ISO TARIFF APPENDIX A

Master Definitions Supplement

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Access Charge A charge paid by all Market Participants withdrawing Energy from the ISO Controlled Grid, as set forth in Section 7.1. The Access Charge will recover that portion of the Participating TO's Transmission Revenue Requirement not recovered through Transmission Revenue Credits.

Active Bid A bid that has been submitted to the PX and validated by the PX, but cannot be modified during a subsequent iteration of an auction.

Active Zone Initially, the Zones so identified in Appendix I to the ISO Tariff.

Actual Imbalance A deviation between scheduled Generation and metered Generation at each UDC/ISO Controlled Grid boundary or at each Participating Generator's delivery point or a deviation between scheduled Load and metered Load at each UDC/ISO Controlled Grid boundary or ISO Control Area boundary.

Adjustment Bid A bid in the form of a curve defined by (i) the minimum MW output to which a Scheduling Coordinator will permit a resource (Generating Unit or

Dispatchable Load) to be redispatched by the ISO; (ii) the maximum MW output to which a Scheduling Coordinator will permit the resource to be redispatched by the ISO; (iii) up to a specified number of MW values in between; (iv) a preferred MW operating point; and (v) for the ranges between each of the MW values greater than the preferred operating point, corresponding prices (in $/MWh) for which the Scheduling Coordinator is willing to increase the output of the resource and sell Energy from that resource to the ISO (or, in the case of a Dispatchable Load, decrease the Demand); and (vi) for the ranges between each of the MW values less than the preferred operating point, corresponding prices (in $/MWh) for which the Scheduling Coordinator is willing to decrease the output of the resource and purchase Energy from the ISO at the resource's location (or, in the case of a Dispatchable Load, increase the Demand). This data for an Adjustment Bid must result in a monotonically-increasing curve.

Administrative Price The price set by the ISO in place of a Market Clearing

	Price when, by reason of a System Emergency, the ISO determines that it no longer has the ability to maintain reliable operation of the ISO Controlled Grid relying solely on the economic Dispatch of Generation. This price will remain in effect until the ISO considers that the System Emergency has been contained and corrected.
AGC (Automatic Generation Control)	Generation equipment that automatically responds to signals from the ISO's EMS control in real time to control the power output of electric generators within a prescribed area in response to a change in system frequency, tieline loading, or the relation of these to each other, so as to maintain the target system frequency and/or the established interchange with other areas within the predetermined limits.
Aggregate Final Accepted Schedules	ISO approved aggregated Final Schedules.
Ancillary Services	Regulation, Spinning Reserve, Non-Spinning Reserve, Replacement Reserve, Voltage Support and Black Start together with such other interconnected operation services as the ISO may develop in cooperation with Market Participants to support the

transmission of Energy from Generation resources to Loads while maintaining reliable operation of the ISO Controlled Grid in accordance with Good Utility Practice.

Ancillary Service Provider A Participating Generator or an owner of Load who is eligible to provide an Ancillary Service.

Applicable Reliability Criteria The reliability standards established by NERC, WSCC, and Local Reliability Criteria as amended from time to time, including any requirements of the NRC.

Applicants Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company and any others as applicable.

Approved Credit Rating A short-term debt rating of not less than A1 by Standard and Poor's Corporation or a rating of not less than P1 by Moody's Investors Service or an equivalent rating from any other reputable credit rating agency, or other credit rating as approved by either the PX or ISO Governing Board as applicable. A federal agency shall be deemed to have an Approved Credit Rating if its financial obligations under the ISO Tariff and the PX Tariff are backed by the full faith and

credit of the United States.

Approved Load Profile Local Regulatory Authority approved Load profiles applied to cumulative End-Use Meter Data in order to allocate consumption of Energy to Settlement Periods.

Approved Maintenance Outage A Maintenance Outage which has been approved by the ISO through the ISO Outage Coordination Office.

Availability Measure An indication for measuring the performance of Transmission Owners in maintaining the reliability and availability of the Transmission Owner's transmission system.

Available Transfer Capacity For a given transmission path, the capacity rating in MW of the path established consistent with ISO and WSCC transmission capacity rating guidelines, less any reserved uses applicable to the path.

Balanced Schedule A Schedule shall be deemed balanced when Generation, adjusted for Transmission Losses equals Demand with respect to all entities for which a Scheduling Coordinator schedules.

Balancing Account An account set up to allow periodic balancing of financial transactions that, in the normal course of business, do not result in a zero balance of cash

inflows and outflows.

Base Transmission Revenue Requirements The Transmission Revenue Requirement adjusted to reflect the Transmission Revenue Balancing Account Adjustment (TRBAA).

Black Start The procedure by which a Generating Unit self-starts without an external source of electricity thereby restoring power to the ISO Controlled Grid following system or local area blackouts.

Bulk Supply Point A UDC metering point.

Business Day A day on which banks are open to conduct general banking business in California.

C.F.R. Code of Federal Regulations.

Committed Load The Load that has been accepted by the PX to be served in the Day-Ahead or Hour-Ahead bidding process.

Conditional Energy Bids A Bid for Energy to serve Demand at or below a specified price.

Congestion A condition that occurs when there is insufficient Available Transfer Capacity to implement all Preferred Schedules simultaneously or, in real time, to serve all Generation and Demand. "Congested" shall be

construed accordingly.

Congestion Management The alleviation of Congestion in accordance with applicable ISO Protocols and Good Utility Practice.

Connected Entity A Participating TO or any party that owns or operates facilities that are electrically interconnected with the ISO Controlled Grid.

Constraints Physical and operational limitations on the transfer of electrical power through transmission facilities.

Contingency Disconnection or separation, planned or forced, of one or more components from an electrical system.

Control Area An electric power system (or combination of electric power systems) to which a common AGC scheme is applied in order to: i) match, at all times, the power output of the Generating Units within the electric power system(s), plus the Energy purchased from entities outside the electric power system(s), minus Energy sold to entities outside the electric power system, with the Demand within the electric power system(s); ii) maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice; iii) maintain the frequency of the electric

	power system(s) within reasonable limits in accordance with Good Utility Practice; and iv) provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.
Converted Rights	Those transmission service rights as defined in Section 2.4.4.2.1 of the ISO Tariff.
Cost Shifting	A transfer of costs from one group of customers to another or from one utility to another.
CPUC	The California Public Utilities Commission, or its successor.
Critical Protective System	Facilities and sites with protective relay systems and Remedial Action Schemes that the ISO determines may have a direct impact on the ability of the ISO to maintain system security and over which the ISO exercises Operational Control.
CTC (Competition Transition Charge)	A non-bypassable charge that is the mechanism that the California Legislature and the CPUC mandated to permit recovery of costs stranded as a result of the shift to the new market structure.
Curtailable Demand	Demand that can be curtailed at the direction of the ISO in the real time dispatch of the ISO Controlled

	Grid. Scheduling Coordinators with Curtailable Demand may offer it to the ISO to meet Non-spinning or Replacement Reserve requirements.
Day-Ahead	Relating to a Day-Ahead Market or Day-Ahead Schedule.
Day-Ahead Market	The forward market for Energy and Ancillary Services to be supplied during the Settlement Periods of a particular Trading Day that is conducted by the ISO, the PX and other Scheduling Coordinators and which closes with the ISO's acceptance of the Final Day-Ahead Schedule.
Day-Ahead Schedule	A Schedule prepared by a Scheduling Coordinator or the ISO before the beginning of a Trading Day indicating the levels of Generation and Demand scheduled for each Settlement Period of that Trading Day.
Delivery Point	The point where a transaction between Scheduling Coordinators is deemed to take place. It can be either the Generation input point, a Demand Take-Out Point, or a transmission bus at some intermediate location.
Demand	The rate at which Energy is delivered to Loads and

Scheduling Points by Generation, transmission or distribution facilities. It is the product of voltage and the in-phase component of alternating current measured in units of watts or standard multiples thereof, e.g., 1,000W=1kW, 1,000kW=1MW, etc.

Demand Bid A bid into the PX indicating a quantity of Energy that an Eligible Customer wishes to purchase and, if relevant, the maximum price that the customer is prepared to pay for that Energy. This bid will only be accepted in the PX auction process if the Market Clearing Price is at or below the price of the Demand Bid. A Buyer may state, for each hour, a different price preference for each demand quantity in each location, i.e., the maximum price in each hour at which it is prepared to take a specified amount of Energy in the Day-Ahead Schedule. If a bid is submitted without a price, it is assumed that the bidder is prepared to pay the Market-Clearing Price.

Demand Forecast An estimate of Demand over a designated period of time.

Demand Market Participant Any Eligible Customer on behalf of whom Demand

	and Ancillary Services are scheduled pursuant to the ISO Tariff.
Dependable Generation	The sum of the maximum amount of generating capacity, in MW, from Generating Units interconnected with the Participating TO's transmission or distribution system, that a Participating TO reasonably believes could be delivered to serve Load, regardless of ownership of the Generation capacity or whether a contract exists for the purchase of the output from the Generator.
Dependent Participating TO	A Participating TO that is not Self-Sufficient.
Direct Access Demand	The Demand of Direct Access End-Users.
Direct Access End-User	An Eligible Customer located within the Service Area of a UDC who purchases Energy and Ancillary Services through a Scheduling Coordinator.
Direct Access Generation	An Eligible Customer who is selling Energy or Ancillary Services through a Scheduling Coordinator.
Dispatch	The operating control of an integrated electric system to: i) assign specific Generating Units and other sources of supply to effect the supply to meet the relevant area Demand taken as Load rises or falls;

	ii) control operations and maintenance of high voltage lines, substations, and equipment, including administration of safety procedures; iii) operate interconnections; iv) manage Energy transactions with other interconnected Control Areas; and v) curtail Demand.
Dispatchable Loads	Load which is the subject of an Adjustment Bid.
Distribution System	The distribution assets of a TO or UDC.
EEP (Electrical Emergency Plan)	A plan to be developed by the ISO in consultation with UDCs to address situations when Energy reserve margins are forecast to be below established levels.
Electric Capacity	The continuous demand-carrying ability for which a Generating Unit, or other electrical apparatus is rated, either by the user or by the manufacturer.
Eligible Customer	(i) any utility (including Participating TOs, Market Participants and any power marketer), Federal power marketing agency, or any person generating Energy for sale or resale; Energy sold or produced by such entity may be Energy produced in the United States, Canada or Mexico; however, such entity is not eligible for transmission service that would be prohibited by

Section 212(h)(2) of the Federal Power Act; and (ii) any retail customer taking unbundled transmission service pursuant to a state retail access program or pursuant to a voluntary offer of unbundled retail transmission service by the Participating TO.

