

**1. DEFINITIONS AND INTERPRETATION.**

**1.1** Capitalized terms used in this ISO Tariff shall have the meanings set out in the Master Definitions Supplement set out in Appendix A to this ISO Tariff unless otherwise stated or the context otherwise requires.

**1.2** In this ISO Tariff “includes” or “including” shall mean “including without limitation”.

**1.3** In this ISO Tariff, unless the context otherwise requires:

- (a) the singular shall include the plural and vice versa;
- (b) references to a Section or Appendix shall mean a section or appendix of this ISO Tariff;
- (c) references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
- (d) 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;
- (e) any reference to a day, month, week or year is to a calendar day, month, week or year.

**2. ISO OPERATIONS.**

**2.1 Access to the ISO Controlled Grid.**

**2.1.1 Open Access.**

The ISO shall, subject to Sections 2.1.2 and 2.1.3, provide to all Eligible Customers open and non-discriminatory access to the ISO Controlled Grid regardless of the locations of their connections to the ISO Controlled Grid in accordance with the terms of this ISO Tariff including, in particular, the procedures for scheduling and Congestion Management. Energy and Ancillary Services may be transmitted on behalf of an Eligible Customer into, out of or through the ISO Controlled Grid only if scheduled by a Scheduling Coordinator. A Scheduling Coordinator must ensure that each Eligible Customer which it represents has all appropriate licenses or authorizations from the Local Regulatory Authority, FERC or any other regulatory body.

**2.1.2 Eligibility of Customers for Direct Access or Wholesale Sales.**

The eligibility of an End-Use Customer for Direct Access will be determined in accordance with the Direct Access eligibility and phase-in procedures (if any) adopted by the Local Regulatory Authority. Any dispute as to whether an End-Use Customer meets the eligibility criteria must be resolved by the Local Regulatory Authority prior to the ISO providing Direct Access to that End-Use Customer.

A Wholesale Customer shall not be entitled to participate in Wholesale Sales through a Scheduling Coordinator if it is not entitled to wholesale transmission service pursuant to the provisions of FPA Section 212(h).

**2.1.3 Facilities Financed by Local Furnishing Bonds or Other Tax-Exempt Bonds.**

**2.1.3.1** This Section 2.1.3 applies only to transmission facilities which are under the Operational Control of the ISO and are owned by a Local Furnishing Participating TO or other Tax Exempt Participating TO. Nothing in this ISO Tariff or the TCA shall compel (and the ISO is not authorized to request) any Local Furnishing Participating TO or other Tax Exempt Participating TO to violate: (1) 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 Debt or (2) the contractual restrictions and covenants regarding the use of any transmission facilities specified in Appendix B to the TCA.

**2.1.3.2** Each Local Furnishing Participating TO and other Tax Exempt Participating TO shall cooperate with and provide all necessary assistance to the ISO in developing an ISO Protocol to meet the objectives of Section 2.1.3.1 and shall keep the ISO fully informed of any changes necessary to that ISO Protocol from time to time.

**2.1.3.3** The ISO shall implement the ISO Protocol referred to in Section 2.1.3.1 provided that the Local Furnishing TOs and other Tax Exempt Participating TOs shall bear sole responsibility for the development of that ISO Protocol including the interpretation of all relevant legislation and the tax and other financial consequences of its implementation.

**2.2 Scheduling.**

**2.2.1 Scheduling Responsibilities and Obligations.**

The provisions of this Section 2.2 shall govern the ISO's scheduling of Energy and Ancillary Services on the ISO Controlled Grid and Congestion Management. Nothing in this ISO Tariff is intended to permit or require the violation of Federal or California law concerning hydro-generation and Dispatch, including but not limited to fish release

requirements, minimum and maximum dam reservoir levels for flood control purposes, and in-stream flow levels. In carrying out its functions, the ISO will comply with and will have the necessary authority to give instructions to Participating TOs and Market Participants to enable it to comply with requirements of environmental legislation and environmental agencies having authority over the ISO in relation to Environmental Dispatch and will expect that submitted Schedules will support compliance with the requirements of environmental legislation and environmental agencies having authority over Generators in relation to Environmental Dispatch. In contracting for Ancillary Services and Imbalance Energy the ISO will not act as principal but as agent for and on behalf of the relevant Scheduling Coordinators.

**2.2.2 ISO Scheduling Responsibilities.**

To fulfill its obligations with respect to scheduling Energy and Ancillary Services, the ISO shall:

- (a) provide Scheduling Coordinators with operating information and system status on a Day-Ahead and Hour-Ahead, Zonal and/or Scheduling Point basis to enable Scheduling Coordinators to optimize Generation, Demand and the provision of Ancillary Services;
- (b) determine whether Preferred Schedules submitted by Scheduling Coordinators meet the requirements of Section 2.2.7.2, and whether they will cause Congestion;
- (c) prepare Suggested Adjusted Schedules on a Day-Ahead basis and Final Schedules on a Day-Ahead and Hour-Ahead basis;
- (d) validate all Ancillary Services bids and self provided Ancillary Services;

- (e) reduce or eliminate Congestion based on Adjustment Bids and in accordance with the Congestion Management procedures; and
- (f) if necessary, make mandatory adjustments to Schedules in accordance with the Congestion Management procedures.

**2.2.3 Scheduling Coordinator Certification.**

The ISO shall accept Schedules and bids for Energy and Ancillary Services only from Scheduling Coordinators which it has certified in accordance with Section 2.2.4 as having met the requirements of this Section 2.2.3. Scheduling Coordinators scheduling Ancillary Services shall additionally meet the requirements of Section 2.5.6.

**2.2.3.1** Each Scheduling Coordinator shall:

- (a) demonstrate to the ISO's reasonable satisfaction that it is capable of performing the functions of a Scheduling Coordinator under this ISO Tariff including (without limitation) the functions specified in Sections 2.2.6 and 2.2.7 and that it is capable of complying with the requirements of all ISO Protocols;
- (b) identify each of the Eligible Customers (including itself if it trades for its own account) which it is authorized to represent as Scheduling Coordinator and confirm that the metering requirements under Section 10 are met in relation to each Eligible Customer for which it is submitting bids under this ISO Tariff;
- (c) confirm that each of the End-Use Customers it represents is eligible for Direct Access;
- (d) confirm that none of the Wholesale Customers it represents is ineligible for wholesale transmission service pursuant to the provisions of FPA Section 212(h);

- (e) demonstrate to the ISO's reasonable satisfaction that it meets the financial criteria set out in Section 2.2.3.2;
- (f) enter into an SC Agreement with the ISO; and
- (g) provide NERC tagging data.

**2.2.3.2** Each Scheduling Coordinator, UDC or MSS shall either maintain an Approved Credit Rating (which may differ for different types of transactions with the ISO) or provide in favor of the ISO one of the following forms of security for an amount to be determined by the Scheduling Coordinator, UDC or MSS and notified to the ISO under Section 2.2.7.3:

- (a) an irrevocable and unconditional letter of credit confirmed by a bank or financial institution reasonably acceptable to the ISO;
- (b) an irrevocable and unconditional surety bond posted by an insurance company reasonably acceptable to the ISO;
- (c) an unconditional and irrevocable guarantee by a company which has and maintains an Approved Credit Rating;
- (d) a cash deposit standing to the credit of an interest bearing escrow account maintained at a bank or financial institution designated by the ISO;
- (e) a certificate of deposit in the name of the ISO from a financial institution designated by the ISO; or
- (f) a payment bond certificate in the name of the ISO from a financial institution designated by the ISO.

Letters of credit, guarantees, surety bonds, payment bond certificates, escrow agreements

and certificates of deposit shall be in such form as the ISO may reasonably require from time to time by notice to Scheduling Coordinators, UDCs or MSSs. A Scheduling Coordinator, UDC or MSS which does not maintain an Approved Credit Rating shall be subject to the limitations on trading set out in Section 2.2.7.3. Until March 3, 2001, and notwithstanding anything to the contrary in the ISO Tariff, a Scheduling Coordinator or UDC that –

- (1) has an Approved Credit Rating on January 3, 2001; and
- (2) is an Original Participating Transmission Owner or is a Scheduling Coordinator for an Original Participating Transmission Owner;

shall not be subject to the limitations on trading set forth in Section 2.2.7.3 for the Trading Day if, by 8:30 a.m. on the day prior to the Trading Day, the ISO posts notice on the ISO Home Page that such trading limitations will not apply.

#### **2.2.3.3 Review of Creditworthiness.**

The ISO may review the creditworthiness of any Scheduling Coordinator, UDC or MSS which delays or defaults in making payments due under the ISO Tariff and, as a consequence of that review, may require such Scheduling Coordinator, UDC or MSS, whether or not it has (or is deemed to have) an Approved Credit Rating, to provide credit support in the form of:

- (a) an irrevocable and unconditional letter of credit by a bank or financial institution reasonably acceptable to the ISO;
- (b) a cash deposit standing to the credit of an interest-bearing escrow account maintained at a bank or financial institution designated by the ISO;

- (c) an irrevocable and unconditional surety bond posted by an insurance company reasonably acceptable to the ISO; or
- (d) a payment bond certificate in the name of the ISO from a financial institution designated by the ISO.

The ISO may require the Scheduling Coordinator, UDC or MSS to maintain such credit support for at least one (1) year from the date of such delay or default.

**2.2.4 Certification Procedure.**

**2.2.4.1** The ISO shall certify Scheduling Coordinators in accordance with the following application procedure. An SC Applicant shall furnish the ISO with the following:

- (a) a completed SC Application Form; and
- (b) a non-refundable application fee set by the ISO Governing Board.

The application fee will cover the reasonable costs associated with processing the application, including credit reference verification and the provision of documentation.

**2.2.4.2 Application.**

- (a) The SC Application Form must be sent to the ISO in accordance with Section 20.1, at least sixty (60) days in advance of the date on which the SC Applicant proposes to commence operating as a Scheduling Coordinator.
- (b) The ISO shall acknowledge receipt of the SC Application Form in writing promptly after receiving it.
- (c) The ISO shall review the application and may request additional information, clarifications or further documentation from the SC Applicant that the ISO reasonably considers may be relevant in determining whether the SC Applicant meets the eligibility requirements of Section 2.2.3 within 14 days after receiving the SC Application Form.
- (d) If the SC Applicant fails to respond appropriately to any request by the ISO pursuant to subsection (c), within seven (7) days or such longer period as the ISO may agree, the ISO may reject the application.

