

ISO TARIFF APPENDIX A
Master Definitions Supplement

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Access Charge

A charge paid by all UDCs, MSSs and, in certain cases, Scheduling Coordinators, delivering Energy to Gross Load, as set forth in Section 7.1. The Access Charge includes the High Voltage Access Charge, the Transition Charge and the Low Voltage Access Charge. The Access Charge will recover the Participating TO's Transmission Revenue Requirement in accordance with Appendix F, Schedule 3.

Active Zone

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) included in its Schedule or, in the case of an Inter-SC Trade, included in its Schedule or the Schedule of another Scheduling Coordinator, to be redispatched by the ISO; (ii) the maximum

MW output to which a Scheduling Coordinator will permit the resource included in its Schedule or, in the case of an Inter-SC Trade, included in its Schedule or the Schedule of another Scheduling Coordinator, 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

Affiliate

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.

An entity, company or person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with the subject entity, company, or person.

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.

Alert Notice

A Notice issued by the ISO when the operating requirements of the ISO Controlled Grid are marginal because of Demand exceeding forecast, loss of major Generation, or loss of transmission capacity that has curtailed imports into the ISO Control Area, or if the Hour-Ahead Market is short on scheduled Energy and Ancillary Services for the ISO Control Area.

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 Participating Load who is

eligible to provide an Ancillary Serviced.

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

With respect to whether security must be posted for payment of the Grid Management Charge:

(a) A short-term taxable commercial paper debt rating of not less than any one of the following: (i) A1 by Standard and Poor's Corporation; (ii) D1 by Duff & Phelps Credit Rating Agency; (iii) F1 by Fitch IBCA Incorporated; or (iv) P1 by Moody's Investors Service. This rating shall be an issuer, or counterpart rating, without the benefit of credit enhancement.

(b) A short-term tax exempt commercial paper debt rating of not less than any one of the following: (i) A1 by Standard and Poor's Corporation; (ii) V1 by Fitch IBCA Incorporated; or (iii) VMIG1 by Moody's Investors Service. This rating shall be an issuer, or counterparty

rating, without the benefit of credit enhancement.

With respect to whether security must be posted for payment of all charges other than the Grid Management Charge:

(c) A short-term tax exempt commercial paper debt rating of not less than any one of the following: (i) A2 by Standard and Poor's Corporation; (ii) D2 by Duff & Phelps Credit Rating Agency; (iii) F2 by Fitch IBCA Incorporated; or (iv) P2 by Moody's Investors Service. This rating shall be an issuer, or counterparty rating, without the benefit of credit enhancement.

(d) A short-term tax exempt commercial paper debt rating of not less than any one of the following: (i) A2 by Standard and Poor's Corporation; (ii) V2 by Fitch IBCA Incorporated; or (iii) VMIG2 by Moody's Investors Service. This rating shall be an issuer, or counterparty rating, without the benefit of credit enhancement.

(e) A long-term debt rating of not less than any one of the following: (i) A- by Standard and Poor's Corporation; (ii) A- by Duff & Phelps Credit Rating Agency; (iii) A- by Fitch IBCA Incorporated; or (iv) A3

by Moody's Investors Service. This rating shall be an issuer, or counterparty rating, without the benefit of credit enhancement.

With respect to whether security must be posted for payment of all charges:

(f) A federal agency shall be deemed to have an Approved Credit Rating if its financial obligations under the ISO Tariff are backed by the full faith and credit of the United States.

(g) A California state agency shall be deemed to have an Approved Credit Rating if its financial obligations under the ISO Tariff are backed by the full faith and credit of the State of California.

(h) Another credit rating approved by the ISO Board of Governors.

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 forecast 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).

BEEP Interval

The time period, which may range between five (5) and thirty (30) minutes, over which the ISO's BEEP Software measures deviations in Generation and Demand, and selects Ancillary Service and Supplemental Energy resources to

provide balancing Energy in response to such deviations. As of the ISO Operations Date, the BEEP Interval shall be ten (10) minutes. Following a decision, by the ISO Governing Board, the ISO may, by seven (7) days' notice published on the ISO's Home Page, at <http://www.caiso.com> (or such other internet address as the ISO may publish from time to time), increase or decrease the BEEP Interval within the range of five (5) to thirty (30) minutes.