Eligible Regulatory Must-Take Generation Regulatory Must-Take Generation which (i) has been approved as Regulatory Must-Take Generation by a Local Regulatory Authority within California, and (ii) is owned or produced by a Participating TO or UDC which has provided direct access to its End-Use Customers and serves load in the ISO Control Area.

Eligible Regulatory Must-Run Generation Regulatory Must-Run Generation which (i) has been approved as Regulatory Must-Run Generation by a Local Regulatory Authority within California, and (ii) is owned or produced by a Participating TO or UDC which has provided direct access to its End-Use Customers and serves load in the ISO Control Area.

Eligible Trader An Eligible Customer that has demonstrated to the reasonable satisfaction of the PX (which will apply published criteria and procedures adopted by the PX Governing Board in making its evaluation) that it has

no unfair advantages over other PX Participants that would permit it to affect the Market Clearing Price in the PX Market.

Emergency Startup — A startup order from the ISO delivered to a Generator in response to a System Emergency.

EMS (Energy Management System) — A computer control system used by electric utility dispatchers to monitor the real time performance of the various elements of an electric system and to control Generation and transmission facilities.

Encumbrance — A legal restriction or covenant binding on a Participating TO that affects the operation of any transmission lines or associated facilities and which the ISO needs to take into account in exercising Operational Control over such transmission lines or associated facilities if the Participating TO is not to risk incurring significant liability. Encumbrances shall include Existing Contracts and may include: (1) other legal restrictions or covenants meeting the definition of Encumbrance and arising under other arrangements entered into before the ISO Operations Date, if any; and (2) legal restrictions or covenants

	meeting the definition of Encumbrance and arising under a contract or other arrangement entered into after the ISO Operations Date.
End-Use Customer or End-User	A purchaser of electric power who purchases such power to satisfy a Load directly connected to the ISO Controlled Grid or to a Distribution System and who does not resell the power.
End-Use Meter Data	Meter Data that measures the Energy consumption in respect of End-Users gathered, edited and validated by Scheduling Coordinators and submitted to the ISO in Settlement quality form.
End-Use Meter	A metering device collecting Meter Data with respect to the Energy consumption of an End-User.
Energy	The electrical energy produced, flowing or supplied by generation, transmission or distribution facilities, being the integral with respect to time of the instantaneous power, measured in units of watt-hours or standard multiples thereof, e.g., 1,000 Wh=1kWh, 1,000 kWh=1MWh, etc.
Energy Bid	The price at or above which a Generator has agreed to produce the next increment of Energy.

Energy Efficiency Services	Services that are intended to assist End-Users in achieving savings in their use of Energy or increased efficiency in their use of Energy.
Entitlements	The right of a Participating TO obtained through contract or other means to use another entity's transmission facilities for the transmission of Energy.
Environmental Dispatch	Dispatch designed to meet the requirements of air quality and other environmental legislation and environmental agencies having authority or jurisdiction over the ISO.
Environmental Quality	In relation to Energy, means Energy which involves production sources that reduce harm to the environment.
Equipment Clearances	The process by which the ISO grants authorization to another party to connect or disconnect electric equipment interconnected to the ISO Controlled Grid.
Existing Contracts	The contracts which grant transmission service rights in existence on the ISO Operations Date (including any contracts entered into pursuant to such contracts) as may be amended in accordance with their terms or by agreement between the parties thereto from time

to time.

Existing Operating Agreement — The agreement between the ISO and an Existing Operating Entity entered into prior to the ISO Operations Date relating to the operation of a subsystem of that Existing Operating Entity.

Existing Operating Entity — The entity which owns and operates a MSS (Metered Subsystem).

Existing Rights — Those transmission service rights defined in Section 2.4.4.1.1 of the ISO Tariff.

Facilities Study Agreement — An agreement between a Participating TO and either a Market Participant, Project Sponsor, or identified principal beneficiaries pursuant to which the Market Participants, Project Sponsor, and identified principal beneficiaries agree to reimburse the Participating TO for the cost of a Facility Study.

Facility Owner — An entity owning transmission, Generation, or distribution facilities connected to the ISO Controlled Grid.

Facility Study — An engineering study conducted by a Participating TO to determine required modifications to the Participating TO's transmission system, including the

cost and scheduled completion date for such modifications that will be required to provide needed services.

Facility Thermal Ratings For all electric current carrying facilities, all applicable capacity or electric limits to be observed during normal, short-term emergencies, and long-term emergency operating conditions.

FERC The Federal Energy Regulatory Commission or its successor.

FIITC (Firm Import Interconnection Transmission Capacity) The amount of firm transmission capacity in MW associated with transmission facilities owned by a Participating TO or contracted to the Participating TO under an Existing Contract, which allows Generating Units that are not directly interconnected with that Participating TO's transmission or distribution system to deliver Energy to that Participating TO. For each month of the Self-Sufficiency Test Period, FIITC shall include the maximum amount of requirements and bundled power sale capacity purchased by the Participating TO from the transmission owner to which it is physically interconnected during the hour

in which the Monthly Peak Load of the Participating TO occurs.

Final Day-Ahead Schedule — The Day-Ahead Schedule which has been approved as feasible and consistent with all other Schedules by the ISO based upon the ISO's Day-Ahead Congestion Management procedures.

Final Hour-Ahead Schedule — The Hour-Ahead Schedule of Generation and Demand that has been approved by the ISO as feasible and consistent with all other Schedules based on the ISO's Hour-Ahead Congestion Management procedures.

Final Schedule — A Schedule developed by the ISO following receipt of a Revised Schedule from a Scheduling Coordinator.

Final Settlement Statement — The restatement or recalculation of the Preliminary Settlement Statement by the ISO or the PX, as the case may be, following the issue of that Preliminary Settlement Statement.

Five Minute Ex Post Price — The price charged or paid to Scheduling Coordinators responsible for Participating Generators, System Resources or Participating Buyers for Imbalance Energy in each Zone. The price will vary between Zones if Congestion is present. This five minute price

	is equal to the bid price of the marginal resource accepted by the ISO for dispatch and deemed eligible under the ISO Tariff to set the price during a five minute period.
Flexible Generation	Generation that is capable of, and for which the Generator has agreed to, adjust operating levels in response to real time market price or ISO control signals.
Forced Outage	An Outage for which sufficient notice cannot be given to allow the Outage to be factored into the Day-Ahead Market or Hour-Ahead Market scheduling processes.
FPA	Parts II and III of the Federal Power Act, 16 U.S.C. § 824 et seq., as they may be amended from time to time.
Frozen Bid	A bid that has been submitted to the PX and validated by the PX, but cannot be modified during a subsequent iteration of an auction.
Full Marginal Loss Rate	A rate calculated by the ISO for each Generation and Scheduling Point location to determine the effect on total system Transmission Losses of injecting an increment of Generation at each such location to

serve an equivalent incremental MW of Demand distributed proportionately throughout the ISO Control Area.

Generating Unit An individual electric generator and its associated plant and apparatus whose electrical output is capable of being separately identified and metered or a Physical Scheduling Plant that, in either case, is:

(a) located within the ISO Control Area;

(b) connected to the ISO Controlled Grid, either directly or via interconnected transmission, or distribution facilities; and

(c) that is capable of producing and delivering net Energy (Energy in excess of a generating station's internal power requirements).

Generation Energy delivered from a Generating Unit.

Generation Dispatch Constraints Details of any mandatory Generating Unit commitment requirements (e.g., Must-Run Generation) or dispatch limits (minimum output or maximum output) that must be observed due to system operating constraints (e.g., thermal, voltage, or stability limits). These limits are in addition to

limits that may be specified by Generators in their Energy or Ancillary Service bids to the ISO or PX.

Generation Scheduling The ISO's planned hourly pattern of Generation.

Generator The seller of Energy or Ancillary Services produced by a Generating Unit.

GMM (Generation Meter Multiplier) A number which when multiplied by a Generating Unit's Metered Quantity will give the total Demand to be served from that Generating Unit.

Good Utility Practice Any of the practices, methods, and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods, and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practice is not intended to be any one of a number of the optimum practices, methods, or acts to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the

region.

Grid Management Charge The ISO monthly charge on all Scheduling Coordinators that is intended to recover the ISO's startup and development costs and the costs associated with the ongoing operation and maintenance, including financing costs, of the ISO Controlled Grid which shall be calculated as set out in Section 8 of the ISO Tariff.

Grid Operations Charge An ISO charge that recovers redispatch costs incurred due to Intra-Zonal Congestion in each Zone. These charges will be paid to the ISO by the Scheduling Coordinators, in proportion to their metered Demand within, and metered exports from, the Zone.

Hour-Ahead Relating to an Hour-Ahead Market or an Hour-Ahead Schedule.

Hour-Ahead Market The forward market for Energy and Ancillary Services to be supplied during a particular Settlement Period that is conducted by the ISO, the PX and other Scheduling Coordinators which opens after the ISO's acceptance of the Final Day-Ahead Schedule for the Trading Day in which the Settlement Period falls and

closes with the ISO's acceptance of the Final Hour-Ahead Schedule.

Hour-Ahead Schedule A Schedule prepared by a Scheduling Coordinator or the ISO before the beginning of a Settlement Period indicating the changes to the levels of Generation and Demand scheduled for that Settlement Period from that shown in the Final Day-Ahead Schedule.