- (e) The ISO will notify the SC Applicant in writing whether its application has been accepted or rejected and, if rejected, will give a written explanation of the reasons for the rejection within 14 days after the SC Applicant has provided all of the additional information requested by the ISO pursuant to subsection (c).
- (f) The SC Applicant shall become a Scheduling Coordinator when, following acceptance of its Application, it has entered into an SC Agreement with the ISO and has met the requirements of Section 2.2.3.2.

**2.2.4.3** The SC Applicant may within twenty-eight (28) days following rejection of its application, appeal in writing that rejection to the ISO Governing Board setting out the grounds for the appeal. The ISO Governing Board will hear the appeal on and present an oral decision within thirty-five (35) days of the date the appeal notice is served on the ISO Governing Board in accordance with Section 20.1. The ISO Governing Board will notify the SC Applicant in writing of its decision within seven (7) days of hearing the appeal.

**2.2.4.4** If the ISO Governing Board rejects the application on appeal then the SC Applicant may appeal under the ISO ADR Procedure. The ISO shall agree to mediation under Section 13.2 if the SC Applicant so requests.

**2.2.4.5 Termination of Service Agreement.**

- (a) A Scheduling Coordinator's SC Agreement may be terminated by the ISO on written notice to the Scheduling Coordinator:
  - (i) if the Scheduling Coordinator no longer meets the requirements for eligibility set out in Section 2.2.3 and fails to remedy the default within a period of seven (7) days after the ISO has given written notice of the default;

- (ii) if the Scheduling Coordinator fails to pay any sum under this ISO Tariff and fails to remedy the default within a period of seven (7) days after the ISO has given written notice of the default; or
  - (iii) if the Scheduling Coordinator commits any other default under this ISO Tariff or any of the ISO Protocols which, if capable of being remedied, is not remedied within thirty (30) days after the ISO has given it written notice of the default; or
- (b) by the Scheduling Coordinator on sixty (60) days written notice to the ISO, provided that such notice shall not be effective to terminate the SC Agreement until the Scheduling Coordinator has complied with all applicable requirements of Section 2.2.5.

The ISO shall, following termination of an SC Agreement and within thirty (30) days of being satisfied that no sums remain owing by the Scheduling Coordinator under the ISO Tariff, return or release to the Scheduling Coordinator, as appropriate, any money or credit support provided by such Scheduling Coordinator to the ISO under Section 2.2.3.2.

**2.2.4.5.1** Pending acceptance of termination of service pursuant to Section 2.2.4.6.1 by FERC, the ISO will suspend the certification of a Scheduling Coordinator which has received a notice of termination under Section 2.2.4.5(a) and the Scheduling Coordinator will not be eligible to submit schedules and bids for Energy and Ancillary Services to the ISO.

**2.2.4.6 Notification of Termination.** The ISO shall, promptly after providing written notice of default to a Scheduling Coordinator as specified in Section 2.2.4.5(a), notify the Scheduling Coordinators that could be required to represent End Use Eligible Customers

of the Scheduling Coordinator under Section 2.2.4.7.2 if the default is not cured. The ISO shall, as soon as reasonably practicable following the occurrence of any of the events specified in Section 2.2.4.5, notify the Scheduling Coordinator and the Scheduling Coordinators that could be required to represent End Use Eligible Customers of the defaulting Scheduling Coordinator, and the UDCs, and shall as soon as reasonably practicable after the issuance of such notice of termination post such notice on the ISO Home Page. Termination of the SC Agreement will automatically remove the Scheduling Coordinator's certification under Section 2.2.4 and Section 2.5.6.

**2.2.4.6.1 Filing of Notice of Termination.** Any notice of termination given pursuant to Section 2.2.4.5 shall also be filed by the ISO with FERC.

**2.2.4.7 Continuation of Service on Termination.**

**2.2.4.7.1 Option for Eligible Customers to choose a new Scheduling Coordinator.**

When the ISO suspends the certification of a Scheduling Coordinator pending termination, Eligible Customers of the defaulting Scheduling Coordinator shall be entitled to select another Scheduling Coordinator to represent them. The ISO will post notice of any suspension on the ISO Home Page. Until the ISO is notified by another Scheduling Coordinator that it represents an Eligible Customer of the defaulting Scheduling Coordinator, the Eligible Customer of the defaulting Scheduling Coordinator will receive interim service in accordance with Section 2.2.4.7.2.

**2.2.4.7.2 Interim Service.**

The ISO shall maintain a list of Scheduling Coordinators willing to represent Eligible Customers of a defaulting Scheduling Coordinator, which list may be differentiated by UDC

Service Area. Scheduling Coordinators who indicate to the ISO their desire to be on such list shall be placed thereon by the ISO in random order.

- (a) When the ISO suspends the certification of a Scheduling Coordinator in accordance with Section 2.2.4.5.1, Eligible Customers of the defaulting Scheduling Coordinators shall be assigned to all Scheduling Coordinators on the list established pursuant to Section 2.2.4.7.2 in a non-discriminatory manner to be established by the ISO, and each Eligible Customer shall thereafter be represented by the Scheduling Coordinator to which it is assigned unless and until it selects another Scheduling Coordinator in accordance with Section 2.2.4.7.1, subject to subsection (b).
- (b) Unless the ISO is notified by another Scheduling Coordinator that it represents an Eligible Customer of a defaulting Scheduling Coordinator within seven (7) days of the notice of termination being posted on the ISO Home Page, the Scheduling Coordinator to which that Eligible Customer has been assigned in accordance with subsection (a) may establish a reasonable minimum period for service, not to exceed thirty (30) days.
- (c) In the event no Scheduling Coordinator indicates its willingness to represent Eligible Customers of a defaulting Scheduling Coordinator, the UDC, who has the obligation to serve End Use Customers of the Eligible Customer, if any, shall arrange to serve those End Use Customers of such Eligible Customers that are located within the Service Area of the UDC. Such service will be provided in a manner consistent with that

which the UDC provides, pursuant to the rules and tariffs of the Local Regulatory Authority, for its bundled end-use customers.

- (d) This Section shall not in any way require a UDC to provide or arrange for Scheduling Coordinator service for wholesale Eligible Customers.

**2.2.5 Eligible Customers Represented by Scheduling Coordinators.**

Each Scheduling Coordinator shall within ten (10) days of a request by the ISO provide the ISO with a list of the Eligible Customers which it represents at the date of the request.

**2.2.6 Responsibilities of a Scheduling Coordinator.**

Each Scheduling Coordinator shall be responsible for:

**2.2.6.1 Obligation to Pay.** Paying the ISO's charges in accordance with this ISO Tariff;

**2.2.6.2 Submit Schedules.** Submitting Schedules for Energy in the Day-Ahead Market and Hour-Ahead Market in relation to Market Participants for which it serves as Scheduling Coordinator;

**2.2.6.3 Modifications in Demand and Supply.** Coordinating and allocating modifications in scheduled Demand and exports and scheduled Generation and imports at the direction of the ISO in accordance with this ISO Tariff;

**2.2.6.4 Trades between Scheduling Coordinators.** Billing and settling an Inter-Scheduling Coordinator Energy or Ancillary Service Trade shall be done in accordance with the agreements between the parties to the trade. The parties to an Inter-Scheduling Coordinator Energy or Ancillary Service Trade shall notify the ISO, in accordance with the ISO Protocols, of the Zone in which the transaction is deemed to occur, which, for Inter-Scheduling Coordinator Energy Trades, shall be used for the purpose of identifying which Scheduling Coordinator will be responsible for payment of applicable Usage Charges;

**2.2.6.5 Scheduling Deliveries.** Including in its Schedules to be submitted to the ISO under this ISO Tariff, the Demand, Generation and Transmission Losses necessary to give effect to trades with other Scheduling Coordinators;

**2.2.6.6 Tracking and Settling Trades.** Tracking and settling all intermediate trades among the entities for which it serves as Scheduling Coordinator;

**2.2.6.7 Ancillary Services.** Providing Ancillary Services in accordance with Section 2.5;

**2.2.6.8 Annual and Weekly Forecasts.** Submitting to the ISO the forecasted weekly peak Demand on the ISO Controlled Grid and the forecasted Generation capacity. The forecasts shall cover a period of twelve (12) months on a rolling basis;

**2.2.6.9 ISO Protocols.** Complying with all ISO Protocols and ensuring compliance by each of the Market Participants which it represents with all applicable provisions of the ISO Protocols; and

**2.2.6.10 Interruptible Imports.** Identifying any Interruptible Imports included in its Schedules.

**2.2.7 Operations of a Scheduling Coordinator.**

**2.2.7.1 Maintain Twenty-four (24) Hour Scheduling Centers.** Each Scheduling Coordinator shall operate and maintain a twenty-four (24) hour, seven (7) days per week, scheduling center. Each Scheduling Coordinator shall designate a senior member of staff as its scheduling center manager who shall be responsible for operational communications with the ISO and who shall have sufficient authority to commit and bind the Scheduling Coordinator.

**2.2.7.2 Submitting Balanced Schedules.** A Scheduling Coordinator shall submit to the ISO only Balanced Schedules in the Day-Ahead Market and the Hour-Ahead Market. A Schedule shall be treated as a Balanced Schedule when aggregate Generation, Inter-Scheduling Coordinator Energy Trades (whether purchases or sales), and imports or exports to or from external Control Areas adjusted for Transmission Losses as appropriate, equals aggregate forecast Demand with respect to all entities for which the Scheduling Coordinator schedules in each Zone. If a Scheduling Coordinator submits a Schedule that is not a Balanced Schedule, the ISO shall reject that Schedule provided that Scheduling Coordinators shall have an opportunity to validate their Schedules prior to the deadline for submission to the ISO by requesting such validation prior to the applicable deadline.

**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, 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 (i) Grid Management Charge and/or Imbalance Energy, Ancillary Services, Grid Operations Charge, Wheeling Access Charge, 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 liabilities exceed 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.

