

adjacent Control Areas and the ISO Control Area's frequency correction and time error correction obligations.

**"Dynamic Schedule"** means a telemetered reading or value which is updated in real time and which is used as a schedule in the ISO EMS calculation of ACE and the integrated value of which is treated as a schedule for interchange accounting purposes.

**"ISO Home Page"** means the ISO internet home page at [www.caiso.com](http://www.caiso.com) or such other internet address as the ISO shall publish from time to time.

**ASRP 1.2.3**

**Rules of Interpretation**

- (a) 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.
- (b) 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.
- (c) 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.
- (d) This Protocol shall be effective as of the ISO Operations Date.

**ASRP 1.3**

**Scope**

**ASRP 1.3.1**

**Scope of Application to Parties**

This Protocol applies to the ISO and to the following:

- (a) Participating Generators
- (b) Operators
- (c) UDCs
- (d) Providers of Curtailable Demand

- (e) Scheduling Coordinators
- (f) Metered Subsystem Operators.

**ASRP 1.3.2 Liability of the 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.

**ASRP 2 ANCILLARY SERVICES STANDARDS**

**ASRP 2.1 Basis of Standards**

**ASRP 2.1.1 Basic criteria**

- (a) The ISO shall base its Ancillary Services standards upon the Western System Coordinating Council (WSCC) Minimum Operating Reliability Criteria (MORC) and North American Electric Reliability Council (NERC) Criteria to the extent they are applicable to the ISO Controlled Grid.
- (b) The ISO may adjust the Ancillary Services standards temporarily to take into account, among other things, variations in system conditions, real-time dispatch constraints, contingencies, and voltage and dynamic stability assessments.

**ASRP 2.2 Review of Standards**

**ASRP 2.2.1 Grid Operations Committee Review**

The ISO Grid Operations Committee shall periodically undertake a review of the ISO Controlled Grid operations to determine any revision to the Ancillary Services standards to be used in the ISO Control Area. As a minimum the ISO Technical Advisory Committee shall conduct such reviews to accommodate revisions to WSCC and NERC standards.

**ASRP 2.2.2 Contents of Grid Operations Committee Reviews**

Periodic reviews may include, but are not limited to:

- (a) analysis of the deviation between actual and forecast Demand;

- ASRP 4.4.1            Dynamic Scheduling of Regulation from External Resources**
- Scheduling Coordinators are allowed to bid or self-provide their Regulation obligation in whole or in part from resources located outside the ISO Control Area by dynamically scheduling such resources; if it can be demonstrated that the control function will use dedicated communication links (either directly or through EMS computers) for ISO computer control and telemetry to provide this function in accordance with the ISO's standards and procedures posted on the ISO Home Page.
- ASRP 4.5                Standard for Regulation: Procurement**
- ASRP 4.5.1            Procurement of Non Self-Provided Regulation**
- Regulation necessary to meet ISO requirements not met by self-provided Regulation will be procured by the ISO as described in the ISO Tariff.
- ASRP 4.5.2            Certification and Testing Requirements**
- Each Generating Unit and System Unit used to bid Regulation or used to self provide Regulation must have been certified and tested by the ISO using the process defined in Appendix A to this Protocol.
- ASRP 4.5.3            [Not Used]**
- ASRP 4.5.4            [Not Used]**
- ASRP 5                 OPERATING RESERVE STANDARDS**
- The ISO needs, as a minimum, Operating Reserve, consisting of Spinning Reserve and Non-Spinning Reserve, sufficient to meet WSCC MORC. The Operating Reserve requirement shall be equal to (a) 5% of the Demand (except the Demand covered by firm purchases from outside the ISO Control Area) to be met by Generation from hydroelectric resources, plus 7% of the Demand (except the Demand covered by firm purchases from

operating level within ten minutes after issue of the Dispatch instruction.

**ASRP 5.7 Standard for Non-Spinning Reserve: Control**

Each provider of Non-Spinning Reserve must be capable of receiving a Dispatch instruction within one minute from the time the ISO Control Center elects to Dispatch the Non-Spinning Reserve resource and must ensure that its resource can be at the Dispatched operating level or condition within ten minutes after issue of the Dispatch instruction.

**ASRP 5.8 Standard for Operating Reserve: Procurement**

**ASRP 5.8.1 Procurement of Non Self-Provided Operating Reserve**

Operating Reserve necessary to meet ISO requirements not met by self-provided Operating Reserve will be procured by the ISO as described in the ISO Tariff.

**ASRP 5.8.2 Procurement Not Limited to ISO Control Area**

The ISO will procure Spinning and Non-Spinning Reserves from Generating Units operating within the ISO Control Area and external imports of System Resources.

**ASRP 5.8.3 Spinning Reserve Certification and Testing Requirements**

Spinning Reserve may only be provided from

- (1) Generating Units;
- (2) System Resources from external imports; or
- (3) System Units;

which have been certified and tested by the ISO using the process defined in Appendix B to this Protocol.

**ASRP 5.8.4 Non-Spinning Reserve Certification and Testing Requirements**

Non-Spinning Reserve may only be provided from resources including

- (1) Loads;
- (2) Generating Units;
- (3) System Resources from external imports; and