Hourly Ex Post Price The price charged or paid to Scheduling Coordinators responsible for Participating Generators and Participating Buyers for Imbalance Energy in each Zone. The price will vary between Zones if Congestion is present. The Hourly Ex Post Price is the Energy weighted average of the 12 Five Minute Ex Post Prices in each Zone during each Settlement Period.

Hydro Spill Generation Hydro-electric Generation in existence prior to the ISO Operations Date that: i) has no storage capacity and that, if backed down, would spill; ii) has exceeded its storage capacity and is spilling even though the generators are at full output, or iii) has inadequate storage capacity to prevent loss of hydro-electric

Energy either immediately or during the forecast period, if hydro-electric Generation is reduced; iv) has increased regulated water output to avoid an impending spill.

Identification Code An identification number assigned to each Scheduling Coordinator by the ISO.

Imbalance Energy The real time change in Generation output or Demand (from dispatchable Generating Units or Loads) which is instructed by the ISO to ensure that reliability of the ISO Controlled Grid is maintained in accordance with Applicable Reliability Criteria. Sources of Imbalance Energy include Regulation, Spinning and Non-spinning Reserves, Replacement Reserve, and Energy from other Generating Units that are able to respond to the ISO's request for more or less Energy.

In-Kind Self Provision: A Scheduling Coordinator's provision of any portion of its Ancillary Services allocation to the ISO from specified individual resources.

Inactive Zone All Zones which the ISO Governing Board has determined do not have a workably competitive Generation market and as initially set out in Appendix

	I to the ISO Tariff.
Inter-Scheduling Coordinator Trades	Energy transactions between Scheduling Coordinators.
Inter-Zonal Congestion	Congestion across an Inter-Zonal Interface.
Inter-Zonal Interface	The (i) group of transmission paths between two adjacent Zones of the ISO Controlled Grid, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established or will be established prior to the use of the interface for Congestion Management; (ii) the group of transmission paths between an ISO Zone and an adjacent Scheduling Point, for which a physical, non-simultaneous transmission capacity rating (the rating of the interface) has been established or will be established prior to the use of the interface for Congestion Management; or (iii) the group of transmission paths between two adjacent Scheduling Points, where the group of paths has an established transfer capability and established transmission rights.
Interconnection	Transmission facilities, other than additions or

replacements to existing facilities that: i) connect one system to another system where the facilities emerge from one and only one substation of the two systems and are functionally separate from the ISO Controlled Grid facilities such that the facilities are, or can be, operated and planned as a single facility; or ii) are identified as radial transmission lines pursuant to contract; or iii) produce Generation at a single point on the ISO Controlled Grid; provided that such interconnection does not include facilities that, if not owned by the Participating TO, would result in a reduction in the ISO's Operational Control of the Participating TO's portion of the ISO Controlled Grid.

Interconnection Agreement — A contract between a party requesting interconnection and the Participating TO that owns the transmission facility with which the requesting party wishes to interconnect.

Interest — Interest shall be calculated in accordance with the methodology specified for interest on refunds in the regulations of FERC at 18 C.F.R. §35.19(a)(2)(iii) (1996). Interest on delinquent amounts shall be

	calculated from the due date of the bill to the date of payment. When payments are made by mail, bills shall be considered as having been paid on the date of receipt.
Interruptible Imports	Energy sold by a Generator or resource located outside the ISO Controlled Grid which by contract can be interrupted or reduced at the discretion of the seller.
Intra-Zonal Congestion	Congestion within a Zone.
IOU	An investor owned electric utility.
ISO (Independent System Operator)	The California Independent System Operator Corporation, a state chartered, nonprofit corporation that controls the transmission facilities of all Participating TOs and dispatches certain Generating Units and Loads.
ISO Account	The ISO Clearing Account, the ISO Reserve Account or such other accounts as the ISO deems necessary or convenient for the purpose of efficiently implementing the funds transfer system under the ISO Tariff.
ISO ADR Committee	The Committee appointed by the ISO ADR Committee pursuant to Article IV, Section 3 of the ISO bylaws to

perform functions assigned to the ISO ADR Committee in the ADR process in Section 13 of the ISO Tariff.

ISO ADR Procedures The procedures for resolution of disputes or differences set out in Section 13 of the ISO Tariff, as amended from time to time.

ISO Audit Committee A Committee of the ISO Governing Board appointed pursuant to Article IV, Section 5 of the ISO bylaws to (I) review the ISO's annual independent audit (2) report to the ISO Governing Board on such audit, and (3) to monitor compliance with the ISO Code of Conduct.

ISO Authorized Inspector means a person authorized by the ISO to certify, test, inspect and audit meters and metering facilities in accordance with the procedures established by the ISO pursuant to the ISO Protocols on metering.

ISO Bank The bank appointed by the ISO from time to time for the purposes of operating the Settlement process.

ISO Clearing Account The account in the name of the ISO with the ISO Bank to which payments are required to be transferred for allocation to ISO Creditors in accordance with their

respective entitlements.

ISO Code of Conduct For employees, the code of conduct for officers, employees and substantially full-time consultants and contractors of the ISO as set out in exhibit A to the ISO bylaws; for Governors, the code of conduct for governors of the ISO as set out in exhibit B to the ISO bylaws.

ISO Control Area Balancing Function The real time Dispatch of Generation (and Curtailable Demand), directed by the ISO, to balance with actual Demand during the current operating hour to meet operating reliability criteria.

ISO Control Center The Control Center established, pursuant to Section 2.3.1.1 of the ISO Tariff.

ISO Controlled Grid The system of transmission lines and associated facilities of the Participating TOs that have been placed under the ISO's Operational Control.

ISO Creditor (i) A Scheduling Coordinator to which amounts are payable pursuant to the terms of the ISO Tariff with respect to the amounts standing to the credit of its account; or amounts owing to it by another Scheduling Coordinator; or

(ii) A Participating TO to which amounts are payable pursuant to the terms of the ISO Tariff with respect to Wheeling Access Charges.

ISO Debtor A Scheduling Coordinator or a Participating TO that is required to make a payment to the ISO under the ISO Tariff.

ISO Default Interest Rate The rate which is equal to 2% above the average rate of interest which the ISO Bank charges to the ISO in respect of its borrowings.

ISO Documents The ISO Tariff, the ISO Protocols, ISO bylaws, and any agreement entered into between the ISO and a Scheduling Coordinator, a Participating TO or any other Market Participant pursuant to the ISO Tariff.

ISO Governing Board The Board of Governors established to govern the affairs of the ISO.

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.

ISO Memorandum Account The memorandum account established by each California IOU pursuant to California Public Utility Commission Order D. 96-08-038 date August 2, 1996

which records all ISO startup and development costs incurred by that California IOU.

ISO Metered Entity means:

a) any one of the following entities that is directly connected to the ISO Controlled Grid:

i. a Generator other than a Generator that sells all of its Energy (excluding any Energy consumed by auxiliary load equipment electrically connected to that Generator at the same point) and Ancillary Services to the UDC in whose Service Area it is located;

ii. an Eligible Customer; or

iii. an End-User other than an End-User that purchases all of its Energy from the UDC in whose Service Area it is located; and

(b) any one of the following entities:

i. a Participating Generator; or

ii. a Participating TO in relation to its Tie Point Meters with other TOs or Control Areas.

ISO Operations Date The date on which the ISO first assumes Operational Control of the ISO Controlled Grid.

ISO Outage Coordination Office	The office established by the ISO to coordinate Maintenance Outages in accordance with Section 2.3.3 of the ISO Tariff.
ISO Payments Calendar	A calendar published by the ISO showing the dates on which Settlement Statements will be published by the ISO and the Payment Dates by which invoices issued under the ISO Tariff must be paid.
ISO Protocols	The rules, protocols, procedures and standards attached to the ISO Tariff as Appendix L, promulgated by the ISO (as amended from time to time) to be complied with by the ISO Scheduling Coordinators, Participating TOs and all other Market Participants in relation to the operation of the ISO Controlled Grid and the participation in the markets for Energy and Ancillary Services in accordance with the ISO Tariff.
ISO Register	The register of all the transmission lines, associated facilities and other necessary components that are at the relevant time being subject to the ISO's Operational Control.
ISO Reserve Account	The account established for the purpose of holding cash deposits which may be used in or towards

clearing the ISO Clearing Account.

ISO Security Amount The level of security provided in accordance with Section 2.2.3.2 of the ISO Tariff by an SC Applicant who does not have an Approved Credit Rating.

ISO Tariff The California Independent System Operator Agreement and Tariff, dated March 31, 1997, as it may be modified from time to time.

ISO Technical Advisory Committee A committee appointed by the ISO Governing Board pursuant to Article IV, Section 4 of the ISO bylaws to advise on additions and revisions to its rules and protocols, tariffs, reliability and operating standards and other technical matters.

ISP (Internet Service Provider) An independent network service organization engaged by the ISO to establish, implement and operate WEnet.

Literal Self Provision A Scheduling Coordinator's provision of any portion of its Ancillary Services allocation from a System Unit via a Metered Subsystem.

Load An end-use device of an End-Use Customer that consumes power. Load should not be confused with Demand, which is the measure of power that a Load

receives or requires.

Load Shedding The systematic reduction of system Demand by temporarily decreasing the supply of Energy to Loads in response to transmission system or area capacity shortages, system instability, or voltage control considerations.

Local Furnishing Bond Tax-exempt bonds utilized to finance facilities for the local furnishing of electric energy, as described in section 142(f) of the Internal Revenue Code, 26 U.S.C. § 142(f).

Local Furnishing Participating TO Any Tax-Exempt Participating TO that owns facilities financed by Local Furnishing Bonds.

Local Publicly Owned Electric Utilities A municipality or municipal corporation operating as a public utility furnishing electric service, a municipal utility district furnishing electric service, a public utility district furnishing electric services, an irrigation district furnishing electric services, or a joint powers authority that includes one or more of these agencies and that owns Generation or transmission facilities, or furnishes electric services over its own or its members' electric Distribution System.

