  
Alhambra CA 91803

For all inquiries contact:  
1-800-ISO-HELP

Comments:

Charges settlement date: 20-JUN-97 to 20-JUN-97

<b>Charge Type</b>	<b>Description</b>	<b>Amount</b>
0001	0001-Day-Ahead Spinning Reserve due SC	-\$845.00
0002	0002-Day-Ahead Non-Spinning Reserve due SC	-\$1,025.00
0003	0003-Day-Ahead AGC/Regulation due SC	-\$1,025.00
0004	0004-Day-Ahead Replacement Reserve due SC	-\$1,385.00
0051	0051-Hour-Ahead Spinning Reserve due SC	-\$1,565.00
0052	0052-Hour-Ahead Non-Spinning Reserve due SC	-\$1,745.00
0053	0053-Hour-Ahead AGC/Regulation due SC	-\$1,925.00
0054	0054-Hour-Ahead Replacement Reserve due SC	-\$2,105.00
0101	0101-Day-Ahead Spinning Reserve due ISO	\$22,075.00
0102	0102-Day-Ahead Non-Spinning Reserve due ISO	\$23,935.00
0103	0103-Day-Ahead AGC/Regulation due ISO	\$25,795.00
0104	0104-Day-Ahead Replacement Reserve due ISO	\$27,655.00
0251	0251-Hour-Ahead Intra-Zonal Congestion Settlement due ISO	\$385.00
0252	0252-Hour-Ahead Intra-Zonal Congestion Charge/Refund due ISO	\$4,925.00
0253	0253-Hour-Ahead Inter-Zonal Congestion Settlement due ISO	\$5,285.00
0301	0301-Ex-Post A/S Energy due SC	-\$6,005.00
0302	0302-Ex-Post Supplemental Reactive Power due SC	-\$6,365.00
0303	0303-Ex-Post Replacement Reserve due ISO (Dispatched)	\$6,725.00
0304	0304-Ex-Post Replacement Reserve due ISO (Undispatched)	\$7,085.00

**Invoice Total**

\_\_\_\_\_  
\_\_\_\_\_

**Independent System Operator**

**FERC FEES INVOICE**

CUSTOMER 1  
101 N. Harbor Blvd.  
Anaheim CA 92808

Invoice: 181  
Date: 20-JUN-97  
Customer Number: 1000

Please send payment to:

1000 South Fremont Avenue  
Building A-11  
Alhambra CA 91803

For all inquiries contact:  
1-800-ISO-HELP

Comments:

Charges settlement date: 20-JUN-97 to 20-JUN-97

<u>Charge Type</u>	<u>Description</u>	<u>Amount</u>
<u>[Charge type to be determined]</u>	_____ FERC Annual Charges due ISO	<u>[Sample charge]</u>
<u>Invoice Total</u>		_____
		_____

**2.5.26.6 Temporary Exemption from Rescission of Energy Payments** ~~For the period June 15, 2000 through October 15, 2000,~~ Any Participating Load that has entered into a Participating Load Agreement and has responded to a Dispatch instruction will be exempt from the requirements of Section 2.5.26.2.3 in the hour of the Dispatch and for the following two (2) hours during the period beginning on June 15, 2000 and ending on the date specified in a notice (“Notice Terminating Temporary Exemption”) to be issued by the ISO. Such notice shall be posted on the ISO Home Page and distributed to Market Participants via e-mail at least seven (7) calendar days in advance of the termination of this temporary exemption.

### **10.6.3 Timing of Meter Data Submission.**

Scheduling Coordinators shall submit either hourly time-stamped Settlement Quality Meter Data for Scheduling Coordinator Metered Entities or profiled cumulative Settlement Quality Meter Data to the ISO for each Settlement Period in a Trading Day within ~~forty-fivethirty-one~~ (4531) ~~calendar~~Business Ddays of that Trading Day.

**11.2.9.1** The total annual charges levied under Section 11.2.9 shall not exceed \$0.095/MWh, applied to Gross Loads in the ISO Control Area and total exports from the ISO Controlled Grid, unless: (a) the ISO Governing Board reviews the basis for the charges above that level and approves the collection of charges above that level for a defined period; and (b) the ISO provides at least seven days' advance notice to Scheduling Coordinators of the determination of the ISO Governing Board.

**ISO Tariff Appendix F**  
**Schedule 3**  
**High Voltage Access Charges**

- 9.2 If the Participating TO is not [subject to FERC's jurisdictional under Sections 205 and 206 of the Federal Power Act](#), the Participating TO shall at its sole option: (1) file its High Voltage Transmission Revenue Requirement and Low Voltage Transmission Revenue Requirement for those facilities and Entitlements under the Operational Control of the ISO directly with the Commission in accordance with the rules and requirements established by the Commission; or (2) submit to the ISO its Transmission Revenue Requirement for those facilities and Entitlements under the Operational Control of the ISO, and the ISO shall publish such submission on the ISO Home Page. For the second option, the High Voltage and Low Voltage Transmission Revenue Requirement shall be submitted in a format and supported by information that substantially follows the FERC requirement for Transmission Revenue Requirement submissions or reconciles major differences in format. If, within 60 days of publication of such submission, the ISO does not raise an objection with the Participating TO, and no affected party raises an objection by written notification to the ISO and the Participating TO, the Transmission Revenue Requirement shall be accepted as submitted. If an objection is raised, the ISO will convene a meeting, the objective of which will be to achieve agreement over the Participating TO's TRR, applying, to the extent practicable, the guidelines and rulings of the FERC applicable to the determination of the TRR of Participating TOs that are [subject to FERC's jurisdictional under Sections 205 and 206 of the Federal Power Act](#). If the ISO determines that a consensual resolution is unlikely, it will so notify the Participating TO and the dispute shall be submitted to a Revenue Review Panel established by the ISO for resolution of the just and reasonable TRR of the Participating TO. The Revenue Review Panel shall consist of three individuals with substantial experience in the establishment of unbundled transmission rates for public utilities. Members of the panel may not have a financial stake in any participant in the California electricity market. The ISO shall establish, modify as necessary and appropriate from time to time, and post on the ISO Home Page rules of procedure for proceedings before the Revenue Review Panel, which rules shall afford the ISO and interested Market Participants the opportunity to participate and to submit information to the panel. In deciding upon a just and reasonable TRR for the Participating TO, the Revenue Review Panel shall, to the extent practicable, apply the guidelines and rulings of the FERC applicable to the determination of the TRR of a Participating TO that is [subject to FERC's jurisdictional under Sections 205 and 206 of the Federal Power Act](#). The decision of the panel shall be subject to review and acceptance by the FERC.