**2.2.7.4** The ISO shall notify the relevant Scheduling Coordinator if it rejects a Schedule under Section 2.2.7.3 in which event the Scheduling Coordinator shall not be entitled to submit any further Schedules until it has demonstrated to the ISO's satisfaction that its ISO Security Amount has been increased sufficiently to avoid the limit on trading imposed under Section 2.2.7.3 from being exceeded.

**2.2.7.5** The ISO may restrict, or suspend a Scheduling Coordinator's right to Schedule or require the Scheduling Coordinator to increase its ISO Security Amount if at any time such Scheduling Coordinator's liability for Imbalance Energy is determined by the ISO to be

excessive by comparison with the likely cost of the amount of Energy scheduled by the Scheduling Coordinator.

### **2.2.8 The Scheduling Process.**

The ISO scheduling process is described for information purposes only in tabular form in Appendix C. The scheduling process by nature will need constant review and amendment as the market develops and matures and, therefore, is subject to change. The description in Appendix C aids understanding of the implementation and operation of the various markets administered by the ISO and is filed for information purposes only.

**2.2.8.1 Preferred Schedule.** A Preferred Schedule shall be submitted by each Scheduling Coordinator on a daily and/or hourly basis to the ISO. Scheduling Coordinators may also submit to the ISO, Ancillary Services bids in accordance with Section 2.5.10 and, where they elect to self provide Ancillary Services pursuant to Section 2.5.20.1, an Ancillary Service schedule meeting the requirements set forth in Section 2.5.20.6. The Preferred Schedule shall also include an indication of which resources (Generation or Load) if any may be adjusted by the ISO to eliminate Congestion. On receipt of the Preferred Schedule in the Day-Ahead scheduling process, the ISO shall notify the Scheduling Coordinator of any specific Reliability Must-Run Units which have not been included in the Preferred Schedule but which the ISO requires to run in the next Trading Day. The ISO will also notify the Scheduling Coordinator of any Ancillary Services it requires from specific Reliability Must-Run Units under their Reliability Must-Run Contracts in the next Trading Day. If the ISO identifies mismatches in the scheduled quantity or location for any Inter-Scheduling Coordinator Energy Trade, it will notify the Scheduling Coordinators concerned and give them until a specified time, which will allow

them approximately one half-hour, in which to modify their Schedules to resolve the mismatch before it applies the provisions of Section 2.2.11.3.4. If the ISO notifies a Scheduling Coordinator that there will be no Congestion on the ISO Controlled Grid and, subject to Section 2.2.11.3.4, the Preferred Schedule shall become that Scheduling Coordinator's Final Schedule.

**2.2.8.2 Suggested Adjusted Schedules.** In the Day-Ahead scheduling process, if the sum of Scheduling Coordinators' Preferred Schedules would cause Congestion across any Inter-Zonal Interface, the ISO shall issue to all Scheduling Coordinators an estimate of the Usage Charges if Congestion is not relieved and Suggested Adjusted Schedules that shall reflect adjustments made by the ISO to each Scheduling Coordinator's Preferred Schedule to eliminate Congestion, based on the initial Adjustment Bids submitted in the Preferred Schedules. The ISO will include in the Suggested Adjusted Schedules the resolution of any mismatches in Inter-Scheduling Coordinator Energy Trades, as determined by the ISO.

**2.2.8.3 Revised Schedules.** Following receipt of a Suggested Adjusted Schedule, a Scheduling Coordinator may submit to the ISO a Revised Schedule, which shall be a Balanced Schedule, and which shall seek to reduce or eliminate Congestion. If the ISO identifies mismatches in the scheduled quantity or location for any Inter-Scheduling Coordinator Energy Trade, it will notify the Scheduling Coordinators concerned and give them until a specified time, which will allow them approximately one half-hour, in which to modify their Schedules to resolve the mismatch before it applies the provisions of Section 2.2.11.3.4.

**2.2.8.4 Final Schedules.** If the ISO notifies a Scheduling Coordinator that there will be no Congestion on the ISO Controlled Grid, the Revised Schedule shall become that Scheduling Coordinator's Final Schedule. If no Scheduling Coordinator submits any

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 [Not Used]**

**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;

**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; and

**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]**

**2.2.11 Information to Be Submitted by Scheduling Coordinators to the ISO.**

Each Preferred Schedule submitted by a Scheduling Coordinator shall represent its preferred mix of Generation to meet its Demand and account for Transmission Losses and must include the name and identification number of each Eligible Customer for whom a Demand Bid or an Adjustment Bid is submitted, as well as:

**2.2.11.1 For Load:**

**2.2.11.1.1 Designated Location Code.** For all Load the Location Code of the Take-Out Point;

**2.2.11.1.2 Quantity at Take-Out Point.** The aggregate quantity (in MWh) of Demand being served at each Take-Out Point for which a bid has been submitted;

**2.2.11.1.3 Flexibility.** Whether the Preferred Schedule is flexible for adjustment to eliminate Congestion;

**2.2.11.1.4 Adjustment Bids.** The MW and \$/MWh values representing the Adjustment Bid curve for any Dispatchable Load.

**2.2.11.2 For Generation:**

**2.2.11.2.1 Location of Generating Units.** The Location Code of all Generating Units scheduled, if applicable, or the source Control Area and Scheduling Point;

**2.2.11.2.2 Quantity Scheduled.** The aggregate quantity (in MWh) being scheduled from each Generating Unit and System Resource;

**2.2.11.2.3 Notification of Flexibility.** Notification of whether the Preferred Schedule is flexible for adjustment to eliminate Congestion;

- 2.2.11.2.4 Adjustment Bids.** The MW and \$/MWh values representing the Adjustment Bid curve for each Generating Unit and System Resource for which an Adjustment Bid has been submitted;
- 2.2.11.2.5 Operating Characteristics.** Operating characteristics for each Generating Unit and System Resource for which an Adjustment Bid has been submitted; and
- 2.2.11.2.6 Must-Take/Must-Run Generation.** Identification of all scheduled Generating Units that are Regulatory Must-Take Generation or Regulatory Must-Run Generation.
- 2.2.11.3 For deliveries to/from other Scheduling Coordinators:**
- 2.2.11.3.1 Identification Code.** Identification Code of Scheduling Coordinator to which Energy is provided or from which Energy is received;
- 2.2.11.3.2 Quantity of Energy.** Quantity (in MWh) of Energy being received or delivered;
- 2.2.11.3.3 Zone.** The Zone within which Energy is deemed to be provided by one Scheduling Coordinator to another under the Inter-Scheduling Coordinator Energy Trades.
- 2.2.11.3.4 Adjustments.** Scheduling Coordinators will have the opportunity to resubmit Preferred Schedules and or Revised Schedules upon notice by the ISO if the ISO determines that the quantity or location of the receiving Scheduling Coordinator is not consistent with the quantity or location of the delivering Scheduling Coordinator. If the Scheduling Coordinators involved in a mismatched Inter-Scheduling Coordinator Energy Trade do not submit adjusted Schedules which resolve any mismatch as to quantities and provided that there is no dispute as to whether the mismatched trade occurred or over its

location, the ISO will adjust the Schedule containing the higher quantity to match the scheduled quantity of Energy in the other Schedule, except where the Schedule to be reduced contains only Inter-Scheduling Coordinator Energy Trades, in which case the ISO will adjust the other Schedule to match the Schedule containing the higher quantity. If there is a dispute between the Scheduling Coordinators as to whether the Inter-Scheduling Coordinator Energy Trade occurred or over its location, the ISO will remove the disputed trade from the Schedules in which it appears. The ISO will then balance the Schedules which are no longer Balanced Schedules by adjusting resources in the relevant Scheduling Coordinator's portfolio in accordance with the procedures detailed in the ISO Protocols.

**2.2.11.3.5** The Generating Unit or Dispatchable Load that the source or recipient of Energy traded.

**2.2.11.3.6** The MW and \$/MWh values representing the Adjustment Bid for any Generating Unit or Dispatchable Load that is the source or recipient of Energy traded.

**2.2.11.4 For Self Provided Ancillary Services:** Scheduling Coordinators electing to self provide Ancillary Services shall supply the information referred to in Section 2.5.20.5 in relation to each Ancillary Service to be self provided.

**2.2.11.5 For Interruptible Imports:** the quantity (in MWh) of Energy categorized as Interruptible Imports and whether the Scheduling Coordinator intends to self provide the Operating Reserve required by Section 2.5.3.2 to cover such Interruptible Imports or to purchase such Operating Reserve from the ISO.

**2.2.12 Timing of Day-Ahead Scheduling.**

**2.2.12.1** The ISO may in its sole discretion waive the timing requirements of this Section 2.2 where necessary to preserve System Reliability. The ISO may also waive the

timing requirements of Section 2.2 where, because of error or delay, the ISO is unable to meet the timing requirements. Any such waiver shall be published on WEnet.

**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, (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 Energy"), 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"). 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 Energy** -- For each hour specified in the RMR Dispatch Notice, the Applicable RMR Owner shall bid the entire amount of the RMR Contract Energy for that hour into the PX Day-Ahead Market at zero dollars per MWh. 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 Energy*** – For each hour specified in the RMR Dispatch Notice, 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 no less than the sum of the RMR Contract Energy for that hour and the amount of RMR Market Energy scheduled as a bilateral Day-Ahead transaction for that hour, 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 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 redispatched for that hour.

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 hour, the Applicable RMR Owner shall bid all remaining RMR Energy for that hour, net of any RMR Market Energy the Applicable RMR Owner elects to provide through an Hour-Ahead bilateral transaction for that 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 hour shall include all RMR Energy specified in the RMR Dispatch Notice for that hour, except for the amount of RMR Energy that the Applicable RMR Owner was required to bid into the PX Markets under 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 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 redispatched for that hour.

**2.2.12.2.3.3** Whether or not the RMR Energy is in the Final Preferred Schedule, the Applicable RMR Owner must deliver the RMR Energy pursuant to the RMR Dispatch Notice. 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.

**2.2.12.3 Non-PX Demand Information.** By 6:00 a.m. on the day preceding the Trading Day, each Scheduling Coordinator (other than the PX) shall provide to the ISO a Demand Forecast specified by UDC Service Area for which it will schedule deliveries for each of the Settlement Periods of the following Trading Day. The ISO shall aggregate the Demand information by UDC Service Area and transmit the aggregate Demand information to each UDC serving such aggregate Demand.