Local Regulatory Authority The state or local governmental authority responsible for the regulation or oversight of a utility.

Local Reliability Criteria Reliability criteria established at the ISO Operations Date, unique to the transmission systems of each of the Participating TOs.

Location Code The code assigned by the ISO to Generation input points, and Demand Take-Out Points from the ISO Controlled Grid, and transaction points for trades between Scheduling Coordinators. This will be the information used by the ISO to determine the location of the input, output, and trade points of Energy Schedules. Each Generation input and Demand Take-Out Point will have a designated Location Code identification for use in submitting Energy and Ancillary Service bids and Schedules.

Loop Flow Energy flow over a transmission system caused by parties external to that system.

Loss Scale Factor The ratio of expected Transmission Losses to the total Transmission Losses which would be collected if Full Marginal Loss Rates were utilized.

Maintenance Outage A period of time during which an Operator takes its

facilities out of service for the purposes of carrying out routine planned maintenance, or for the purposes of new construction work or for work on de-energized and live transmission facilities (e.g., relay maintenance or insulator washing) and associated equipment.

Marginal Generators Those Generating Units which, in an hour, are the sources of the last increments of Generation in the Preferred Schedule, excluding: (i) Must-Run Generation, (ii) Must-Take Generation, (iii) units scheduled to ramp at their maximum ramp rate throughout the hour, or (iv) units operating at minimum operating levels (when less costly Generation must be backed down).

Marginal Loss Factor The marginal impact of a given Generating Unit's output on total system Transmission Losses.

Market Clearing Price The price in a market at which supply equals Demand. All Demand prepared to pay at least this price has been satisfied and all supply prepared to operate at or below this price has been purchased.

Market Participant An entity, including a Scheduling Coordinator, who

participates in the Energy marketplace through the buying, selling, transmission, or distribution of Energy or Ancillary Services into, out of, or through the ISO Controlled Grid.

Master File A file maintained by the PX in conformance with the PX bidding and bid evaluation protocol containing information regarding Generating Units, Loads and other resources eligible to bid into the PX.

Merit Order Rank The ranking of PX Generation according to applicable bid prices for scheduling and price setting purposes.

Meter Data Energy usage data collected by a metering device or as may be otherwise derived by the use of Approved Load Profiles.

Meter Points Locations on the ISO Controlled Grid at which the ISO requires the collection of Meter Data by a metering device.

Metered Quantities For each Direct Access End-User, the actual metered amount of MWh and MW; for each Participating Generator the actual metered amounts of MWh, MW, MVAr and MVArh.

Monthly Peak Load The maximum hourly Demand on a Participating TO's

transmission system for a calendar month, multiplied by the Operating Reserve Multiplier.

MSS (Metered Subsystem) A system of an Existing Operating Entity as at the ISO Operations Date which has been operating for a number of years subsumed within the ISO Controlled Grid and encompassed by revenue quality meters at each interface point with the ISO Controlled Grid which is operated in accordance with Existing Contracts and an Existing Operating Agreement.

Municipal Tax Exempt Debt An obligation the interest on which is excluded from gross income for federal tax purposes pursuant to Section 103(a) of the Internal Revenue Code of 1986 or the corresponding provisions of prior law without regard to the identity of the holder thereof. Municipal Tax Exempt Debt does not include Local Furnishing Bonds.

Municipal Tax Exempt TO A Transmission Owner that has issued Municipal Tax Exempt Debt with respect to any transmission facilities, or rights associated therewith, that it would be required to place under the ISO's Operational Control pursuant to the Transmission Control

	Agreement if it were a Participating TO.
NERC	The North American Electric Reliability Council or its successor.
Nomogram	A set of operating or scheduling rules which are used to ensure that simultaneous operating limits are respected, in order to meet NERC and WSCC operating criteria.
Non-Converted Rights	Those transmission service rights as defined in Section 2.4.4.2.1 of the ISO Tariff.
Non-ISO Participant	An entity that is not a Market Participant or a Participating TO.
Non-ISO Transmission Facilities	Transmission facilities, either inside or outside the State of California, over which the ISO does not exert Operational Control.
Non-Participating Generator	A Generator that is not a Participating Generator.
Non-Participating TO	A TO that is not a party to the TCA or for the purposes of Sections 2.4.3 and 2.4.4 of the ISO Tariff the holder of transmission service rights under an Existing Contract that is not a Participating TO.
Non-PX Generation	Generation that is scheduled by a Scheduling Coordinator, other than the PX, and that supplies

Loads through the use of transmission or distribution facilities owned by Participating TOs.

Non-PX Load Load that is scheduled by a Scheduling Coordinator, other than the PX, and which is supplied through the use of transmission or distribution facilities owned by Participating TOs.

Non-Self-Sufficient Contract Demand The sum of the amounts in MW for each month of the Self-Sufficiency Test Period by which that Dependent Participating TO's Dependable Generation plus its FIITC is less than its monthly peak hourly Demand divided by 12. The MW amounts for those months in which that Dependent Participating TO's Dependable Generation plus its FIITC exceeds its monthly peak Demand shall not be considered in the calculation of Non-Self Sufficient Contract Demand.

Non-Spinning Reserve The portion of off-line generating capacity that is capable of being synchronized and ramping to a specified load in ten minutes (or load that is capable of being interrupted in ten minutes) and that is capable of running (or being interrupted) for at least two hours.

NRC The Nuclear Regulatory Commission or its successor.

Operating Procedures Procedures governing the operation of the ISO Controlled Grid as the ISO may from time to time develop, and/or procedures that Participating TOs currently employ which the ISO adopts for use.

Operating Reserve The combination of Spinning and Non-Spinning Reserve required to meet WSCC and NERC requirements for reliable operation of the ISO Control Area.

Operating Reserve Multiplier The Operating Reserve Multiplier is initially 1.07 times the amount of Dependable Generation and FIITC that is not associated with hydro-electric Generation, plus 1.05 times the amount of Dependable Generation and FIITC that is associated with the hydro-electric Generation, divided by Dependable Generation and FIITC, based on the current WSCC operating reserve criteria of 7% for thermal generation and 5% for hydro-electric Generation. If the WSCC changes the operating reserve criteria or the ISO Governing Board establishes a higher reserve margin for purposes of system reliability and integrity, the Operating Reserve

Multiplier shall be changed accordingly.

Operational Control — The rights of the ISO under the Transmission Control Agreement and the ISO Tariff to direct Participating TOs how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting Applicable Reliability Criteria.

Operator — The operator of facilities comprised in the ISO Controlled Grid or Reliability Must-Run Units.

OPF (Optimal Power Flow) — A computer optimization program which uses a set of control variables (which may include active power and/or reactive power controls) to determine a steady-state operating condition for the transmission grid for which a set of system operating constraints (which may include active power and/or reactive power constraints) are satisfied and an objective function (e.g. total cost or shift of schedules) is minimized.

Order No. 888 — The final rule issued by FERC entitled "Promoting Wholesale Competition through Open Access Non-

discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities," 61 Fed. Reg. 21,540 (May 10, 1996), FERC Stats. & Regs., Regulations Preambles [1991-1996] ¶ 31,036 (1996), Order on Rehearing, Order No. 888-A, 78 FERC ¶ 61,220 (1997), as it may be amended from time to time.

Order No. 889 The final rule issued by FERC entitled "Open Access Same-Time Information System (formerly Real Time Information Networks) and Standards of Conduct," 61 Fed. Reg. 21,737 (May 10, 1996), FERC Stats. & Regs., Regulations Preambles [1991-1996] ¶ 31,035 (1996), Order on Rehearing, Order No. 889-A, 78 FERC ¶ 61,221 (1997), as it may be amended from time to time.

Outage Disconnection or separation, planned or forced, of one or more elements of an electric system.

Overgeneration A condition that occurs when total Generation exceeds total Demand in the ISO Control Area.

Participating Buyer A Direct Access End-User or a wholesale buyer of Energy or Ancillary Services through Scheduling

	Coordinators.
Participating Seller or Participating Generator	A Generator or other seller of Energy or Ancillary Services through a Scheduling Coordinator over the ISO Controlled Grid and which has undertaken to be bound by the terms of the ISO Tariff.
Participating TO	A party to the TCA whose application under Section 2.2 of the TCA has been accepted and who has placed its transmission assets and Entitlements under the ISO's Operational Control in accordance with the TCA.
Payment Date	The date by which invoiced amounts are to be paid under the terms of the ISO or PX Tariffs as applicable.
PBR (Performance-Based Ratemaking)	Regulated rates based in whole or in part on the achievement of specified performance objectives.
Physical Scheduling Plant	A group of two or more related Generating Units, each of which is individually capable of producing Energy, but which either by physical necessity or operational design must be operated as if they were a single Generating Unit and any Generating Unit or Units containing related multiple generating components which meet one or more of the following criteria: i) multiple generating components are related

by a common flow of fuel which cannot be interrupted without a substantial loss of efficiency of the combined output of all components; ii) the Energy production from one component necessarily causes Energy production from other components; iii) the operational arrangement of related multiple generating components determines the overall physical efficiency of the combined output of all components; iv) the level of coordination required to schedule individual generating components would cause the ISO to incur scheduling costs far in excess of the benefits of having scheduled such individual components separately; or v) metered output is available only for the combined output of related multiple generating components and separate generating component metering is either impractical or economically inefficient.

PMS (Power Management System)

The ISO computer control system used to monitor the real time performance of the various elements of the ISO Controlled Grid, control Generation, and perform operational power flow studies.

Power Flow Model The computer software used by the ISO to model the voltages, power injections and power flows on the ISO Controlled Grid and determine the expected Transmission Losses and Generation Meter Multipliers.

Preferred Day-Ahead Schedule A Scheduling Coordinator's Preferred Schedule for the ISO Day-Ahead scheduling process.