BEEP Interval Ex Post Prices

The prices charged to or paid by Scheduling Coordinators for Imbalance Energy in each Zone in each BEEP Interval.

BEEP Software

The balancing energy and ex post pricing software which is used by the ISO to determine which Ancillary Service and Supplemental Energy resources to Dispatch and to calculate the Ex Post Prices.

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.

Black Start Generator

A Participating Generator in its capacity as party to an Interim Black Start Agreement with the ISO for the provision of Black Start services, but shall exclude Participating Generators in their capacity as providers of Black Start services under their Reliability Must-Run Contracts

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.

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.

Curtable Demand

Demand from a Participating Load that can be curtailed at the direction of the ISO in the real time dispatch of the ISO Controlled Grid. Scheduling Coordinators with Curtable 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.

Default GMM

Pre calculated GMM based on historical Load and interchange levels.

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,

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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.

An estimate of Demand over a designated period of time.

Demand Forecast

Any Eligible Customer on behalf of whom Demand and Ancillary Services are scheduled pursuant to the ISO Tariff.

Demand Market Participant

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.

Effective Price

The price, applied to undelivered Instructed Imbalance Energy, calculated by dividing the absolute value of the total payment or charge for Instructed Imbalance Energy by the absolute value of the total Instructed Imbalance Energy, for the Settlement Period; provided that, if both the total payment or charge and quantity of Instructed Imbalance Energy for the Settlement Period are negative, the Effective Price shall be multiplied by -1.0 (minus one).

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

Eligible Regulatory Must-Take Generation

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.

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.

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.

Ex Post GMM

GMM that is calculated utilizing the real time Power Flow Model in accordance with Section 7.4.2.1.2.

Ex Post Price

The Hourly Ex Post Price or the BEEP Interval Ex Post Prices.

Ex Post Transmission Loss

Transmission Loss that is calculated based on Ex Post GMM.

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 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.

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 following the issue of that Preliminary Settlement Statement.

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.

**FTR (Firm Transmission
Right)**

A contractual right, subject to the terms and conditions of the ISO Tariff, that entitles the FTR Holder to receive, for each hour of the term of the FTR, a portion of the Usage Charges received by the ISO for transportation of energy from a specific originating

Zone to a specific receiving Zone and, in the event of an uneconomic curtailment to manage Day-Ahead congestion, to a Day-Ahead scheduling priority higher than that of a schedule using Converted Rights capacity that does not have an FTR.

FTR Bidder

An entity that submits a bid in an FTR auction conducted by the ISO in accordance with Section 9.4 of the ISO Tariff.

FTR Holder

The owner of an FTR, as registered with the ISO.

FTR Market

A transmission path from an originating Zone to a contiguous receiving Zone for which FTRs are auctioned by the ISO in accordance with Section 9.4 of the ISO Tariff.

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

Generating Unit

proportionately throughout the ISO Control Area.
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 to a neighboring Control Area.

Gross Load

All Energy (adjusted for distribution losses) delivered for the supply of Loads directly connected to the transmission facilities or Distribution System of a UDC or MSS, and all Energy provided by a Scheduling Coordinator for the supply of Loads not directly connected to the transmission facilities or Distribution System of a UDC or MSS. Gross Load shall exclude Load with respect to which the Wheeling Access Charge is payable and the portion of the Load of an individual retail customer of a UDC, MSS, or Scheduling Coordinator that is served by a Generating Unit that: (a) is located on the customer's site or provides service to the customer's site through over-the-fence arrangements as authorized by Section 218 of the California Public Utilities Code; (b) is a qualifying small power production facility or qualifying cogeneration facility, as those terms are defined in the FERC's regulations implementing Section 201 of the Public Utility Regulatory Policies Act of 1978; (c) was serving the customer's

Load on or before March 31, 2000; and (d) secured Standby Service from a Participating TO under terms approved by a Local Regulatory Authority or FERC, as applicable, as of March 31, 2000 and continues to secure Standby Service from the Participating TO or can be curtailed concurrently with an outage of the Generating Unit serving the Load. Gross Load forecasts consistent with filed TRR will be provided by each Participating TO to the ISO.

High Voltage Access Charge

The Access Charge applicable under Section 7.1 to recover the High Voltage Transmission Revenue Requirements of each Participating TO in a TAC Area.