**2.2.12.4** The Preferred Schedule of each Scheduling Coordinator for the following Trading Day shall be submitted at or prior to 10:00 a.m. on the day preceding the Trading Day together with any Adjustment Bids and Ancillary Services bids.

**2.2.12.5** In submitting its Preferred Schedule, each Scheduling Coordinator shall notify the ISO of any Generating Units or Dispatchable Loads which are not scheduled but have submitted Adjustment Bids and are available for Dispatch at those same Adjustment Bids to assist in relieving Congestion.

**2.2.12.6 ISO Analysis of Preferred Schedules.** On receipt of the Preferred Schedules, the ISO will analyze the Preferred Schedules of Applicable RMR SCs to determine the compatibility of such Preferred Schedules with the RMR Dispatch Notices. If the ISO identifies mismatches in the scheduled quantity or location for any Inter-Scheduling Coordinator Energy Trade, it will notify the Scheduling Coordinators concerned

and give them until a specified time, which will allow them approximately one half-hour, in which to modify their Schedules to resolve the mismatch before it applies the provisions of Section 2.2.11.3.4. The ISO shall analyze the combined Preferred Schedules submitted by all Scheduling Coordinators to forecast the probability of Congestion being caused by the Preferred Schedules. If the ISO finds that the Preferred Schedules will not cause Congestion, and subject to Section 2.2.11.3.4, the Preferred Schedules shall become the Final Schedules and the ISO shall notify Scheduling Coordinators accordingly.

**2.2.12.7 Issuance of Suggested Adjusted Schedules.** If the ISO finds that the Preferred Schedules would cause Congestion, it shall issue Suggested Adjusted Schedules no later than 11:00 a.m. on the day preceding the Trading Day. The ISO will include in the Suggested Adjusted Schedules the resolution of any mismatches in Inter-Scheduling Coordinator Energy Trades, as determined by the ISO.

**2.2.12.8 Submission of Revised Schedules.** If the ISO has issued Suggested Adjusted Schedules, by 12:00 noon on the day preceding the Trading Day, each Scheduling Coordinator may submit a Revised Schedule to the ISO or shall inform the ISO that it does not wish to make any change to its previously submitted Preferred Schedule. If the ISO identifies mismatches in the scheduled quantity or location for any Inter-Scheduling Coordinator Energy Trade, it will notify the Scheduling Coordinators concerned and give them until a specified time, which will allow them approximately one half-hour, in which to modify their Schedules to resolve the mismatch before it applies the provisions of Section 2.2.11.3.4.

**2.2.12.8.1 Revised Schedules Become Final Day-Ahead Schedules.** Subsequent to receiving Revised Schedules if the ISO identifies no Congestion on the ISO Controlled Grid and subject to Section 2.2.11.3.4, the Revised Schedules and any unamended

Preferred Schedules shall become Final Day-Ahead Schedules and the ISO shall notify Scheduling Coordinators accordingly.

**2.2.12.8.2 Use of Congestion Management for Final Schedule.** Subsequent to receiving Revised Schedules if the ISO identifies Congestion on the ISO Controlled Grid, it shall use the Congestion Management provisions of this ISO Tariff and the ISO Protocols to develop the Final Day-Ahead Schedules.

**2.2.13 Timing of Hour-Ahead Scheduling.**

**2.2.13.1 Submission of Preferred Schedule.** Each Scheduling Coordinator's Preferred Schedule for each Settlement Period during a Trading Day together with any additional or updated Adjustment Bids or Ancillary Services Bids shall be submitted at least two hours prior to the commencement of that Settlement Period.

**2.2.13.1.1 Statements in Preferred Schedule.** In submitting its Preferred Schedule, each Scheduling Coordinator may submit Adjustment Bids for use in the Hour-Ahead Market to assist in relieving Congestion.

**2.2.13.1.2 Final Hour-Ahead Schedule Submission.** Each Hour-Ahead Schedule shall indicate the changes which the relevant Scheduling Coordinator wishes to make to the Final Day-Ahead Schedule.

**2.2.13.2 ISO Analysis of Preferred Schedules.** The ISO shall analyze the combined Preferred Schedules submitted by all Scheduling Coordinators to forecast the probability of Congestion being caused by the Preferred Schedules.

**2.2.13.2.1 Preferred Schedules Become Final Hour-Ahead Schedules.** If the ISO identifies no Congestion on the ISO Controlled Grid, the Preferred Schedules shall

become Final Hour-Ahead Schedules and the ISO shall notify Scheduling Coordinators accordingly.

**2.2.13.2.2 Congestion Management Provisions for Final Hour Ahead Schedules.**

If the ISO identifies Congestion, it shall use the Congestion Management provisions of Section 7.2 of this ISO Tariff and the ISO Scheduling Protocol to develop the Final Hour-Ahead Schedules.

**2.2.13.2.3 Unscheduled Demand.**

**2.2.13.2.3.1 Penalty on Unscheduled Demand.** Any Scheduling Coordinator whose total metered Demand in a Zone in a Settlement Period exceeds the total Demand reflected in its Final Hour-Ahead Schedule by more than five (5) percent of such metered Demand shall pay the penalty set forth in Section 2.2.13.2.3.2 for each MWh of the excess, unless the Scheduling Coordinator's metered Demand is less than 200 MW, in which case the Scheduling Coordinator shall pay the penalty to the extent its metered Demand exceeds the Demand in its Final Hour-Ahead Schedule by more than ten (10) MWh.

**2.2.13.2.3.2 Amount of Penalty.** For each MW of unscheduled Demand subject to penalty as determined in accordance with Section 2.2.13.2.3.1, a Scheduling Coordinator shall pay a penalty equal to the lesser of: (a) two times the Market Clearing Price of Imbalance Energy; and (b) \$100; but no less than \$0. This penalty shall be payable in addition to any amounts payable for the purchase of Imbalance Energy.

**2.2.13.2.3.3 Allocation of Penalty Revenues.** The revenues received by the ISO through the payment of the penalties described in Section 2.2.13.2.3.2 will be allocated in

proportion to metered Demand to those Scheduling Coordinators who do not incur penalties under Section 2.2.13.2.3.1 for the Settlement Period with respect to which the charges were assessed.

**2.2.13.3 Final Hour-Ahead Schedules.** The ISO shall inform each Scheduling Coordinator of its responsibilities to provide Ancillary Services in accordance with Section 2.5.21. Not later than thirty (30) minutes before the commencement of each Settlement Period, the ISO shall provide each Scheduling Coordinator with the Final Schedule for that Settlement Period. Each Final Schedule shall be a Balanced Schedule and shall contain the following information:

**2.2.13.3.1 Generation.**

**2.2.13.3.1.1** Name and identification number of each Participating Generator appearing in the Final Schedule;

**2.2.13.3.1.2** Location Code of each Generating Unit, System Resource and Scheduling Point;

**2.2.13.3.1.3** The changes in the final scheduled quantity (in MWh) for each such Generating Unit, System Resource and scheduled voltage;

**2.2.13.3.1.4** Notification if the scheduled Generation was adjusted to resolve Congestion; and

**2.2.13.3.1.5 [Not Used]**

**2.2.13.3.2 Load.**

**2.2.13.3.2.1** For each Load where a Demand Bid has been submitted, the Location Code of the Take-Out Point;

**2.2.13.3.2.2 Final Scheduled Quantity.** Final scheduled quantity (in MWh) of Demand; and

**2.2.13.3.2.3 Notification of Adjustment.** Notification if the scheduled Demand was adjusted to resolve Congestion.

**2.2.13.4 Usage Charges.** The ISO shall notify each Scheduling Coordinator of the applicable Usage Charge calculated in accordance with Section 7.3.

**2.2.14 Communications.**

**2.2.14.1** Communications between the ISO and Scheduling Coordinators shall take place via direct computer link to a dedicated terminal at the Scheduling Coordinator's scheduling center. The ISO will establish the back-up communication procedures as part of the ISO Protocols.

**2.2.14.2** Any Generation or Demand that is available for Dispatch must be capable of responding to ISO Dispatch instructions through a direct computer link or other means in accordance with the ISO Protocol on Dispatch.

**2.2.15 Verification of Information.**

The ISO shall be entitled to take all reasonable measures to verify that Scheduling Coordinators meet the technical and financial criteria set forth in Section 2.2.3 hereof and the accuracy of information submitted to the ISO pursuant to Section 2.2.11.

## **2.2.16 Relationship Between ISO and Participating Loads**

The ISO shall only accept bids for Supplemental Energy or Ancillary Services, or Schedules for self-provision of Ancillary Services, from Loads if such Loads are Participating Loads which meet standards adopted by the ISO and published on the ISO Home Page. The ISO shall not schedule Energy or Ancillary Services from a Participating Load other than through a Scheduling Coordinator.

## **2.3 System Operations under Normal and Emergency Operating Conditions.**

### **2.3.1 ISO Control Center Operations.**

#### **2.3.1.1 ISO Control Center.**

**2.3.1.1.1 Establish ISO Control Center.** The ISO shall establish a WSCC approved Control Area and control center to direct the operation of all facilities forming part of the ISO Controlled Grid, Reliability Must-Run Units and Generating Units providing Ancillary Services.

**2.3.1.1.2 Establish Back-up Control Facility.** The ISO shall establish back-up control facilities remote from the ISO Control Center sufficient to enable the ISO to continue to direct the operation of the ISO Controlled Grid, Reliability Must-Run Units and Generating Units providing Ancillary Services in the event of the ISO Control Center becoming inoperable.

**2.3.1.1.3 ISO Control Center Authorities.** The ISO shall have full authority, subject to Section 2.3.1.2 to direct the operation of the facilities referred to in Section 2.3.1.1.2 including (without limitation), to:

- (a) direct the physical operation by the Participating TOs of transmission facilities under the Operational Control of the ISO, including (without limitation) circuit

- breakers, switches, voltage control equipment, protective relays, metering, and Load Shedding equipment;
- (b) commit and dispatch Reliability Must-Run Units;
  - (c) order a change in operating status of auxiliary equipment required to control voltage or frequency;
  - (d) take any action it considers to be necessary consistent with Good Utility Practice to protect against uncontrolled losses of Load or Generation and/or equipment damage resulting from unforeseen occurrences;
  - (e) control the output of Generating Units that are selected to provide Ancillary Services and Imbalance Energy;
  - (f) dispatch Loads through direct Load control or other means at the ISO's discretion that are curtailable as an Ancillary Service; and
  - (g) procure Supplemental Energy.