Preferred Hour-Ahead Schedule A Scheduling Coordinator's Preferred Schedule for the ISO Hour-Ahead scheduling process.

Preferred Schedule The initial Schedule produced by a Scheduling Coordinator that represents its preferred mix of Generation to meet its Demand. For each Generator, the Schedule will include the quantity of output, details of any Adjustment Bids, and the location of the Generator. For each Load, the Schedule will include the quantity of consumption, details of any Adjustment Bids, and the location of the Load. The Schedule will also specify quantities and location of trades between the Scheduling Coordinator and all other Scheduling Coordinators. The Preferred Schedule will be balanced with respect to Generation,

	Transmission Losses, Load and trades between Scheduling Coordinators.
Preliminary Settlement Statement	The initial statement issued by the ISO or the PX, as the case may be, of the calculation of the Settlements and allocation of the charges in respect of all Settlement Periods covered by the period to which it relates.
Price-Flexible Bids	Customer Demand bid into the PX without a maximum price threshold. This Demand will be committed in the PX auction process regardless of the Market Clearing Price.
Price-Inflexible Demand	Customer Demand bid into the PX indicating a maximum price the customer is prepared to pay. This Demand will only be committed in the PX auction process if the Market Clearing Price is at or below the bid.
Project Sponsor	A Market Participant or group of Market Participants or a Participating TO that proposes the construction of a transmission addition or upgrade in accordance with Section 3.2 of the ISO Tariff.
Proxy Energy Bid	The price at which a Participating Generator, owner or

operator of a Load or of a System Resource providing Regulation, Spinning Reserve, Non-Spinning Reserve, or Replacement Reserve capacity as part of an arrangement by a Scheduling Coordinator for self provision of these services has agreed to provide the next increment of Energy or decrement of Demand.

PX (Power Exchange) The California Power Exchange Corporation, a state chartered, nonprofit corporation charged with providing a Day-Ahead forward market for Energy in accordance with the PX Tariff. The PX is a Scheduling Coordinator and is independent of both the ISO and all other Market Participants.

PX Account The PX Clearing Account, the PX Reserve Account or such other accounts as the PX deems necessary or convenient for the purpose of efficiently implementing the funds transfer system under the PX Tariff.

PX Administration Charge The charge that the PX makes to PX Participants for the provision of its services.

PX ADR Committee The committee appointed by the PX Governing Board pursuant to Article IV, Section 3 of the PX bylaws to perform functions assigned to the PX ADR Committee

in the ADR Procedures in Section 7 of the PX Tariff.

PX ADR Procedures The procedures for resolution of disputes or differences set out in Section 7 of the PX Tariff, as amended from time to time.

PX Auction Activity Rules The rules by which bids submitted to and validated by the PX may be modified or withdrawn during a PX Energy market auction.

PX Audit Committee A Committee of the PX Governing Board appointed pursuant to Article IV, Section 3 of the PX bylaws (1) to review the PX's annual independent audit, (2) report to the PX Governing Board on such audit, and (3) to monitor compliance with the PX Code of Conduct.

PX Bank The bank at which the PX maintains the PX Clearing Account and the PX Reserve Account from time to time.

PX Buyer A buyer of Energy or Ancillary Services through the PX.

PX Clearing Account The account in the name of the PX with the PX Bank to which payments are required to be transferred for allocation to PX Creditors in accordance with their

respective entitlements.

PX Code of Conduct For employees, the code of conduct for officers, employees and substantially full-time-consultants and contractors of the PX as set out in Exhibit A to the PX bylaws; for Governors, the code of conduct for governors of the PX as set out in Exhibit B to the PX bylaws.

PX Creditor Each PX Participant to whom monies are payable pursuant to the terms of the PX Tariff in respect of: (i) the amounts standing to the credit of its account with the PX Reserve Account; or (ii) amounts owing to it by another PX Participant.

PX Debtor Each PX Participant that is required to make a payment to the PX under the PX Tariff.

PX Default Interest Rate The rate which is equal to 2% above the average rate of interest which the PX Bank charges to the PX in respect of its borrowings.

PX Documents The PX Tariff, the PX Protocols, the PX bylaws and any agreements entered into between the PX and a PX Participant pursuant to the PX Tariff.

PX Generation Generation being scheduled by the PX.

PX Governing Board The Board of Governors established by California law to govern the affairs of the PX.

PX Indicative Price The average of the prices for Energy for the California/Oregon Border and Palos Verdes shown in the Dow Jones Index for the twelve (12) month period immediately preceding the date of the commencement of trading through the PX Market, as published each day in the Wall Street Journal.

PX Load Load which has been scheduled by the PX and which is received through the use of transmission or distribution facilities owned by Participating TOs.

PX Markets The markets for the sale and purchase of Energy operated by the PX in accordance with the PX Tariff.

PX Memorandum Account The memorandum account established by each California IOU pursuant to California Public Utility Commission Order D. 96-08-038 date August 2, 1996 which records all PX start-up and development costs incurred by that California IOU.

PX Overgeneration A condition that occurs when the aggregate quantity (in MWh) of Supply Bids relating to Eligible Regulatory Must-Take Generation and Eligible

	Regulatory Must-Run Generation exceeds the aggregate quantity (in MWh) of Demand Bids in the PX auction.
PX Participant	An entity that is authorized to buy or sell Energy or Ancillary Services through the PX, and any agent authorized to act on behalf of such entity.
PX Participant Settlement Account	The settlement account of a PX Participant held at a bank situated in California, the details of which are set out in the PX Participant's accession agreement.
PX Payments Calendar	A calendar published by the PX showing the dates on which Settlement Statements will be published by the PX and the Payment Dates by which invoices issued under the PX Tariff must be paid.
PX Protocols	The rules, protocols, procedures and standards attached to the PX Tariff as Appendix E, promulgated by the PX (as amended from time to time) to be complied with by the PX and Market Participants in relation to operation and participation in the PX Markets.
PX Reserve Account	The account established for the purpose of holding cash deposits which may be used in or towards

clearing the PX Clearing Account.

PX Security Amount — The minimum level of security required from a PX Participant which does not have an Approved Credit Rating in accordance with Section 2.4.1 of the PX Tariff.

PX Seller — Any PX Participant selling Energy or Ancillary Services through the PX.

PX Tariff — The California Power Exchange Operating Agreement and Tariff, dated March 31, 1997, as it may be modified from time to time.

PX Technical Advisory Committee — A Committee appointed by the PX Governing Board pursuant to Article IV, Section 4 of the PX bylaws to advise on additions and revisions to ISO rules and protocols, tariffs, reliability and operating standards and other technical matters.

Ramping — Changing the loading level of a Generating Unit in a constant manner over a fixed time (e.g., ramping up or ramping down). Such changes may be directed by a computer or manual control.

RAS (Remedial Action Schemes) — Protective systems that typically utilize a combination of conventional protective relays, computer-based

processors, and telecommunications to accomplish rapid, automated response to unplanned power system events. Also, details of RAS logic and any special requirements for arming of RAS schemes, or changes in RAS programming, that may be required.

Reactive Power Control Generation or other equipment needed to maintain acceptable voltage levels on the ISO Controlled Grid and to meet reactive capacity requirements at points of interconnection on the ISO Controlled Grid.

Real Time Market The competitive generation market controlled and coordinated by the ISO for arranging real time Imbalance Energy.

Redispatch The readjustment of scheduled Generation or Demand side management measures, to relieve Congestion or manage Energy imbalances.

Registered Data Those items of technical data and operating characteristics relating to Generation, transmission or distribution facilities which are identified to the owners of such facilities as being information, supplied in accordance with ISO Protocols, to assist the ISO to maintain reliability of the ISO Controlled

Grid and to carry out its functions.

Regulation

The service provided by Generating Units equipped and operating with AGC which will enable such units to respond to the ISO's direct digital control signals in an upward and downward direction to match, on a real time basis, Demand and resources, consistent with established NERC and WSCC operating criteria. Regulation is used to control the power output of electric generators within a prescribed area in response to a change in system frequency, tieline loading, or the relation of these to each other so as to maintain the target system frequency and/or the established interchange with other areas within the predetermined limits.

Regulatory Must-Run Generation

Hydro Spill Generation and Generation which is required to run by applicable Federal or California laws, regulations, or other governing jurisdictional authority. Such requirements include but are not limited to hydrological flow requirements, environmental requirements, such as minimum fish releases, fish pulse releases and water quality

requirements, irrigation and water supply requirements, or the requirements of solid waste Generation, or other Generation contracts specified or designated by the jurisdictional regulatory authority as it existed on December 20, 1995, or as revised by Federal or California law or Local Regulatory Authority.

Regulatory Must-Take Generation

Those Generation resources identified by CPUC, or a Local Regulatory Authority, the operation of which is not subject to competition. These resources will be scheduled by the relevant Scheduling Coordinator directly with the ISO on a must-take basis. Regulatory Must-Take Generation includes qualifying facility Generating Units as defined by federal law, nuclear units and pre-existing power purchase contracts with minimum energy take requirements.

Reliability Criteria

Pre-established criteria that are to be followed in order to maintain desired performance of the ISO Controlled Grid under contingency or steady state conditions.

Reliability Must-Run Charge

The sum payable each month for the cost of Reliability Must-Run Generation.

Reliability Must-Run Contract A contract entered into by the ISO with a Generator which operates a Generating Unit giving the ISO the right to call on the Generator to generate Energy and/or provide Ancillary Services from the Generating Unit as and when this is required to ensure the reliability of the ISO Controlled Grid.

Reliability Must-Run Generation Generation that the ISO determines is required to be on line to meet Applicable Reliability Criteria requirements. This includes i) Generation constrained on line to meet NERC and WSCC reliability criteria for interconnected systems operation; ii) Generation needed to meet Load demand in constrained areas; and iii) Generation needed to be operated to provide voltage or security support of the ISO or a local area.