High Voltage Transmission Facility

A transmission facility that is owned by a Participating TO or to which a Participating TO has an Entitlement that is represented by a Converted Right and that operates at a voltage at or above 200 kilovolts, and supporting facilities, and the costs of which are not directly assigned to one or more specific customers.

High Voltage Transmission Revenue Requirement

The portion of a Participating TO's TRR associated with and allocable to the Participating TO's High Voltage Transmission Facilities and Converted Rights associated with High Voltage Transmission Facilities.

**High Voltage Transmission
Standby Service**

Service provided by a Participating TO which allows a Standby Service Customer to utilize the Participating TO's High Voltage Transmission Facilities as a backup to ensure that Energy may be reliably delivered to the Standby Service Customer in the event of an outage of a Generating Unit located on or near the customer's premise.

**High Voltage Wheeling
Access Charge**

The Wheeling Access Charge associated with the recovery of a Participating TO's High Voltage Transmission Revenue Requirements in accordance with Section 7.1.

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 BEEP Interval 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

Imbalance Energy is Energy from Regulation, Spinning and Non-spinning Reserves, or Replacement Reserve, or Energy from other Generating Units, System Units, System Resources, or Loads that are able to respond to the ISO's request for more or less Energy.

Inactive Zone

All Zones which the ISO Governing Board has determined do not have a workably competitive Generation market and as set out in Appendix I to the ISO Tariff.

Incremental Change

The change in dollar value of a specific charge type from the Preliminary Settlement Statement to the Final Settlement Statement including any new charge types or Trading Day charges appearing for the first time on the Final Settlement Statement.

Instructed Imbalance Energy

The real time change in Generation output or Demand (from dispatchable Generating Units, System Units, System Resources or Loads) which is instructed by the ISO to ensure that reliability of the ISO Control Area is maintained in accordance with Applicable Reliability Criteria. Sources of Imbalance Energy include Spinning and Non-Spinning Reserves, Replacement Reserve, and Energy from other dispatchable Generating Units, System Units, System Resources or Loads that are able

to respond to the ISO's request for more or less Energy.

**Inter-Scheduling
Coordinator Ancillary
Service Trades**

Ancillary Service transactions between Scheduling
Coordinators.

**Inter-Scheduling Energy
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 trust 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 (1) 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

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 Access Charges or 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

The ISO internet home page at <http://www.caiso.com/> or such other internet address as the ISO shall publish from time to time.

ISO Market

Any of the markets administered by the ISO under the ISO Tariff, including, without limitation, Imbalance Energy, Ancillary Services, and FTRs.

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

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

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. The ISO Security Amount may be separated into two components: (i) the level of security required to secure payment of the Grid Management Charge; and (ii) the level of security required to secure payment of all charges other than the Grid Management Charge.

ISO Tariff

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

ISO Grid Operations 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.

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

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

Participating TO

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, a state agency or subdivision furnishing electric services, a rural cooperative 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 from trades between Scheduling Coordinators. This will be the information used by the ISO

Loop Flow

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. 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.

Low Voltage Access Charge

The Access Charge applicable under Section 7.1 to recover the Low Voltage Transmission Revenue Requirement of a Participating TO.

Low Voltage Transmission Facility

A transmission facility owned by a Participating TO or to which a Participating TO has an Entitlement that is represented by a Converted Right, which is not a High Voltage Transmission Facility.

Low Voltage Transmission Revenue Requirement

The portion of a Participating TO's TRR associated with and allocable to the Participating TO's Low Voltage Transmission Facilities and Converted Rights associated

with Low Voltage Transmission Facilities.

**Low Voltage Wheeling
Access Charge**

The Wheeling Access Charge associated with the recovery of a Participating TO's Low Voltage Transmission Revenue Requirement in accordance with Section 7.1.

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 containing information regarding Generating Units, Loads and other resources.

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, MVAh and MVAh.

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 geographically contiguous system of a New Participating TO, located within a single Zone which has been operating for a number of years prior to the ISO Operations Date subsumed within the ISO Control Area and encompassed by ISO certified revenue quality meters at each interface point with the ISO Controlled Grid and ISO certified revenue quality meters on all Generating Units internal to the system, which is operated in accordance with an agreement described in

Section 3.3.1.

