

**SCHEDULING PROTOCOL (SP)**

**SP 1 OBJECTIVES, DEFINITIONS AND SCOPE**

**SP 1.1 Objectives**

The objectives of this Protocol are:

- (a) to process the scheduling input data (submitted to the ISO under the Ancillary Service Requirements Protocol (ASRP), the Demand Forecasting Protocol (DFP), and the Schedules and Bids Protocol (SBP)) in order to develop Final Schedules for the Day-Ahead and Hour-Ahead Markets (real time management of the ISO Controlled Grid is addressed in the Dispatch Protocol (DP));
- (b) to provide for the scheduling of the use of Firm Transmission Rights and use of transmission service rights under Existing Contracts;
- (c) to assist the ISO in purchasing Ancillary Services; and
- (d) to manage Congestion.

**SP 1.2 Definitions**

**SP 1.2.1 Master Definitions Supplement**

Any word or expression defined in the Master Definitions Supplement to the ISO Tariff shall have the same meaning where used in this Protocol. A reference to a Section or an Appendix is to a Section or an Appendix of the ISO Tariff. References to SP are to this Protocol or to the stated paragraph of this Protocol.

**SP 1.2.2 Special Definitions for this Protocol**

In this Protocol, the following words and expressions shall have the meanings set opposite them:

“**ISO Home Page**” means the ISO internet home page at <http://www.caiso.com/iso> or such other internet address as the ISO shall publish from time to time.

**SP 1.2.3 Rules of Interpretation**

Unless the context otherwise requires, if the provisions of this Protocol and the ISO Tariff conflict, the ISO Tariff will

prevail to the extent of the inconsistency. The provisions of the ISO Tariff have been summarized or repeated in this Protocol only to aid understanding.

- (a) A reference in this Protocol to a given agreement, ISO Protocol or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made.
- (b) The captions and headings in this Protocol are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Protocol.
- (c) This Protocol shall be effective as of the ISO Operations Date.
- (e) References to time are references to the prevailing Pacific time.

**SP 1.3            Scope**

**SP 1.3.1        Scope of Application to Parties**

The SP applies to the following entities:

- (a) Scheduling Coordinators (SCs);
- (b) Utility Distribution Companies (UDCs);
- (c) Participating Transmission Owners (PTOs);
- (d) interfacing Control Area operators in accordance with Inter-Control Area agreements entered into with the ISO, to the extent the agreement between the Connected Entity and the ISO so provides; and
- (e) the Independent System Operator (ISO).

**SP 1.3.2        Liability of ISO**

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

**SP 2            INTERFACE REQUIREMENTS**

The WEnet interface requirements and associated information requirements are described in the SBP.

**SP 3**

**TIME LINES**

- (a) Consistent with Sections 2.2.12.1 and 2.5.2.2 of the ISO Tariff, the ISO may implement any temporary variation or waiver of timing requirements contained in this SP (including the omission of any step) if any of the following criteria are met:
  - (i) the ISO receives Schedules that require delay in performing Day-Ahead Market or Hour-Ahead Market evaluations, such as in the case of the ISO receiving Inter-Scheduling Coordinator Energy Trades that do not balance;
  - (ii) the ISO requires additional time to fulfill its responsibilities pursuant to Section 2.2.2 of the ISO Tariff;
  - (iii) problems with data or the processing of data cause a delay in receiving or issuing Schedules or publishing information on the WEnet;
  - (iv) problems with telecommunications or computing infrastructure cause a delay in receiving or issuing Schedules or publishing information on the WEnet; or
  - (v) such waiver or variation of timing requirements is reasonably necessary to preserve System Reliability, prevent an imminent or threatened System Emergency or to retain Operational Control over the ISO Controlled Grid during an actual System Emergency.
  
- (b) If the ISO temporarily implements a waiver or variation of such timing requirements (including the omission of any step) consistent with Section 2.2.12.1 of the ISO Tariff and SP 3(a), the ISO will publish the following information on WEnet as soon as practicable:
  - (i) the exact timing requirements affected;
  - (ii) details of any substituted timing requirements;
  - (iii) an estimate of the period for which this waiver or variation will apply; and
  - (iv) reasons for the temporary waiver or variation.

**SP 3.1.2 Preferred Schedules**

The Preferred Schedule is the initial Schedule submitted by a SC in the Day-Ahead Market or Hour-Ahead Market. A Preferred Schedule shall be a Balanced Schedule submitted to the ISO by each SC on a daily and/or hourly basis.

**SP 3.1.3 Seven-Day Advance Schedules**

SCs may submit Balanced Schedules for up to seven (7) Trading Days at a time, representing the SC's Preferred Schedule for each Day-Ahead Market and/or Hour-Ahead Market. These advance Schedules can be overwritten by new Preferred Schedules at any time prior to the deadline for submitting Day-Ahead Schedules and Hour-Ahead Schedules, as described in the SP. If not overwritten by the SC, a Schedule submitted in advance of this deadline for submission will become the SC's Preferred Schedule at the deadline for submitting Day-Ahead Schedules and/or Hour-Ahead Schedules. There is no validation of Schedules submitted in advance of the deadline for submitting Preferred Schedules. As part of the scheduling and validation process, the ISO will calculate and publish, via WEnet, the GMMs applicable to the Day-Ahead and Hour-Ahead Markets eight (8) days ahead of the Trading Day to which they relate, as described in SP 4.