**2.3.1.1.4 Coordination and Approval for Outages.** The ISO shall have authority to coordinate and approve Outages and returns to service of all facilities comprised in the ISO Controlled Grid and Reliability Must-Run Units in accordance with Section 2.3.3.

**2.3.1.1.5 Responsibility for Authorized Work on Facilities.** The ISO shall have authority to approve requests by Participating TOs to work on all energized transmission equipment under the Operational Control of the ISO.

**2.3.1.1.6** The ISO shall be the WSCC security coordinator for the ISO Controlled Grid.

**2.3.1.2 Market Participant Responsibilities.**

**2.3.1.2.1 Comply with Operating Orders Issued.** With respect to this Section 2.3.1.2, all Market Participants within the ISO Control Area shall comply fully and promptly with the ISO's operating orders, unless such operation would impair public health or safety. For this purpose ISO operating orders to shed Load shall not be considered as an impairment to public health or safety.

**2.3.1.2.2 Implementation of Instructions.** All Market Participants shall respond to ISO instructions with no more delay than specified in the response times set out in the ISO Protocols.

**2.3.1.3 Operating Reliability Criteria.**

**2.3.1.3.1** The ISO shall exercise Operational Control over the ISO Controlled Grid to meet planning and Operating Reserve criteria no less stringent than those established by WSCC and NERC as those standards may be modified from time to time, and Local Reliability Criteria that are in existence on the ISO Operations Date and have been submitted to the ISO by each Participating TO pursuant to Section 2.2.1(v) of the TCA. All Market Participants and the ISO shall comply with the ISO reliability criteria, standards, and procedures.

**2.3.1.3.2** The ISO may establish planning and Operating Reserve criteria more stringent than those established by WSCC and NERC or revise the Local Reliability Criteria subject to and in accordance with the provisions of the TCA.

**2.3.2 Management of System Emergencies.**

**2.3.2.1 Declaration of System Emergencies.** The ISO shall, when it considers that conditions giving rise to a System Emergency exist, declare the existence of such System

Emergency. A declaration by the ISO of a System Emergency shall be binding on all Market Participants until the ISO announces that the System Emergency no longer exists.

**2.3.2.2 Emergency Procedures.** In the event of a System Emergency, the ISO shall take such action as it considers necessary to preserve or restore stable operation of the ISO Controlled Grid. The ISO shall act in accordance with Good Utility Practice to preserve or restore reliable, safe and efficient service as quickly as reasonably practicable. The ISO shall keep system operators in adjacent Control Areas informed as to the nature and extent of the System Emergency in accordance with WSCC procedures and, where practicable, shall additionally keep the Market Participants within the Control Area informed.

**2.3.2.3 Intervention in Market Operations.** The ISO may intervene in the operation of the Day-Ahead Market, the Hour-Ahead Market or the Real Time Market and set the Administrative Price, if the ISO determines that such intervention is necessary in order to contain or correct a System Emergency as follows.

**2.3.2.3.1** The ISO will not intervene in the operation of the Day-Ahead Market unless there has been a total or major collapse of the ISO Controlled Grid and the ISO is in the process of restoring it.

**2.3.2.3.2** Before any such intervention the ISO must (in the following order):  
(a) dispatch all scheduled Generation and all other Generation offered or available to it regardless of price (including all Adjustment Bids, Supplemental Energy bids, Ancillary Services and reserves); (b) dispatch all interruptible loads made available by UDCs to the ISO in accordance with the relevant agreements with UDCs; (c) dispatch or curtail all price-responsive Demand that has been bid into any of the markets and exercise its rights under all load curtailment contracts available to it; (d) exercise Load

Shedding to curtail Demand on an involuntary basis to the extent that the ISO considers necessary.

**2.3.2.3.3** The Administrative Price in relation to each of the markets for Imbalance Energy and Ancillary Services shall be set at the applicable Market Clearing Price in the Settlement Period immediately preceding the Settlement Period in which the intervention took place. When Administrative Prices are imposed, Inter-Zonal Congestion will be managed in accordance with DP 8.5 of the Dispatch Protocol.

**2.3.2.3.4** The intervention will cease as soon as the ISO has restored all Demand that was curtailed on an involuntary basis under Section 2.3.2.3.2(d).

**2.3.2.4 Emergency Guidelines.** The ISO shall issue protocols for all Market Participants to follow during a System Emergency. These guidelines shall be consistent with the specific obligations of Scheduling Coordinators and Market Participants referenced in Section 2.3.2.7 below.

**2.3.2.5 Periodic Tests of Emergency Procedures.** The ISO shall develop and administer periodic unannounced tests of System Emergency procedures set out in the ISO Protocols. Such tests shall be designed to ensure that the ISO Market Participants are capable of promptly and efficiently responding to imminent or actual System Emergencies.

**2.3.2.6 Prioritization Schedule for Shedding and Restoring Load.** Prior to the ISO Operations Date, and annually thereafter, the ISO shall, in consultation with Market Participants and subject to the provisions of Section 2.1.3, develop a prioritization schedule for Load Shedding should a System Emergency require such action. The prioritization schedule shall also establish a sequence for the restoration of Load in the event that multiple Scheduling Coordinators or Market Participants are affected by service interruptions and Load must be restored in blocks.

**2.3.2.7 Further Obligations Relating to System Emergencies.** The ISO and Participating TOs shall comply with their obligations in Section 9 of the TCA. The ISO and UDCs shall comply with their obligations in Section 4 of this ISO Tariff. The ISO and Generators shall comply with their obligations in Section 5 of this ISO Tariff.

**2.3.2.8 Use of Load Curtailment Programs.**

**2.3.2.8.1 Use of UDC's Existing Load Curtailment Programs.** As an additional resource for managing System Emergencies, the ISO will, subject to Section 2.1.3, notify the UDCs when the conditions to implement their Load curtailment programs have been met in accordance with their terms. Each UDC shall by not later than October 1 of each year advise the ISO of the capabilities of its Load curtailment programs for the forthcoming year, and the conditions under which those capabilities may be exercised and shall give the ISO as much notice as reasonably practicable of any change to such programs.

**2.3.2.8.2 Load Curtailment.** A Scheduling Coordinator may specify that Loads will be reduced at specified Market Clearing Prices or offer the right to exercise Load curtailment to the ISO as an Ancillary Service or utilize Load curtailment itself (by way of self provision of Ancillary Services) as Non-Spinning Reserve or Replacement Reserve. The ISO, at its discretion, may require direct control over such Curtailable Demand to assume response capability for managing System Emergencies. However, non-firm Loads shall not be eligible to provide Curtailable Demand if they are receiving incentives for interruption under existing programs approved by a Local Regulatory Authority, unless: a) participation in the ISO's Ancillary Services markets is specifically authorized by such Local Regulatory Authority, and b) there exist no contingencies on the availability, nor any unmitigated incentives encouraging prior curtailment, of such interruptible Load for Dispatch as Curtailable Demand as a result of the operation of such existing program.

The ISO may establish standards for automatic communication of curtailment instructions to implement Load curtailment as a condition for accepting any offered Curtailable Demand as an Ancillary Service.

**2.3.2.9 System Emergency Reports and Sanctions.**

**2.3.2.9.1 Review of Major Outages.** The ISO with the cooperation of any affected UDC shall jointly perform a review following a major Outage that affects at least ten (10) percent of the Load served by the Distribution System of a UDC or any Outage that results in major damage to the ISO Controlled Grid or to the health and safety of personnel. The review shall address the cause of the Outage, the response time and effectiveness of emergency management efforts, and whether the operation, maintenance or scheduling practices of the ISO, any Participating TOs, Eligible Customers, UDCs or Participating Generators enhanced or undermined the ability of the ISO to maintain or restore service efficiently and in a timely manner.

**2.3.2.9.2 Provide Information to Review Outages.** Participating TOs, Participating Generators, Eligible Customers, Scheduling Coordinators and UDCs shall promptly provide information requested by the ISO to review Outages pursuant to Section 2.3.2.9.1 and to prepare Outage reports. The ISO shall seek the views of any affected Participating TOs, Participating Generators, Eligible Customers, Scheduling Coordinator or UDCs and allow such affected Participating TOs, Participating Generators, Eligible Customers, Scheduling Coordinators or UDCs to comment on any issues arising during the preparation of a report. All findings and reports arising from the ISO's review shall be shared with Participating TOs, Participating Generators, Eligible Customers and UDCs.

**2.3.2.9.3 Imposing Sanctions.** If the ISO finds that the operation and maintenance practices of any Participating TOs, Participating Generators, Eligible Customers, or UDCs prolonged the response time or contributed to the Outage, the ISO may impose sanctions on the responsible Participating TOs, Participating Generators, Eligible Customers, or UDCs provided that no sanction shall be imposed in respect of actions taken in compliance with the ISO's instructions or pursuant to a Remedial Action Scheme. The ISO shall develop and file with FERC a schedule of such sanctions. Any dispute concerning whether sanctions should be imposed under this Section shall be resolved through the ISO ADR Procedures. The schedule of sanctions filed with FERC (including categories and levels of sanctions) shall not be subject to the ISO ADR Procedures. The ISO shall publish on the ISO Home Page details of all instances in which a sanction has been imposed.

**2.3.3 Coordination of Outages and Maintenance.**

**2.3.3.1 ISO Outage Coordination Office.** The ISO Outage Coordination Office shall be established by the ISO and shall coordinate and approve Maintenance Outages of all facilities forming part of the ISO Controlled Grid and Reliability Must-Run Units. The ISO shall additionally coordinate and approve Outages required for new construction and for work on de-energized and live transmission facilities (e.g., relay maintenance or insulator washing) and associated equipment.

**2.3.3.2 Requirement for Approval.** An Operator shall not take facilities comprised in the ISO Controlled Grid or Reliability Must-Run Units out of service for the purposes of planned maintenance or for new construction or other work except as approved by the ISO Outage Coordination Office.