MSS Operator

An entity that owns an MSS and has executed an agreement described in Section 3.3.1.

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

Municipal Tax Exempt TO

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.

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.

New High Voltage Facility

A High Voltage Transmission Facility of a Participating TO that enters service after the beginning of the transition period described in Section 4 of Schedule 3 of Appendix F, or a capital addition made after the beginning of the transition period described in Section 4.1 of Schedule 3 of Appendix F to an Existing High Voltage Transmission Facility.

**New Participating TO
Nomogram**

A Participating TO that is not an Original Participating TO. 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-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-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.

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.

Original Participating TO

A Participating TO that was a Participating TO as of January 1, 2000.

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 Load

An entity providing Curtailable Demand, which has undertaken in writing to comply with all applicable provisions of the ISO Tariff, as they may be amended from time to time.

**Participating Seller or
Participating Generator**

A Generator or other seller of Energy or Ancillary

Participating TO

Services through a Scheduling Coordinator over the ISO Controlled Grid, which has undertaken to be bound by the terms of the ISO Tariff, in the case of a Generator through a Participating Generator Agreement.

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. A Participating TO may be an Original Participating TO or a New Participating TO.

Payment Date

The date by which invoiced amounts are to be paid under the terms of the ISO Tariff.

**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 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.

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.

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 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.

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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 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 Tariff

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

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 either by Generating Units certified by the ISO as equipped and capable of responding to the ISO's direct digital control signals, or by System Resources that have been certified by the ISO as capable of delivering such service to the ISO Control Area, 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. Regulation includes both the increase of output by a Generating Unit or System Resource ("Regulation Up") and the decrease in output by a Generating Unit or System Resource ("Regulation Down"). Regulation Up and Regulation Down are distinct capacity products, with separately stated requirements and Market Clearing Prices in each Settlement Period.

Regulation Energy Payment

The additional value of regulating Energy.

Adjustment

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 of solid waste Generation, or other Generation contracts.

**Regulatory Must-Take
Generation**

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. 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 by a Responsible Utility to the ISO for the cost of Reliability Must-Run Generation.

**Reliability Must-Run
Contract (RMR Contract)**

A rate schedule on file at FERC and in effect, or a contract between the ISO and a Generator, giving the ISO the right to call on the Generator to generate Energy or provide Ancillary Services from the Generating Unit as

and when required to ensure the reliability of the ISO
Controlled Grid, in return for certain payments.

**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 a Reliability Must-
Run Contract

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,
Curtable Demand that is capable of being curtailed within
sixty minutes and that can remain curtailed for two hours.

Responsible Utility

The utility which is a party to the TCA in whose Service Area the Reliability Must-Run Unit is located or whose Service Area is contiguous to the Service Area in which a Reliability Must-Run Unit owned by an entity outside of the ISO Controlled Grid is located.

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.

Revenue Review Panel

The panel established by the ISO Governing Board to review the Transmission Revenue Requirement of non-FERC jurisdictional Participating TOs.

Revised Schedule

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

RMR Owner

The provider of services under a Reliability Must-Run Contract.

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 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. 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 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 including any protocol of the ISO.

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 approved by the Governor on September 23, 1996.

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.

Standby Rate

Means a rate assessed a Standby Service Customer by the Participating TO, as approved by the Local Regulatory Authority, or FERC, as applicable, for Standby Service which compensates the Participating TO, among other things, for costs of High Voltage Transmission Facilities.

Standby Service

Service provided by a Participating TO which allows a Standby Service Customer, among other things, access to High Voltage Transmission Facilities for the delivery of backup power on an instantaneous basis to ensure that Energy may be reliably delivered to the Standby Service Customer in the event of an outage of a Generating Unit serving the customer's Load.

Standby Service Customer

A retail End-Use Customer of a Participating TO that receives Standby Service and pays a Standby Rate.

Standby Transmission Revenue

The transmission revenues, with respect to cost of both High Voltage Transmission Facilities and Low Voltage Transmission Facilities, collected directly from Standby Service Customers through charges for Standby Service.