Reliability Must-Run Unit A Generating Unit which is the subject of the contract between the Generator and the ISO under which, in return for certain payments, the ISO is entitled to call upon the owner to run the unit when required by the ISO for the purposes of the reliable operation of the ISO Controlled Grid.

REMnet The Wide Area Network through which the ISO

acquires meter data.

Replacement Reserve Generating capacity that is dedicated to the ISO, capable of starting up if not already operating, being synchronized to the ISO Controlled Grid, and ramping to a specified Load point within a sixty (60) minute period, the output of which can be continuously maintained for a two hour period. Also, Curtailable Demand that is capable of being curtailed within sixty minutes and that can remain curtailed for two hours.

Revenue Requirement The revenue level required by a utility to cover expenses made on an investment, while earning a specified rate of return on the investment.

Revised Schedule A Schedule submitted by a Scheduling Coordinator to the ISO following receipt of the ISO's Suggested Adjusted Schedule.

RTG (Regional Transmission Group) A voluntary organization approved by FERC and composed of transmission owners, transmission users, and other entities, organized to efficiently coordinate the planning, expansion and use of transmission on a regional and inter-regional basis.

SCADA (Supervisory Control and Data Acquisition) A computer system that allows an electric system

operator to remotely monitor and control elements of an electric system.

SC Agreement — An agreement between a Scheduling Coordinator and the ISO whereby the Scheduling Coordinator agrees to comply with all ISO rules, protocols and instructions, as those rules, protocols and instructions may be amended from time to time.

SC Applicant — An applicant for certification by the ISO as a Scheduling Coordinator.

SC Application Form — The form specified by the ISO from time to time in which an SC Applicant must apply to the ISO for certification as a Scheduling Coordinator.

Scaled Marginal Loss Rate — A factor calculated by the ISO for a given Generator location for each hour by multiplying the Full Marginal Loss Rate for such Generator location by the Loss Scale Factor for the relevant hour.

Schedule — A statement of (i) Demand, including quantity, duration and Take-Out Points and (ii) Generation, including quantity, duration, location of Generating Unit, and Transmission Losses; and (iii) Ancillary Services which will be self provided, (if any)

submitted by a Scheduling Coordinator to the ISO. "Schedule" includes Preferred Schedules, Suggested Adjusted Schedules, Final Schedules and Revised Schedules.

Scheduled Maintenance Maintenance on Participating Generators, TOs and UDC facilities scheduled more than twenty-four hours in advance.

Scheduling Coordinator An entity certified by the ISO for the purposes of undertaking the functions specified in Section 2.2.6 of the ISO Tariff.

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

Scheduling Point A location at which the ISO Controlled Grid is connected, by a group of transmission paths for which a physical, non-simultaneous transmission capacity rating has been established for Congestion Management, to transmission facilities that are outside the ISO's Operational Control. A Scheduling Point typically is physically located at an "outside" boundary of the ISO Controlled Grid (e.g., at the point of interconnection between a Control Area utility and

the ISO Controlled Grid). For most practical purposes, a Scheduling Point can be considered to be a Zone that is outside the ISO's Controlled Grid.

Security Monitoring The real time assessment of the ISO Controlled Grid that is conducted to ensure that the system is operating in a secure state, and in compliance with all Applicable Reliability Criteria.

Self-Sufficiency or Self-Sufficient A Participating TO for which the sum of its Dependable Generation and its FIITC is greater than or equal to its Monthly Peak Load.

Self-Sufficiency Test Period For the initial Self-Sufficiency determination for a Participating TO, the Self-Sufficiency Test Period shall be the twelve-month period ending December 31, 1996. The Self-Sufficiency Test Period for a Participating TO undergoing a new Self-Sufficiency determination as a result of the termination or modification of an Existing Contract as referred in Section 7.1.3.2 of the ISO Tariff shall be the twelve-month period ending in the month prior to the month that the Existing Contract was terminated or modified.

Service Area An area in which, as of December 20, 1995, an IOU or

a Local Publicly Owned Electric Utility was obligated to provide electric service to End-Use Customers.

Set Point Scheduled operating level for each Generating Unit or other resource scheduled to run in the Hour-Ahead Schedule.

Settlement Process of financial settlement for products and services purchased and sold undertaken by the ISO under Section 11 of the ISO Tariff or by the PX under Section 6 of the PX Tariff. Each Settlement will involve a price and a quantity.

Settlement Account An Account held at a bank situated in California, designated by a Scheduling Coordinator or a Participating TO pursuant to the Scheduling Coordinator's SC Agreement or in the case of a Participating TO, Section 2.2.1 of the TCA, to which the ISO shall pay amounts owing to the Scheduling Coordinator or the Participating TO under the ISO Tariff.

Settlement Period For all ISO and PX transactions the period beginning at the start of the hour, and ending at the end of the hour. There are twenty-four Settlement Periods in

each Trading Day, with the exception of a Trading Day in which there is a change to or from daylight savings time.

Settlement Quality Meter Data — Meter Data gathered, edited, validated, and stored in a settlement-ready format, for Settlement and auditing purposes.

Settlement Statement — Either or both of a Preliminary Settlement Statement or Final Settlement Statement.

Settlement Statement Re-run — The re-calculation of a Settlement Statement in accordance with the provisions of the ISO Tariff or PX Tariff as the case may be or any protocol of the ISO or PX.

Severance Fee — The charge or periodic charge assessed to customers to recover the reasonable uneconomic portion of costs associated with Generation-related assets and obligations, nuclear decommissioning, and capitalized Energy efficiency investment programs approved prior to August 15, 1996 and as defined in the California Assembly Bill No. 1890 enacted on February 24, 1995.

Spinning Reserve — The portion of unloaded synchronized generating

capacity that is immediately responsive to system frequency and that is capable of being loaded in ten minutes, and that is capable of running for at least two hours.

Suggested Adjusted Schedule The output of the ISO's initial Congestion Management for each Scheduling Coordinator for the Day-Ahead Market ("Suggested Adjusted Day-Ahead Schedule") or for the Hour-Ahead Market ("Suggested Adjusted Hour-Ahead Schedule"). These Schedules will reflect ISO suggested adjustments to each Scheduling Coordinator's Preferred Schedule to resolve Inter-Zonal Congestion on the ISO Controlled Grid, based on the Adjustment Bids submitted. These schedules will be balanced with respect to Generation, Transmission Losses, Load, and trades between Scheduling Coordinators to resolve Inter-Zonal Congestion.

Supplemental Energy Energy from Generating Units and other resources which have uncommitted capacity following finalization of the Hour-Ahead Schedules and for which Scheduling Coordinators have submitted bids

	to the ISO at least half an hour before the commencement of the Settlement Period.
Supply	The rate at which Energy is delivered to the ISO Controlled Grid measured in units of watts or standard multiples thereof, e.g., 1,000W=1 KW; 1,000 KW = 1MW, etc.
Supply Bid	A bid into the PX indicating a price at which a seller is prepared to sell Energy.
Supply Market Participant	Any Generator on behalf of whom Generation and Ancillary Services are scheduled pursuant to the ISO Tariff.
System Emergency	Conditions beyond the normal control of the ISO that affect the ability of the ISO Control Area to function normally including any abnormal system condition which requires immediate manual or automatic action to prevent loss of Load, equipment damage, or tripping of system elements which might result in cascading outages or to restore system operation to meet the minimum operating reliability criteria.
System Planning Studies	Reports summarizing studies performed to assess the adequacy of the ISO Controlled Grid as regards

	conformance to Reliability Criteria.
System Reliability	A measure of an electric system's ability to deliver uninterrupted service at the proper voltage and frequency.
System Resource	A group of resources located outside of the ISO Control Area capable of providing Energy and/or Ancillary Services to the ISO Controlled Grid.
System Unit	One or more resources within a Metered Subsystem controlled so as to simulate a single resource with specified performance characteristics.
Take-Out Point	The metering points at which a Scheduling Coordinator Metered Entity or ISO Metered Entity takes delivery of Energy.
Tax Exempt Debt	Municipal Tax Exempt Debt or Local Furnishing Bonds.
Tax Exempt Participating TO	A Participating TO that is the beneficiary of outstanding Tax-Exempt Debt issued to finance any electric facilities, or rights associated therewith, which are part of an integrated system including transmission facilities the Operational Control of which is transferred to the ISO pursuant to the TCA.

TCA (Transmission Control Agreement)	The agreement between the ISO and Participating TOs establishing the terms and conditions under which TOs will become Participating TOs and how the ISO and each Participating TO will discharge their respective duties and responsibilities, as may be modified from time to time.
Tie Point Meter	A revenue meter, which is capable of providing Settlement Quality Meter Data, at a Scheduling Point or at a boundary between UDCs within the ISO Controlled Grid.
TO (Transmission Owner)	An entity owning transmission facilities or having firm contractual rights to use transmission facilities.
TO Tariff	A tariff setting out a Participating TO's rates and charges for transmission access to the ISO Controlled Grid and whose other terms and conditions are the same as those contained in the document referred to as the Transmission Owners Tariff approved by FERC as it may be amended from time to time.
Trading Day	The twenty-four hour period beginning at the start of the hour ending 0100 and ending at the end of the hour ending 2400 daily, except where there is a

change to and from daylight savings time.

Transfer Schedule A Schedule for Energy that is delivered from one Scheduling Coordinator to another. Each Transfer Schedule must originate and terminate completely within the ISO Control Area and may not involve more than two (one sending and one receiving) Scheduling Coordinators.

Transition Charge The charge or periodic charge assessed to customers to recover the reasonable uneconomic portion of costs associated with Generation-related assets and obligations, nuclear decommissioning, and capitalized Energy efficiency investment programs approved prior to August 15, 1996 and as defined in the California Assembly Bill No. 1890 enacted on February 24, 1995.

Transition Period The period of time established by the California Legislature and CPUC to allow IOUs and Local Publicly Owned Electric Utilities an opportunity to recover Transition Costs or Severance Fees.