**2.3.3.3 Requests for Outages in Real Time Operation.** Requests for Outages of facilities forming part of the ISO Controlled Grid and Reliability Must-Run Units in real time operation shall be made by the Operator to the ISO Control Center.

**2.3.3.4 Single Point of Contact.** Requests for approvals and coordination of all Maintenance Outages (consistent with Section 2.3.3.1) will be through a single point of contact between the ISO Outage Coordination Office and each Operator. The single point of contact for the ISO and each Operator will be specified from time to time by the Operator and the ISO pursuant to the detailed procedures referred to in Section 2.3.3.5.

**2.3.3.5 Maintenance Outage Planning.** Each Operator shall, by not later than October 1 each year, provide the ISO with a program of all Maintenance Outages which it wishes to undertake during the next following year. In the case of a Participating TO, that program shall be developed in consultation with the UDCs interconnected with that Participating TO's system and shall take account of each UDC's planned maintenance requirements. The nature of the information to be provided and the detailed Maintenance Outage planning procedure shall be established by the ISO in consultation with the ISO Grid Operations Committee and set out in an ISO Protocol. Either the ISO, pursuant to Section 2.3.3.6, or an Operator, subject to Section 2.3.3.5.4, may at any time request a change to an Approved Maintenance Outage. An Operator may, upon seventy-two (72) hours advance notice, schedule with the ISO Outage Coordination Office a Maintenance Outage on its system, subject to the conditions of Sections 2.3.3.5.1, 2.3.3.5.2, and 2.3.3.5.3.

**2.3.3.5.1** The ISO Outage Coordination Office shall evaluate whether the requested Maintenance Outage or change to an Approved Maintenance Outage is likely to have a detrimental effect on the efficient use and reliable operation of the ISO Controlled Grid or the facilities of a Connected Entity.

**2.3.3.5.2** Where the ISO Outage Coordination Office reasonably determines that the requested Maintenance Outage or the requested change to an Approved Maintenance Outage, when evaluated together with existing Approved Maintenance Outages, is not likely to have a detrimental effect on the efficient use and reliable operation of the ISO Controlled Grid, the ISO shall authorize the Maintenance Outage or change to the Approved Maintenance Outage, and shall so notify the requesting Operator and other entities who may be directly affected.

**2.3.3.5.3** Where, in the reasonable opinion of the ISO Outage Coordination Office, the requested Maintenance Outage or requested change to an Approved Maintenance Outage is likely to have a detrimental effect on the efficient use and reliable operation of the ISO Controlled Grid, the ISO Outage Coordination Office may reject the requested Maintenance Outage or requested change to Approved Maintenance Outage. The determination of the ISO Outage Coordination Office shall be final and binding on the Operator. If, within fourteen (14) days of having made its determination, the Operator requests the ISO Outage Coordination Office to provide reasons for its determination, it shall do so as soon as is reasonably practicable. The ISO will give reasons for informational purposes only and without affecting in any way the finality or validity of the determination.

**2.3.3.5.4** In the event an Operator of facilities forming part of the ISO Controlled Grid cancels an Approved Maintenance Outage after 5:00 a.m. of the day prior to the day upon which the outage is scheduled to commence and the ISO determines that the change was not required to preserve System Reliability, the ISO may disregard the availability of the affected facilities in determining the availability of transmission capacity in the Day-Ahead Market, provided, however, that the ISO will, as promptly as practicable, notify Market

Participants and reflect the availability of the affected facilities in determining the availability of transmission capacity in the Hour-Ahead Market.

**2.3.3.6 Maintenance Outage Requests by the ISO.** The ISO Outage Coordination Office may at any time request a Maintenance Outage or a change to an Approved Maintenance Outage from an Operator if, in the opinion of the ISO Outage Coordination Office, the requested Maintenance Outage or change is required to secure the efficient use and reliable operation of the ISO Controlled Grid. In addition, the ISO Outage Coordination Office may, by providing notice no later than 5:00 a.m. of the day prior to the day upon which the outage is scheduled to commence, direct the Operator of facilities forming part of the ISO Controlled Grid to cancel an Approved Maintenance Outage, when necessary to preserve or maintain System Reliability or to avoid unduly significant market impacts that would arise if the outage were to proceed as scheduled. The Operator, acting in accordance with Good Utility Practice, shall comply with the ISO's direction and the provisions of Sections 2.3.3.6.1 and 2.3.3.6.2 shall apply. The ISO shall give notice of any such direction to Market Participants prior to the deadline for submission of initial Preferred Day-Ahead Schedules for the day on which the outage was to have commenced. For purposes of this section, an "unduly significant market impact" means an unplanned event or circumstance (e.g., unseasonable weather, a forced outage of a facility, or other occurrence) that adversely affects the competitive nature and efficient workings of the ISO markets, and is of such severity that a prudent transmission operator would not have scheduled a transmission maintenance outage of its facility if the unplanned event or circumstance could have been anticipated.

**2.3.3.6.1** The Operator may: (1) refuse the request; (2) agree to the request; or (3) agree to the request subject to specific conditions. The Operator, acting in accordance with Good Utility Practice, shall make every effort to comply with requests by the ISO

Outage Coordination Office. In the event that the Operator refuses the ISO's request, it shall provide to the ISO Outage Coordination Office written justification for its position.

**2.3.3.6.2** In response the ISO Outage Coordination Office may: (1) overrule any refusal of a Maintenance Outage or a change to an Approved Maintenance Outage by an Operator, in which case the ISO Outage Coordination Office determination shall be final; (2) accept any changes or conditions proposed by the Operator, in which case the Maintenance Outage request or the request to change an Approved Maintenance Outage shall be deemed to be amended accordingly; or (3) reject the change or condition, in which case the ISO Outage Coordination Office and the Operator shall determine if acceptable alternative conditions or changes can be agreed. If the Operator and the ISO Outage Coordination Office cannot agree on acceptable alternative conditions or changes to the ISO Coordination Office's request for a Maintenance Outage or change to an Approved Maintenance Outage, the ISO Outage Coordination Office determination shall be final.

**2.3.3.6.3** The ISO will compensate the applicable Participating TO for any direct and verifiable costs that such Participating TO incurs as a result of the ISO's cancellation of an Approved Maintenance Outage pursuant to this Section 2.3.3.6. For purposes of this section, direct costs include verifiable labor and equipment rental costs that have been incurred by the applicable Participating TO solely as a result of the ISO's cancellation of the Approved Maintenance Outage. Each Participating TO must make a reasonable effort to avoid incurring any such direct costs through such measures as, but not limited to, the prompt cancellation of all contractual arrangements with third parties related to the Approved Maintenance Outage.

**2.3.3.6.4** The amount used to compensate each applicable Participating TO, as described in Section 2.3.3.6.3, shall be charged to the Scheduling Coordinators in proportion to their metered Demand (including Exports) during the Settlement Period(s) of the originally scheduled transmission outage.

**2.3.3.7** The ISO Outage Coordination Office shall provide notice to the Operator of the approval or disapproval of any requested Maintenance Outage. Additionally, the ISO Outage Coordination Office shall notify any Connected Entity that may in the reasonable opinion of the ISO Outage Coordination Office be directly affected by an Approved Maintenance Outage. The content of and procedures for such notice shall be established by the ISO in consultation with the ISO Grid Operations Committee.

**2.3.3.8 Final Approval.** On the day on which an Approved Maintenance Outage is scheduled to commence for facilities forming part of the ISO Controlled Grid and Reliability Must-Run Units, the Operator shall contact the ISO Control Center for final approval of the Maintenance Outage. No Maintenance Outage shall commence without such final approval (including the time of release, in hours and minutes) being obtained from the ISO Control Center whose decision shall be final.

**2.3.3.9 Forced Outages.**

**2.3.3.9.1** Coordination of all Forced Outages (consistent with Section 2.3.3.1) will be through the single point of contact between the Operator and the ISO Control Center.

**2.3.3.9.2** All notifications of Forced Outages shall be communicated to the ISO Control Center with as much notice as possible in order that the necessary security analysis and ISO Controlled Grid assessments may be performed. If prior notice of a Forced Outage cannot be given, the Operator shall notify the ISO of the Forced Outage immediately after it occurs.

**2.3.3.9.3** The ISO Control Center shall coordinate any operational changes necessary to accommodate a Forced Outage and Market Participants shall comply with the ISO's instructions given for that purpose.

**2.3.3.9.4** All Forced Outage approvals shall be communicated by the ISO Control Center to Operators likely to be affected by the Outage using the same procedures adopted for Maintenance Outage coordination procedures.

**2.3.3.10 Other Control Areas.** The ISO Outage Coordination Office shall make all reasonable efforts to coordinate Outages involving other Control Areas or affecting an intertie, import or export capability not under the Operational Control of the ISO to the extent that they may affect the reliability of the ISO Controlled Grid.

**2.3.3.11 Records.** The ISO and all Operators shall develop procedures to keep a record of approved Maintenance Outages as they are implemented and to report the completion of approved Maintenance Outages.

**2.3.4 Management of Overgeneration Conditions.**

The ISO's management of Overgeneration relates only to real time. Overgeneration in real time will be mitigated by the ISO as follows; provided that the ISO operator will have the discretion, if necessary to avoid a system emergency, to eliminate one or more of the following steps.

**2.3.4.1** Commencing one hour prior to the start of the Settlement Period, the ISO will, based on available Adjustment Bids, Supplemental Energy bids and Ancillary Service Energy bids, issue Dispatch instructions to Scheduling Coordinators to reduce Generation and imports for the next operating hour.

**2.3.4.2** To the extent that there are insufficient decremental Energy bids available for the operating hour to fully mitigate the Overgeneration condition, the ISO will notify Scheduling Coordinators of the projected amount of Overgeneration to be mitigated in that hour.

**2.3.4.3** In addition to the action taken under 2.3.4.2, the ISO will, if it considers it necessary to maintain the reliable operation of the ISO Control Area, offer Energy for sale on behalf of Scheduling Coordinators to adjacent Control Area operators at the estimated BEEP Interval Ex Post Price or, if the ISO considers it necessary, at a price established by the ISO on behalf of Scheduling Coordinators, to be paid to adjacent Control Area operators.