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 bound by a Participating Generator Agreement, Loads bound by a Participating Load Agreement, System Units, and System 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 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 individual Generating Units and/or Loads within a Metered Subsystem controlled so as to simulate a single resource with specified performance characteristics, as mutually determined and agreed to by the MSS Operator and the ISO. The Generating Units and/or Loads making up a System Unit must be in close physical proximity to each other such that the operation of the resources comprising the System Unit does not result in significant differences in flows on the ISO Controlled Grid.

TAC Area

A portion of the ISO Controlled Grid with respect to which Participating TOs' High Voltage Transmission Revenue Requirements are recovered through a High Voltage Access Charge. TAC Areas are listed in Schedule 3 of Appendix F.

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 component of the Access Charge collected by the ISO with the High Voltage Access Charge in accordance with Section 5.7 of Appendix F, Schedule 3.

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 , FTR auction revenue and Usage Charges, plus the shortfall or surplus resulting from any cost differences between Transmission Losses and Ancillary Service requirements associated with Existing Rights and the ISO's rules and protocols.

TRBA (Transmission Revenue Balancing Account)

A mechanism to be established by each Participating TO that has transmission customers which will ensure that all Transmission Revenue Credits and other credits specified in Sections 6 and 8 of Appendix F, Schedule 3, flow through to transmission customers.

TRR (Transmission Revenue Requirement)

The TRR is the total annual authorized revenue requirements associated with transmission facilities and Entitlements turned over to the Operational Control of the ISO by a Participating TO that has transmission customers. The costs of any transmission facility turned over to the Operational Control of the ISO shall be fully included in the Participating TO's TRR. The TRR includes the costs of transmission facilities and Entitlements and deducts Transmission Revenue Credits and credits for Standby Transmission Revenue and the transmission revenue expected to be actually received by the Participating TO for Existing Rights and Converted Rights. .

Trustee

The trustee of the California Independent System Operator trust established by order of the California Public Utilities Commission on August 2, 1996 Decision No. 96-08-038

UDC (Utility Distribution Company)

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.

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 7.4.2), 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

Uncontrollable Force

Load profile errors, and distribution loss deviations.

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 which could not be avoided through the exercise of Good Utility Practice.

Uninstructed Imbalance

Energy

The real time change in Generation or Demand other than that instructed by the ISO or which the ISO Tariff provides will be paid at the price for Uninstructed Imbalance Energy.

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.

Warning Notice

A Notice issued by the ISO when the operating requirements for the ISO Controlled Grid are not met in the Hour-Ahead Market, or the quantity of Regulation, Spinning Reserve, Non-Spinning Reserve, Replacement Reserve and Supplemental Energy available to the ISO does not satisfy the Applicable Reliability Criteria.

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 in accordance with Section 7.1.

Wheeling Access Charges shall not apply for Wheeling under a bundled

Wheeling Out

non-economy Energy coordination agreement of a Participating TO executed prior to July 9, 1996. The Wheeling Access Charge may consist of a High Voltage Wheeling Access Charge and a Low Voltage Wheeling Access Charge.

Except for Existing 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 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

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.

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 governs 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 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 into 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;
- F. its status as a Scheduling Coordinator is at all times subject to the ISO Tariff.

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 shall terminate upon acceptance by FERC of a notice of termination. The ISO Shall timely file any notice of termination with FERC.

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.

The ISO Tariff is 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

Day-ahead Schedule Timeline

Line	Responsible Parties				Must-Take and Reliability generation	UD C	PX Participants	Actions
	Time (Before or on)	ISO	Non-PX SCs	PX				
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	5:00 AM	X						Notify Scheduling Coordinators of unit-specific Reliability Must Run requirements
2	6:00 AM	x						Update system load forecast and Ancillary Service requirements.
3			X					Notify ISO of price option for Reliability Must Run Units for which notification was provided at 5:00 a.m.
4			x					Provide direct access load forecasts to the ISO.
5	6:30 AM	x						Provide net direct access load forecasts to UDCs.
6	9:30 AM						x	Submit individual unit schedules, AS schedules/price bids and incs/decs for CM to the PX.
7	9:45 AM			x				Validate individual unite schedules, AS schedule/price bids and incs/decs.
8	10:00 AM			x				Finalize MCP and Initial preferred schedules. Communicate MCP and resulting schedules to the PX participants.
9				x				Finalize AS schedules (self-provision) or AS price bids. Communicate resulting AS schedules and/or price to PX participants.
10			x	x				Submit initial preferred energy schedules to the ISO.
11			x	x				Submit Ancillary Service bids and/or self-provided Ancillary Service schedules to the ISO.
12	10:00 AM	x						Validate all SC energy schedules, including RMR requirements, and bids; notify and resolve incorrect schedules and bids, if any.