Transmission Losses Energy that is lost as a natural part of the process of transmitting Energy from Generation to Load

	delivered at the ISO/UDC boundary or Control Area boundary.
Transmission Revenue Credit	The proceeds received by the Participating TO from the ISO for Wheeling service and Usage Charges, plus the shortfall or surplus resulting from any cost differences between Transmission Losses and Ancillary Service requirements associated with Existing Rights or Non-Converted Rights and the ISO's rules and protocols.
TRBA (Transmission Revenue Balancing Account)	A mechanism to be established by each Participating TO which will ensure that all Transmission Revenue Credits flow through to its transmission customers.
TRR (Transmission Revenue Requirement)	The TRR is the total annual authorized revenues associated with transmission facilities turned over to the Operational Control of the ISO by a Participating TO, and for which FERC jurisdictional entities are permitted to include in their Access Charges for recovery from customers, or in the case of non-FERC jurisdiction entities, the equivalent revenue amount authorized by the appropriate jurisdictional regulatory authority.

Trustee	The trustee of the California Power Exchange trust and the California Independent System Operator trust established by order of the California Public Utilities Commission on August 2, 1996 Decision No. 96-08-038 relating to the Ex Parte Interim Approval of a Loan Guarantee and Trust Mechanism to Fund the Development of an Independent System Operator (ISO) and a Power Exchange (PX) pursuant to Decision 95-12-063 as modified.
UDC (Utility Distribution Company)	An entity that owns a Distribution System for the delivery of Energy to and from the ISO Controlled Grid, and that provides regulated retail electric service to Eligible Customers, as well as regulated procurement service to those End-Use Customers who are not yet eligible for direct access, or who choose not to arrange services through another retailer.
Unaccounted for Energy (UFE)	UFE is the difference in Energy, for each UDC Service Area and Settlement Period, between the net Energy delivered into the UDC Service Area, adjusted for UDC Service Area Transmission Losses (calculated in

accordance with Section 7.4.3), and the total metered Demand within the UDC Service Area adjusted for distribution losses using Distribution System loss factors approved by the Local Regulatory Authority. This difference is attributable to meter measurement errors, power flow modeling errors, energy theft, statistical Load profile errors, and distribution loss deviations.

Uncontrollable Force Any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm, flood, earthquake, explosion, any curtailment, order, regulation or restriction imposed by governmental military or lawfully established civilian authorities or any other cause beyond the reasonable control of the ISO or Market Participant or the PX or PX Participant (as the case may be) which could not be avoided through the exercise of Good Utility Practice.

Unit Commitment The process of determining which Generating Units will be committed (started) to meet Demand and provide Ancillary Services in the near future (e.g., the next Trading Day).

Usage Charge	The amount of money, per 1 kW of scheduled flow, that the ISO charges a Scheduling Coordinator for use of a specific congested Inter-Zonal Interface during a given hour.
Voltage Limits	For all substation busses, the normal and post-contingency Voltage Limits (kV). The bandwidth for normal Voltage Limits must fall within the bandwidth of the post-contingency Voltage Limits. Special voltage limitations for abnormal operating conditions such as heavy or light Demand may be specified.
Voltage Support	Services provided by Generating Units or other equipment such as shunt capacitors, static var compensators, or synchronous condensers that are required to maintain established grid voltage criteria. This service is required under normal or system emergency conditions.
WEnet (Western Energy Network)	An electronic network that facilitates communications and data exchange among the ISO, Market Participants and the public in relation to the status and operation of the ISO Controlled Grid.
Wheeling	Wheeling Out or Wheeling Through.

Wheeling Access Charge The charge assessed by the ISO that is paid by a Scheduling Coordinator for Wheeling. Wheeling Access Charges shall not apply for Wheeling under a bundled non-economy Energy coordination agreement of a Participating TO executed prior to July 9, 1996.

Wheeling Out Except for Existing Rights and Non-Converted Rights exercised under an Existing Contract in accordance with Sections 2.4.3 and 2.4.4, the use of the ISO Controlled Grid for the transmission of Energy from a Generating Unit located within the ISO Controlled Grid to serve a Load located outside the transmission and distribution system of a Participating TO.

Wheeling Through Except for Existing Rights and Non-Converted Rights exercised under an Existing Contract in accordance with Sections 2.4.3 and 2.4.4, the use of the ISO Controlled Grid for the transmission of Energy from a resource located outside the ISO Controlled Grid to serve a Load located outside the transmission and distribution system of a Participating TO.

Wholesale Customer A person wishing to purchase Energy and Ancillary

	Services at a Bulk Supply Point or a Scheduling Point for resale.
Wholesale Sales	The sale of Energy and Ancillary Services at a Bulk Supply Point or a Scheduling Point for resale.
WSCC (Western System Coordinating Council)	The Western Systems Coordinating Council or its successor.
Zone	A portion of the ISO Controlled Grid within which Congestion is expected to be small in magnitude or to occur infrequently. "Zonal" shall be construed accordingly.

ISO TARIFF APPENDIX B

Scheduling Coordinator Agreement

Posted December 23, 1997

Scheduling Coordinator Agreement

THIS AGREEMENT is made this ___ day of _____, _____ and is entered into, by and between:

(1) [Full legal name] having a registered or principal executive office at [address] (the "Scheduling Coordinator")

and

(2) **CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**, a California nonprofit public benefit Corporation having a principal executive office located at such place in the State of California as the ISO Governing Board may from time to time designate (the "ISO").

Whereas:

A. The Scheduling Coordinator has applied for certification by the ISO under the certification procedure referred to in Section 2.2.3 of the ISO Tariff.

B. The Scheduling Coordinator wishes to schedule Energy and Ancillary Services on the ISO Controlled Grid under the terms and conditions set forth in the ISO Tariff and the ISO Protocols.

NOW IT IS HEREBY AGREED as follows:

1. **Definitions**

A. Terms and expressions used in this Agreement shall have the same meanings as those contained in the Master Definitions Supplement to the ISO Tariff.

B. The "ISO Tariff" shall mean the ISO Operating Agreement and Tariff as amended from time to time, together with any Appendices or attachments thereto.

2. **Covenant of the Scheduling Coordinator**

The Scheduling Coordinator agrees that:

A. the ISO Tariff and the ISO Protocols govern all aspects of scheduling of Energy and Ancillary Services on the ISO Controlled Grid, including (without limitation), the financial and technical criteria for

Scheduling Coordinators, bidding, settlement, information reporting requirements and confidentiality restrictions;

B. it will abide by, and will perform all of the obligations under the ISO Tariff and the ISO Protocols placed on Scheduling Coordinators in respect of all matters set forth therein including, without limitation, all matters relating to the scheduling of Energy and Ancillary Services on the ISO Controlled Grid, ongoing obligations in respect of scheduling, Settlement, system security policy and procedures to be developed by the ISO from time to time, billing and payments, confidentiality and dispute resolution;

C. it shall ensure that each UDC, over whose Distribution System Energy or Ancillary Services are to be transmitted in accordance with Schedules, Adjustment Bids or bids for Ancillary Services submitted to the ISO by the Scheduling Coordinator, enters into a UDC operating agreement in accordance with Section 4 of the ISO Tariff;

D. it shall ensure that each Generator for which it schedules Energy or on whose behalf it submits to the ISO Adjustment Bids or bids for Ancillary Services enters in to a Generator agreement in accordance with Section 5 of the ISO Tariff;

E. it shall have the primary responsibility to the ISO, as principal, for all Scheduling Coordinator payment obligations under the ISO Tariff and the ISO Protocols

F. its status as a Scheduling Coordinator is at all times subject to the ISO Tariff and the ISO Protocols.

3. **Term and Termination**

3.1 This Agreement shall commence on the later of (a) _____ or (b) the date the Scheduling Coordinator is certified by the ISO as a Scheduling Coordinator.

3.2 This Agreement may terminate in accordance with the provisions set forth in the ISO Tariff and the Scheduling Coordinator Application Protocol.

4. **Assignment**

Either party may assign its obligations under this Agreement with the other party's consent, such consent shall not to be unreasonably withheld.

5. **Partial Invalidity**

If any provision of this Agreement, or the application of such provision to any persons, circumstance or transaction, shall be held invalid, the remainder of this Agreement, or the application of such provision to other persons or circumstances or transactions, shall not be affected thereby.

6. **Settlement Account**

The Scheduling Coordinator shall maintain at all times an account with a bank capable of Fed-Wire transfer to which credits or debits shall be made in accordance with the billing and Settlement provisions of Section 11 of the ISO Tariff. Such account shall be the account referred to in Clause 7 hereof or as notified by the Scheduling Coordinator to the ISO from time to time by giving at least 7 days written notice before the new account becomes operational.

7. **Notices**

Any notice, demand or request made to or by either party regarding this Agreement shall be made in accordance with the ISO Tariff and unless otherwise stated or agreed shall be made to the representative of the other party indicated below.

ISO:

Name of Primary Representative:_____

Name of Alternative Representative:_____

Address: _____

_____

State:_____ Zip Code: _____

E-Mail Address: _____

Phone No: _____

Fax No:_____

Scheduling Coordinator:

Name of Primary Representative:_____

_____

Name of Alternative Representative:_____

Address: _____

_____

State:_____ Zip Code:_____

E-Mail Address:_____

Phone No:_____

Fax No:_____

Settlement Account No:_____

Title:_____

Sort Code:_____

Bank:_____

8. **Agreement to be bound by ISO Tariff and ISO Protocols.**

The ISO Tariff and the ISO Protocols are incorporated herein and made a part hereof. In the event of a conflict between the terms and conditions of this Agreement and any other terms and conditions set forth in the ISO Tariff, the terms and conditions of the ISO Tariff shall prevail.

9. **Electronic Contracting.**

All submitted applications, schedules, bids, confirmations, changes to information on file with the ISO and other communications conducted via electronic transfer (e.g. direct computer link, FTP file transfer, bulletin board, e-mail, facsimile or any other means established by the ISO) shall have the same legal rights, responsibilities, obligations and other implications as set forth in the terms and conditions of the ISO Tariff and Protocols as if executed in written format.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective authorized officials.