**SP 3.1.4 Suggested Adjusted Schedules**

If the sum of SCs' Preferred Schedules would cause Congestion across any Inter-Zonal Interface, the ISO shall issue Suggested Adjusted Schedules to all SCs in the Day-Ahead Market only. These Suggested Adjusted Schedules will not apply to uses of transmission owned by non-participating transmission owners nor to uses of either Existing Rights or Non-Converted Rights under Existing Contracts. A modification flag, set by the ISO, will indicate whether the scheduled output in a Settlement Period has been modified as a result of Congestion Management. The ISO will publish as public information, via the WEnet, estimated Usage Charges for Energy transfers between Zones.

**SP 3.1.5 Revised Schedules**

Following receipt of a Suggested Adjusted Schedule, a SC may submit to the ISO a Revised Schedule, which shall be a Balanced Schedule, and which shall seek to reduce or eliminate Congestion. There are no Revised Schedules in the Hour-Ahead Market.

- (a) an estimate of the Ancillary Services requirements for the ISO Control Area (see the ASRP for the details on these requirements);
- (b) a forecast of Loop Flows over interfaces with other Control Areas;
- (c) a forecast of the potential for Congestion conditions;
- (d) a forecast of total and Available Transfer Capacity over certain rated transmission paths and Inter-Zonal Interfaces;
- (h) a description of any temporary adjustments to Ancillary Service standards that the ISO has determined by that time to make, in accordance with Section 2.5.2.2.

**SP 3.2.1.1 By Two Hours Before Close of the PX Day-Ahead Market, One Day Ahead**

By two hours before the close of the PX Day-Ahead Market on the day ahead of the Trading Day, the ISO will notify SCs of the Energy Requirements from any Reliability Must-Run Units which the ISO requires to run in the Trading Day, except in those instances where a Reliability Must-Run Unit requires more than one day's notice, in which case the ISO may notify the applicable SC more than one day in advance of the Trading Day;

**SP 3.2.1.2 By One Hour Before Close of the PX Day-Ahead Market, One Day Ahead**

By one hour before the close of the PX Day-Ahead Market on the day prior to the Trading Day, SCs that have been notified that a Reliability Must-Run Unit is required to run in the Trading Day will inform the ISO whether the RMR Owner will take payment from the market or under the RMR Contract.

**SP 3.1.6 By 6:00 am, One Day Ahead**

By 6:00 am on the day ahead of the Trading Day (for example, by 6:00 am on Tuesday for the Wednesday Trading Day), the following information flows for each Settlement Period of the Trading Day will be required to take place:

- (a) SCs will provide, via WEnet, the ISO with forecasts of their Direct Access Demand by UDC Service Area ;
- (b) the ISO will publish, via WEnet, an updated forecast of system Demands and of the Ancillary Services requirements; and
- (c) the ISO will validate (in accordance with the SBP) the information submitted above by SCs and UDCs.

correct, the ISO will notify the affected SC. If the other Control Area Operator's records are in error, no changes will be required by the ISO or affected SCs. The affected SC is required to correct its schedule in the Hour-Ahead Market.

with Section 2.4.4.5.1.4 of the ISO Tariff, the four categories are as follows:

- (a) transmission capacity that must be reserved for firm Existing Rights and firm Non-Converted Rights;
- (b) transmission capacity that may be allocated for use as ISO transmission service (i.e., “new firm uses”);
- (c) transmission capacity that may be allocated by the ISO for conditional firm Existing Rights and conditional firm Non-Converted Rights; and
- (d) transmission capacity that may remain for any other uses, such as non-firm Existing Rights and non-firm Non-Converted Rights for which the Responsible PTO has no discretion over whether or not to provide such non-firm service.

**SP 7.2.2 Prioritization of Transmission Uses**

The following rules are designed to enable the ISO to honor Existing Contracts in accordance with Sections 2.4.3 and 2.4.4 of the ISO Tariff. Regardless of the success of the application of such rules, it is intended that the rights under Existing Contracts will be honored as contemplated by the ISO Tariff. In each of the categories described in SP 7.2.1, the terms and conditions of service may differ among transmission contracts. These differences will be described by each Responsible PTO in the instructions submitted to the ISO in advance of the scheduling process in accordance with the SBP. In addition, Generation, Inter-Scheduling Coordinator Energy Trade imports or external imports in one Zone must be matched by an equal magnitude of Demand, Inter-Scheduling Coordinator Energy Trade exports or external exports in an adjacent Zone (see SP 7.2.3 for a summary of allowable linkages). Scheduling and curtailment priorities associated with each category will be defined by SCs through the use of contract usage templates submitted as part of their Schedules as described in the SBP.

- (a) Transmission capacity for Schedules will be made available to holders of firm Existing Rights and firm Non-Converted Rights in accordance with this SP and the terms and conditions of their Existing Contracts. In the event that the firm uses of these rights must be curtailed, they will be

Schedules submitted by SCs as \$0.00/MWh Adjustment Bids.  
Therefore, there will be no contract reference number  
associated with non-firm Existing Contract rights.

**SP 7.2.3 Allowable Linkages**

As indicated in SP 7.2.2, Generation, Inter-Scheduling Coordinator Energy Trade imports or external imports in one Zone must be matched by an equal magnitude of Demand, Inter-Scheduling Coordinator Energy Trade exports or external exports in the same Zone or in an adjacent Zone.

**SP 7.3 The Day-Ahead Process**

**SP 7.3.1 Validation**

The ISO will coordinate the scheduling of the use of Existing Rights and Non-Converted Rights with new firm uses in the Day-Ahead process. The ISO will validate the Schedules submitted by SCs on behalf of the rights holders for conformity with the instructions previously provided by the Responsible PTO in accordance with the SBP. Invalid Schedules will be rejected and the ISO will immediately communicate the results of each SC's validation to that SC via WENet