13		x						Validate all SC Ancillary Service schedules and bids; notify and resolve incorrect Ancillary Service schedules and bids, If any.
14		x						Start the inter-zonal congestion management evaluation process and Ancillary Services bid evaluation.
15	11:00 AM	x						If no inter-zonal congestion exists, go to line 27.
16		x						Complete advisory dispatch schedules and transmission prices if inter-zonal congestion exists.
17		x						Complete the advisory schedules and prices of each Ancillary Service.
18		x						Notify all SC if inter-zonal congestion exists. Publish advisory transmission prices.
19		x						Inform all SCs their advisory dispatch schedules if inter-zonal congestion exists.
20		x						Inform all SCs advisory AS schedules and prices if inter-zonal congestion exists.
21	11:05 PM		x	x			x	Start the process of developing revised schedules and price bids (the PX may iterate with PX participants).
22			x	x			x	Start the process of developing revised AS schedules and price bids (the PX may iterate with PX participants).
23	12:00 PM		x	x				Submit revised preferred schedules and price bids to the ISO.
24			x	x				Submit revised preferred AS schedules and price bids to the ISO.
25	12:00 PM	x						Validate all SC schedules and bids; notify and resolve incorrect schedules and bids, if any.
26		x						Validate all SC AS schedules and bids; notify and resolve incorrect schedules and bids, if any.
27		x						Start the inter-zonal congestion management evaluation process and Ancillary Services bid evaluation.

28	1:00 PM	x						Complete final dispatch schedules and transmission prices.
29		x						Complete final schedules and prices of each Ancillary Service.
30	1:00 PM	x						Complete final schedules.
31	1:00 PM	x						Inform all SCs their final dispatch schedules.
32		x						Inform all SCs their final AS schedules and prices.
33		x						Publish transmission prices if inter-zonal congestion exists.
34		x						Calculate and communicate with SC the specific SCs zonal prices if asked.
35				x				Publish PX prices.
36				x				Communicate the final generation and load schedules to PX participants.
37				x				Communicate the final Ancillary Service schedules to PX participants.
38		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.
39		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

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

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.

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

Rate Schedules

Schedule 1

Grid Management Charge

Part A – Monthly Calculation of Grid Management Charge (GMC)

The Grid Management Charge (ISO Tariff Section 8.0) is a formula rate designed to recover the ISO's administrative and operating costs, including costs incurred in establishing the ISO before its operations began. The Grid Management Charge also includes costs associated with Scheduling, System Control and Dispatch Service as described in Order No. 888.

The Grid Management Charge will be levied monthly in arrears on all Scheduling Coordinators by charging each Scheduling Coordinator the product of the Grid Management Charge rate, as calculated under section 8.4 of the ISO Tariff, and the Monthly Metered Consumption, all as expressly set forth in the following formula; provided, however, that (i) Existing Contract Deliveries shall be multiplied by a factor of 0.5 before application of the GMC; (ii) loads in a given hour served by Other Volumes shall be exempt from the GMC; (iii) Qualified Loads shall be exempt from the GMC; and (iv) all New Uses, including those by Existing Contract Entities and QFs, are subject to the full GMC. The formula through December 31, 2000, is as follows:

$$\text{Monthly Bill}_{SCi} = [\text{GMC} \times (\text{ECD}_{SCi} \times 0.50)] + [\text{GMC} \times \text{OMC}_{SCi}]$$

Where:

SCi = **the applicable Scheduling Coordinator**

ECD = **Existing Contract Deliveries**

OMC = **Other Metered Consumption**

For purposes of this Schedule 1, capitalized terms not included in the Master Definitions Supplement shall be defined as follows through December 31, 2000:

Existing Contract Deliveries shall mean scheduled deliveries or metered consumption under an Existing Contract to an Existing Contract Entity, calculated in MWh, in accordance with the method historically used by the parties to the Existing Contract.