ISO:

By: _____ _____ _____
Name Title Date

Scheduling Coordinator:

By: _____ _____ _____
Name Title Date

ISO TARIFF APPENDIX C

ISO Scheduling Process

Posted December 23, 1997

Day-ahead Schedule Timeline

	Responsible Parties							
Line	Time (Before or on)	ISO	Non-PX SCs	PX	Must-Take and Reliability generation	UDC	PX Participants	Actions
	Two days ahead							
0	6:00 PM	x						Publish forecasted transmission conditions (Generator Meter Multipliers, system load forecast (by Zones), estimated Ancillary Service requirements, scheduled transmission outages, loop flows, congestion, ATC, etc.)
	One day ahead							
1	6:00 AM	x						Update system load forecast and Ancillary Service requirements.
2			x					Provide direct access load forecasts to the ISO.
3	6:30 AM	x						Provide net direct access load forecasts to UDCs.
4	9:30 AM						x	Submit individual unit schedules, AS schedules/price bids and incs/decs for CM to the PX.
5	9:45 AM			x				Validate individual unite schedules, AS schedule/price bids and incs/decs.
6	10:00 AM			x				Finalize MCP and Initial preferred schedules. Communicate MCP and resulting schedules to the PX participants.
7				x				Finalize AS schedules (self-provision) or AS price bids. Communicate resulting AS schedules and/or price to PX participants.
8			x	x				Submit initial preferred energy schedules to the ISO.
9			x	x				Submit Ancillary Service bids and/or self-provided Ancillary Service schedules to the ISO.
10	10:00 AM	x						Validate all SC energy schedules and bids; notify and resolve incorrect schedules and bids, if any.
11		x						Validate all SC Ancillary Service schedules and bids; notify and resolve incorrect Ancillary Service schedules and bids, If any.
12								Notify Scheduling Coordinators of specific Reliability Must-Run Unit requirements.
13		x						Start the inter-zonal congestion management evaluation process and Ancillary Services bid evaluation.
14	11:00 AM	x						If no inter-zonal congestion exists, go to line 27.
15		x						Complete advisory dispatch schedules and transmission prices if inter-zonal congestion exists.
								Complete the advisory schedules and prices of each Ancillary

16		x						Service.
17		x						Notify all SC if inter-zonal congestion exists. Publish advisory transmission prices.
18		x						Inform all SCs their advisory dispatch schedules if inter-zonal congestion exists.
19		x						Inform all SCs advisory AS schedules and prices if inter-zonal congestion exists.
20	11:05 PM		x	x			x	Start the process of developing revised schedules and price bids (the PX may iterate with PX participants).
21			x	x			x	Start the process of developing revised AS schedules and price bids (the PX may iterate with PX participants).
22	12:00 PM		x	x				Submit revised preferred schedules and price bids to the ISO.
23			x	x				Submit revised preferred AS schedules and price bids to the ISO.
24	12:00 PM	x						Validate all SC schedules and bids; notify and resolve incorrect schedules and bids, if any.
25		x						Validate all SC AS schedules and bids; notify and resolve incorrect schedules and bids, if any.
26		x						Start the inter-zonal congestion management evaluation process and Ancillary Services bid evaluation.
27	1:00 PM	x						Complete final dispatch schedules and transmission prices.
28		x						Complete final schedules and prices of each Ancillary Service.
29	1:00 PM	x						Complete final schedules.
30	1:00 PM	x						Inform all SCs their final dispatch schedules.
31		x						Inform all SCs their final AS schedules and prices.
32		x						Publish transmission prices if inter-zonal congestion exists.
33		x						Calculate and communicate with SC the specific SCs zonal prices if asked.
34				x				Publish PX prices.
35				x				Communicate the final generation and load schedules to PX participants.
36				x				Communicate the final Ancillary Service schedules to PX participants.
37		x						Develop net schedules for each of the Control Area interfaces. These interfaces include SC net schedules, Control Area net schedules and/or individual transactions.
38		x						Call each adjacent Control Area and check that net schedules at each interface point match. Search for discrepancies and identify transactions that do not match. Resolve discrepancies with the involved SCs or eliminate the transactions with discrepancies.

ISO TARIFF APPENDIX D

Black Start Units

Posted December 23, 1997

Black Start Units

The following requirements must be met by Generating Units providing Black Start ("Black Start Units"):

(a) Black Start Units must be capable of starting and paralleling with the ISO Controlled Grid without aid from the ISO Controlled Grid;

(b) Black Start Units must be capable of making a minimum number of starts per event (to be without aid from the ISO Controlled Grid as determined by the ISO);

(c) Black Start Units must be equipped with governors capable of operating in the stand alone (asynchronous) and parallel (synchronous) modes.

(d) Black Start Units must have startup load pickup capabilities at a level to be determined by the ISO, including total startup load (MW) and largest startup load (MW) for such power output levels as the ISO may specify.

(e) All Black Start Units must be capable of producing Reactive Power (boost) and absorbing Reactive Power (buck) as required by the ISO to control system voltages. This requirement may be met by the operation of more than one Black Start unit in parallel providing that:

(i) the Black Start generation supplier demonstrates that the proposed Generation resource shares reactive burden equitably;

(ii) all Participating Generators associated with the proposed Black Start source are located in the same general area.

Buck/boost capability requirement shall be dependent on the location of the proposed resource in relation to Black Start load.

(f) All Black Start Units must have the following communication/control requirements:

(i) dial-up telephone;

(ii) backup radio;

(iii) manning levels which accord with Good Utility Practice.

ISO TARIFF APPENDIX E

Verification of Submitted Data for Ancillary Services

Posted December 23, 1997

Verification of Submitted Data for Ancillary Services

The ISO shall use the following procedures for verifying the scheduling and bid information submitted by Scheduling Coordinators for Ancillary Services. In this Appendix, a "bid" is a bid submitted by a Scheduling Coordinator in the ISO's competitive Ancillary Services market. A "schedule" is a Schedule including Ancillary Services which the Scheduling Coordinator wishes to self-provide.

1. Bid File and Schedule Format. The ISO shall verify that the bid files and schedules conform to the format specified for the type of Ancillary Service bid or schedule submitted. If the bid file or schedule does not conform to specifications, it shall be annotated by the ISO to indicate the location of the errors, and returned to the Scheduling Coordinator for corrections. Any changes made by a Scheduling Coordinator shall require a new submittal of bid or schedule information, and all validity checks shall be performed on the re-submitted bid or schedule.

2. Generation Schedules and Bids.

2.1. Quantity Data. The ISO shall verify that no Scheduling Coordinator is submitting a scheduled or bid quantity for Regulation, Spinning Reserve, Non-Spinning or Replacement Reserve which exceeds available capacity for Regulation and Reserves on the Generating Units, Loads and resources scheduled for that Settlement Period.

2.2 Location Data. The ISO shall verify that the location data corresponds to the ISO Controlled Grid interconnection data.

2.3. Operating Capability. The ISO shall verify that the operating capability data corresponds to the ISO Controlled Grid interconnection data for each Generating Unit, Load or other resource for which a Scheduling Coordinator is submitting an Ancillary Service bid or schedule.

3. Load Schedules and Bids.

3.1. Quantity data. The ISO shall verify that the quantity of Non-Spinning and Replacement Reserve scheduled or bid from Dispatchable Load does not exceed scheduled consumption quantities for that Settlement Period.

3.2. Location data. The ISO shall verify that the location of the Dispatchable Load corresponds to the ISO Controlled Grid interconnection data for each supplier of Dispatchable Load.

4. Notification of Validity or Invalidity of Ancillary Services Schedules and Competitive Bids. The ISO shall, as soon as reasonably practical following the receipt of competitive bids or self-provided Ancillary Service schedules, send to the Scheduling Coordinator who submitted the schedule or bid the following information:

(a) acknowledgment of receipt of the competitive bid or self-provided Ancillary Service schedule;

(b) notification that the bid or schedule has been accepted or reject for non-compliance with the rules specified in this Appendix. If a bid or schedule is rejected, such notification shall contain an explanation of why the bid or schedule was not accepted;

(c) a copy of the bid or schedule as processed by the ISO.

In response to an invalid schedule or bid, the Scheduling Coordinator shall be given a period of time to respond to the notification. The Scheduling Coordinator shall respond by resubmitting a corrected schedule or bid. If the Scheduling Coordinator does not respond to the notification within the required time frame, the ISO shall proceed without that Scheduling Coordinator's bid or schedule.

5. Treatment of Missing Values.

5.1 Missing Location Values. Any bid submitted without a Location Code shall be deemed to have a zero bid quantity for that Settlement Period.

5.2 Missing Quantity Values. Any bid submitted without a quantity value shall be deemed to have a zero bid quantity for Ancillary Service capacity for that Settlement Period.

5.3 Missing Price Values. Any bid submitted with non-zero quantity value, but with a missing price value, shall be rejected. Any schedule submitted without a proxy price value shall be deemed to have a proxy price of zero.

6. Treatment of Equal Price Bids. The ISO shall allow these Scheduling Coordinators to resubmit, at their own discretion, their bid no later than 2 hours the same day the original bid was submitted. In the event identical prices still exist following resubmission of bids, the ISO shall determine the merit order for each Ancillary Service by considering applicable constraint information for each Generating Unit, Load or other resource, and optimize overall costs for the Trading Day. If equal bids still remain, the ISO shall proportion participation in the Final Day Ahead or Hour Ahead Schedule (as the case may be) amongst the bidding Generating Units, Loads and resources with identical bids to the extent

permitted by operating constraints and in a manner deemed appropriate by the ISO.

7. Receipt of Bids and Schedules. The ISO shall maintain an audit trail relating to the receipt of bids and schedules and the processing of those bids and schedules.

ISO TARIFF APPENDIX F

[Not Used]

ISO TARIFF APPENDIX G

Must-Run Agreements

(see Separate Volume 1A)

Not Posted as of December 22, 1997