**2.3.4.4** To the extent that the steps described in Sections 2.3.4.1 through 2.3.4.3 fail to mitigate Overgeneration, the ISO will instruct Scheduling Coordinators to reduce either Generation, or imports, or both. The amount of the reduction for each Scheduling Coordinator will be calculated pro rata based on the product of the total required reduction in Generation and imports (or increase in exports) and the ratio of its Demand to the total Demand in the ISO Control Area.

**2.3.4.5** To the extent that the above steps fail to fully mitigate the Overgeneration, the ISO will issue mandatory Dispatch instructions for specific reductions in Generating Unit output and external imports and all relevant Scheduling Coordinators shall be obligated to comply with such Dispatch instructions.

**2.3.4.6** Any costs incurred by the ISO in implementing Section 2.3.4.3 shall be reimbursed to the ISO by Scheduling Coordinators based upon the extent to which they supplied Energy, in metered amounts, greater than the Generation and imports scheduled in their Final Schedules and consumed Energy, in metered amounts, less than the Demand scheduled in their Final Schedules, as a proportion of the total amount of such excess or shortfall among all Scheduling Coordinators.

**2.3.5 Assurance of Adequate Generation and Transmission to meet Applicable Operating and Planning Reserve.**

**2.3.5.1 Generation Planning Reserve Criteria.** Generation planning reserve criteria shall be met as follows:

**2.3.5.1.1** On an annual basis, the ISO shall prepare a forecast of weekly Generation capacity and weekly peak Demand on the ISO Controlled Grid. This forecast shall cover a period of twelve months and be posted on the WEnet and the ISO may make the forecast available in other forms at the ISO's option.

**2.3.5.1.2** If the forecast shows that the applicable WSCC/NERC Reliability Criteria can be met during peak Load periods, then the ISO shall take no further action.

**2.3.5.1.3** If the forecast shows that the applicable WSCC/NERC Reliability Criteria cannot be met during peak Load periods, then the ISO shall facilitate the development of market mechanisms to bring the ISO Controlled Grid during peak periods into compliance with the Applicable Reliability Criteria (or such more stringent criteria as the ISO may impose pursuant to Section 2.3.1.3.2). The ISO shall solicit bids for Replacement Reserves in the form of Ancillary Services, short-term Generation supply contracts of up to one (1) year with Generators, and Load curtailment contracts giving the ISO the right to reduce the Loads of those parties that win the contracts when there is insufficient Generation capacity to satisfy those Loads in addition to all other Loads. The curtailment contracts shall provide that the ISO's curtailment rights can only be exercised after all available Generation capacity has been fully utilized unless the exercise of such rights would allow the ISO to satisfy the Applicable Reliability Criteria at lower cost, and the curtailment rights shall not be exercised to stabilize or otherwise influence prices for power in the Energy markets.

**2.3.5.1.4** If Replacement Reserves, short-term Generation supply contracts or curtailment contracts are required to meet Applicable Reliability Criteria, the ISO shall select the bids that permit the satisfaction of those Applicable Reliability Criteria at the lowest cost.

**2.3.5.1.5** Notwithstanding the foregoing, if the ISO concludes that it may be unable to comply with the Applicable Reliability Criteria, the ISO shall, acting in accordance with Good Utility Practice, take such steps as it considers to be necessary to ensure compliance, including the negotiation of contracts through processes other than competitive solicitations.

**2.3.5.1.6** The ISO may, in addition to the required annual forecast, publish a forecast of the peak loads and Generation resources for two or more additional years. This forecast would be for information purposes to allow Market Participants to take appropriate steps to satisfy the Applicable Reliability Criteria, and would not be used by the ISO to determine whether additional resources are necessary.

**2.3.5.1.7** In fulfilling its requirement to ensure that the applicable Generation planning reserve criteria are satisfied, the ISO shall rely to the maximum extent possible on market forces.

**2.3.5.1.8** Except where and to the extent that such costs are recovered from Scheduling Coordinators pursuant to Section 2.5, and except as provided in Section 2.3.5.1.9, all costs incurred by the ISO in any hour pursuant to any contract entered into under this Section 2.3.5.1 shall be charged to each Scheduling Coordinator pro rata based upon the same proportion as the Scheduling Coordinator's metered hourly Demand (including exports) bears to the total metered hourly Demand (including exports) served in that hour.

**2.3.5.1.9** Costs incurred by the ISO pursuant to any contract entered into under this Section 2.3.5.1 for resources to meet any portion of the anticipated difference between

forward schedules and the real-time deviations from those schedules shall be charged to each Scheduling Coordinator pro rata based upon the same proportion as the Scheduling Coordinator's obligation for deviation Replacement Reserve in the hour, determined in accordance with Section 2.5.28.4 bears to the total deviation Replacement Reserve in that hour.

**2.4 [Not Used]**

**2.4.1 [Not Used]**

**2.4.1.1 [Not Used]**

**2.4.2 [Not Used]**

**2.4.2.1 [Not Used]**

**2.4.2.2 [Not Used]**

**2.4.3 Existing Contracts for Transmission Service.**

**2.4.3.1** In accordance with Section 2.4.4 each Participating TO and holder of transmission rights under an Existing Contract will work with the ISO to develop operational protocols (which shall be based on existing protocols and procedures to the extent possible) which allow existing contractual rights to be exercised in accordance with Section 2.4.4 in a way that: (i) maintains the existing scheduling and curtailment priorities under the Existing Contract; (ii) is minimally burdensome to the ISO (i.e., creates the least impact on the ISO's preferred operational protocols, rules and procedures); (iii) to the extent possible, imposes no additional financial burden on either the Participating TO or the contract rights holder (beyond that in the Existing Contract); (iv) consistent with the terms of the Existing Contracts, makes as much transmission capacity not otherwise utilized by the holder of the transmission rights as possible available to the ISO for allocation to Market Participants; (v) is minimally burdensome to the Participating TO and the holder of the transmission

rights from an operational point of view; and (vi) does not require the ISO to interpret or underwrite the economics of the Existing Contract.

**2.4.3.2** The ISO may refuse to accept Schedules submitted pursuant to Existing Contracts which do not meet the requirements of the principles, protocols and rules referred to in this Section 2.4.3 and Section 2.4.4.

**2.4.3.3** The ISO will, if requested, advise parties to Existing Contracts regarding the operational aspects of any Existing Contract renegotiations that they undertake.

**2.4.4 ISO Administration of Existing Contracts for Transmission Service.**

**2.4.4.1 Continuation of Rights and Obligations of Non-Participating TOs Under Existing Contracts.**

**2.4.4.1.1** The transmission service rights and obligations of Non-Participating TOs under Existing Contracts, including all terms, conditions and rates of the Existing Contracts, as they may change from time to time under the terms of the Existing Contracts, will continue to be honored by the parties to those contracts, for the duration of those contracts. For the purpose of Section 2.4.4, the transmission service rights of non-Participating TOs are called "Existing Rights."

**2.4.4.1.2** If a Participating TO is a party to an Existing Contract under which Existing Rights are provided, the Participating TO shall attempt to negotiate changes to the Existing Contract to align the contract's scheduling and operating provisions with the ISO's scheduling and operational procedures, rules and protocols, to align operations under the contract with ISO operations, and to minimize the contract parties' costs of administering the contract while preserving their financial rights and obligations as defined in Section 2.4.4.3.

In addition, the Participating TO shall attempt to negotiate changes to provisions in the Existing Contract to ensure that whenever transmission services under the Existing Contract are used to deliver power to a Market Participant that is subject to Access Charges under this Tariff, no duplicative charge for access to the ISO Controlled Grid will be charged under the Existing Contract. For purposes of such negotiations, there shall be a presumption that any charges in an Existing Contract that were designed to recover the embedded cost of transmission facilities within the ISO Controlled Grid will be fully recovered through the Access Charges established under Section 7.1 of this Tariff.

**2.4.4.1.3** If a Non-Participating TO has an Existing Contract with a Participating TO under which the Non-Participating TO's transmission facilities are subject to use by the Participating TO, the Non-Participating TO's rights to the use and ownership of its facilities shall remain unchanged, regardless of the Participating TO's act of turning over the Participating TO's entitlement to use the Non-Participating TO's facilities to the extent possible to the Operational Control of the ISO.

**2.4.4.1.4** If the parties to an Existing Contract are unable to reach agreement on the changes needed to meet the requirements of Section 2.4.4.1.2 or Section 2.4.4.1.3, any disputes related thereto shall be addressed using the dispute resolution provisions of the Existing Contract, including any remedies as are provided by law. The rights of the parties to seek changes or to challenge such changes, under the FPA or as otherwise provided by law, are preserved consistent with the terms of the Existing Contract. Unless and until the necessary changes to the Existing Contract are made, all terms and conditions of the Existing Contracts will continue to be honored by the parties to the contracts.

**2.4.4.2 Conversion of Participating TOs' Rights and Obligations Under Existing Contracts.**

**2.4.4.2.1** Parties who are entitled to transmission service rights under Existing Contracts and who choose to become Participating TOs must, at the time of becoming a Participating TO exercise those rights by converting them to "Converted Rights", which are described in Section 2.4.4.3. A party who ceases to be a Participating TO at or before the end of the five year period beginning at the ISO Operations Date shall be entitled to resume service under any Existing Contract to which it is then a party, so long as that contract has not expired or been terminated. For the purposes of Sections 2.4.3 and 2.4.4, Pacific Gas & Electric Company, Southern California Edison Company and San Diego Gas & Electric Company will be deemed to have converted all rights that they may hold under Existing Contracts to Converted Rights as described in Section 2.4.4.3 with effect from the ISO Operations Date. Schedules that utilize Converted Rights shall be submitted by a Scheduling Coordinator that has been certified in accordance with Section 2.2.4.

**2.4.4.2.2** As part of the conversion referred to in Section 2.4.4.2.1, modifications to an Existing Contract may be needed. Any required modifications must be agreed upon by all parties to the contract. Failure of the parties to reach agreement on the modifications required under Section 2.4.4.2.1 shall be addressed using the dispute resolution provisions of the Existing Contract, including any remedies as are provided by law consistent with the terms of the Existing Contract. The rights of the parties to challenge such changes, under the FPA or as otherwise provided by law, are preserved.

**2.4.4.3 Converted Rights.**

**2.4.4.3.1** A recipient of transmission service under an Existing Contract that chooses to become a Participating TO and convert its rights to ISO transmission service, and the Participating TO which provides the transmission service under the Existing Contract shall change the terms and conditions of the contract to provide that

**2.4.4.3.1.1** The recipient of the transmission service received under an Existing Contract that has converted its rights to ISO transmission service shall turn over Operational Control of its transmission entitlement to the ISO for management by the ISO in accordance with the ISO's scheduling, Congestion Management, curtailment and other ISO Protocols;

**2.4.4.3.1.2** The recipient of the transmission service under an Existing Contract that has converted its rights to ISO transmission service shall obtain all future transmission services within, into (starting at the ISO Controlled Grid), out of, or through the ISO Controlled Grid using the ISO's scheduling and operational procedures and protocols and the ISO Tariff and any applicable TO Tariff, provided that this provision shall not affect the rights, if any, of the contract parties to extend Existing Contracts.

**2.4.4.3.1.3** [Not Used]

**2.4.4.3.1.4** For the capacity represented by its rights, the recipient of firm transmission service under an Existing Contract that has converted its rights to ISO transmission service shall be entitled to receive the Usage Charge revenues for the capacity (and/or alternatives to such revenues, such as physical transmission rights or transmission congestion contracts, should they exist) and all Wheeling revenue credits throughout the term that the capacity is available under the Existing Contract. The recipient of less than firm service shall receive these revenues in proportion to the degree of firmness and the terms and conditions of their service.

**2.4.4.3.1.5** The recipient of the transmission service received under an Existing Contract that has converted its rights to ISO transmission service shall continue to have the obligation to pay the provider of the service for its transmission service at the rates provided in the Existing Contract, as they may change from time to time under the terms of the Existing Contract, or as mutually agreed between the contract parties, through the term of the

contract, subject to the terms and conditions of the contract, including the rights of the parties to the contract to seek unilateral or other changes pursuant to Section 205 or Section 206 of the Federal Power Act and the FERC's Rules and Regulations or as otherwise provided by law.

**2.4.4.3.2** Other aspects of such an Existing Contract may also need to be changed. If the parties to the contract are unable to negotiate such changes, they shall seek appropriate changes through the mechanisms provided within the contract, including the rights, if any, to seek unilateral or other changes pursuant to Section 205 or Section 206 of the Federal Power Act and the FERC's Rules and Regulations or as otherwise provided by law.

**2.4.4.4 ISO Treatment of Non-Participating TOs Existing Rights.**

**2.4.4.4.1** For the purposes of Section 2.4.4, Existing Rights fall into one of three general categories: firm transmission service, non-firm transmission service, and conditional firm transmission service. The parties to an Existing Contract shall notify the ISO which Existing Rights fall into each category, through the operating instructions described in Section 2.4.4.5.1.1. The parties to an Existing Contract shall also be responsible to submit to the ISO any other necessary operating instructions based on their contract interpretations needed by the ISO to enable the ISO to perform its duties.

**2.4.4.4.1.1** The ISO will have no role in interpreting Existing Contracts. The parties to an Existing Contract will, in the first instance, attempt jointly to agree on any operating instructions that will be submitted to the ISO. In the event that the parties to the Existing Contract cannot agree upon the operating instructions submitted by the parties to the Existing Contract, the dispute resolution provisions of the Existing Contract, if applicable, shall be used to resolve the dispute; provided that, until the dispute is resolved, and unless the Existing Contract specifies otherwise, the ISO shall implement the Participating TO's operating instructions. If both parties to an Existing Contract are Participating TOs and the

parties cannot agree to the operating instructions submitted by the parties, until the dispute is resolved, and unless the Existing Contract specifies otherwise, the ISO shall implement the operating instructions of the first Participating TO for which the Existing Contract is an Encumbrance.

**2.4.4.4.2** The ISO's scheduling protocols will accommodate Existing Rights, so that the holders of Existing Rights will receive the same priorities (in scheduling, curtailment, assignment and other aspects of transmission system usage) to which they are entitled under their Existing Contracts.

**2.4.4.4.3** Scheduling deadlines and operational procedures associated with Existing Rights will be honored by the ISO.

**2.4.4.4.4** All contractual provisions that have been communicated to the ISO in writing in accordance with Section 2.4.4.4.1 by the parties to the Existing Contracts, shall be honored by the ISO and the parties to the Existing Contracts and shall be implemented in accordance with the terms and conditions of the relevant Existing Contracts so notified.

**2.4.4.4.4.1** The holders of Existing Rights will not be responsible for paying Usage Charges related to those rights, nor will they be entitled to receive Usage Charge revenues related to those rights.

**2.4.4.4.4.2** Other than any existing rights to such revenues under the Existing Contracts, the holders of Existing Rights will not be entitled to an allocation of revenues from Wheeling Out or Wheeling Through services on the ISO Controlled Grid, related to those rights.

**2.4.4.4.4.3** The holders of Existing Rights shall continue to pay the providers of the Existing Rights at the rates provided in the associated Existing Contracts, as they may change from time to time under the terms of the Existing Contracts.

**2.4.4.4.4 [Not Used]**

**2.4.4.4.5** Parties with Existing Rights shall continue to pay for Transmission Losses or Ancillary Services requirements in accordance with such Existing Contracts as they may be modified or changed in accordance with the terms of the Existing Contract. Likewise the Participating TOs shall continue to provide Transmission Losses and any other Ancillary Services to the holder of the rights under an Existing Contract as may be required by the Existing Contracts. To the extent that Transmission Losses or Ancillary Service requirements associated with Existing Rights are not the same as those under the ISO's rules and protocols, the ISO will not charge or credit the Participating TO for any cost differences between the two, but will provide the parties to the Existing Contracts with details of its Transmission Losses and Ancillary Services calculations to enable them to determine whether the ISO's calculations result in any associated shortfall or surplus and to enable the parties to the Existing Contracts to settle the differences bilaterally or through the relevant TO Tariff.

**2.4.4.5 ISO Protocols Shall Accommodate Existing Rights.**

The ISO will implement the provisions of Section 2.4.4.4 in its Scheduling Protocol. The objective will be to ensure that under the ISO rules and protocols, Existing Rights will enjoy the same relative priorities vis-à-vis new, ISO-provided transmission uses, as they would under the Existing Contracts and the FERC Order 888 tariffs. Under the ISO Scheduling Protocol:

**2.4.4.5.1.1** Existing scheduling rules, curtailment priorities and any other relevant terms and conditions associated with the scheduling and day-to-day implementation of transmission rights will be documented in sets of operating instructions provided to the ISO by the parties to the Existing Contracts. The documentation of these operating instructions,

and disputes related to these operating instructions, will be handled in accordance with the terms of Section 2.4.4.4.1.1.

**2.4.4.5.1.2** To the extent that the operating instructions can be exercised independently of the ISO by the parties to the Existing Contract and the results forwarded to the ISO, the operating instructions shall be exercised by the Participating TOs, and the outcomes shall be forwarded to the ISO. The determination of whether the operating instructions can be “exercised independently of the ISO by the parties to the Existing Contract” shall be made using the same procedures described in Section 2.4.4.4.1.1.

**2.4.4.5.1.3** To the extent that the operating instructions can not be exercised independently of the ISO and the results forwarded to the ISO (because, for example, they require iteration with the ISO’s scheduling process, would unduly interfere with the ISO’s real-time management of curtailments or would unduly interfere with the ability of the holder of rights to exercise its rights), the operating instructions will be provided to the ISO for day-to-day implementation. In this case, the ISO shall act as the scheduling agent for the Participating TOs with regard to Existing Rights.

**2.4.4.5.1.4** The ISO shall determine, based on the information provided by the Participating TOs and contract rights holders under Sections 2.4.4.5.1.2 and 2.4.4.5.1.3, the transmission capacities that (i) must be reserved for firm Existing Rights, (ii) may be allocated for use as ISO transmission service (i.e., new firm uses), (iii) must be reserved by the ISO for conditional firm Existing Rights, and (iv) remain for any non-firm Existing Rights for which a Participating TO has no discretion over whether or not to provide such non-firm service.

**2.4.4.5.1.5** The ISO shall coordinate the scheduling of Existing Rights with the scheduling of ISO transmission service, using the ISO’s Day-Ahead scheduling rules and protocols. In doing so, the ISO shall subtract, from the capacity that is available for the ISO

to schedule in the ISO's Day-Ahead scheduling process, an appropriate amount of transmission capacity reflecting the amount and nature of the Existing Rights.

**2.4.4.5.1.6** For those Existing Rights the use of which has not been scheduled by the rights-holders by the start of the ISO's Hour-Ahead scheduling process, the ISO shall coordinate the scheduling of Existing Rights with the scheduling of ISO transmission service, using the ISO's Hour-Ahead scheduling protocols. In doing so, the ISO may, at its own discretion, consider as available for the ISO to schedule in its Hour-Ahead scheduling process, any or all of the transmission capacity associated with Existing Rights the use of which has not been scheduled by the rights-holders in the ISO's Hour-Ahead scheduling process.

**2.4.4.5.2** The ISO shall recognize that the obligations, terms or conditions of Existing Contracts may not be changed without the voluntary consent of all parties to the contract (unless such contract may be changed pursuant to any applicable dispute resolution provisions in the contract or pursuant to Section 205 or Section 206 of the FPA and the FERC's Rules and Regulations or as otherwise provided by law).

**2.4.4.5.3** The parties to Existing Contracts shall remain liable for their performance under the Existing Contracts. The ISO shall be liable in accordance with the provisions of this ISO Tariff for any damage or injury caused by its non-compliance with the operating instructions submitted to it pursuant to this Section 2.4.4.

**2.4.4.5.4** Unless specified otherwise, in the event that the dispute resolution mechanisms prescribed in an Existing Contract, including all recourses legally available under the contract, can not, in the first instance, result in a resolution of such a dispute, the ISO's ADR Procedure will be used to resolve any disputes between the ISO and the

Participating TO regarding any aspects of the implementation of Section 2.4.3 and 2.4.4, including the reasonableness of a Participating TO's operating instructions or any other decision rules which the Participating TO may submit to the ISO as part of the operational protocols. The transmission rights-holder(s) under the Existing Contract shall have standing to participate in the ISO ADR Procedure.