Existing Contract Entities shall mean entities receiving energy under Existing Contract rights as defined in the ISO Tariff, as it exists on April 1, 1998, , provided that, for purposes of this definition, Existing Contract rights shall not include Converted Rights, as defined in the ISO Tariff and a Participating Transmission Owner shall not qualify as an Existing Contract Entity.

Monthly Metered Consumption shall mean the aggregate of Other Metered Consumption and Existing Contract Deliveries.

New Uses shall mean volumes transported over the ISO Controlled Grid pursuant to an agreement that is not an Existing Contract under the ISO Tariff, and shall not include Qualified Loads.

Other Metered Consumption shall mean the sum of (i) total load of the Scheduling Coordinator within the ISO Control Area and (ii) total export of the Scheduling Coordinator outside of the ISO Control Area (including Wheeling Out and Wheeling Through the ISO Control Area); and (iii) but excluding Existing Contract Deliveries, Other Volumes and Qualified Loads. Other Metered Consumption includes New Uses.

Other Volumes for a given hour shall mean (i) the energy produced in that hour from any generating unit located within an Existing Contract Entity's service area or directly connected to transmission owned by such Existing Contract Entity and/or (ii) any volumes transported through a path that does not include facilities in the ISO Controlled Grid other than volumes transported to serve Load in the service area of a Participating TO or for export from the Service Area of a Participating TO.. Other Volumes does not include New Uses.

Qualified Loads means load served by QF energy that is generated on or distributed by the QF generator through private property or over distribution facilities that are dedicated to the QF through either an arrangement with the UDC in whose service territory the QF is located, or another entity that provides distribution level service, solely for its own use or the use of its tenants or two other corporations located on the real property on which the electricity is generated or on immediately adjacent real property and not for sale or transmission to others.

Part B – Quarterly Adjustment, If Required

The Grid Management Charge may change quarterly if the volume estimates, on an annual basis, change by 5% or more during the year. Each year the Grid Management Charge will be recalculated to reflect the following year's budget estimates and to adjust for any difference between the previous year's cost estimates and actual costs incurred.

Part C – Components of the GMC

As provided in Section 8 of the ISO Tariff, the Grid Management Charge includes the following costs:

- Operating costs (as defined in Section 8.2.2)
- Financing costs (as defined in Section 8.2.3), including Start-Up and Development Costs (as defined in Section 8.2.1)
- Operating and Capital Reserve costs (as defined in Section 8.2.4)

adjusted annually for:

- any surplus revenues from the previous year in the Operating and Capital Reserve Account, as defined under

Section 8.5, which incorporates the difference between projected and actual costs from the previous year (such costs and adjustments being more specifically defined below in the Grid Management Charge Revenue Requirement Formula);

divided by:

- forecasted annual volume in MWh;

adjusted quarterly for:

- a change in the volume estimate used to calculate the Grid Management Charge if, on an annual basis, the change is 5% or more.

The Grid Management Charge Revenue Requirement Formula is as follows:

Grid Management Charge Revenue Requirement =
Operating Expenses + Debt Service + the greater of [(Coverage Requirement x Senior Lien Debt Service) or (Cash Funded Capital Expenditures)] - Interest Earnings - Other Revenues - Reserve Transfer

Where,

Operating Expenses = O&M Expenses plus Taxes Other Than Income Taxes (Account 408.1) and Penalties (Account 426.3)

O&M Expenses = Transmission O&M Expenses (Accounts 560-574) plus Customer Accounting Expenses (Accounts 901-905) plus Customer Service and Informational Expenses (Accounts 906-910) plus Sales Expenses (Accounts 911-917) plus Administrative & General Expenses (Accounts 920-935)

Penalties = payments by the ISO for penalties or fines incurred for violation of WSCC reliability criteria (Account 426.3)

Debt Service = for any fiscal year, scheduled principal and interest payments, sinking fund payments related to balloon maturities, repayment of commercial paper notes, net payments required pursuant to a payment obligation, or payments due on any ISO notes. This amount includes the current year accrued principal and interest payments due April 15 of the following year.

Coverage Requirement = 25% of the Senior Lien Debt Service.

Senior Lien Debt Service = all Debt Service that has a first lien on ISO Net Operating Revenues (Account 128 subaccounts).

Cash Funded Capital Expenditures = Post current fiscal year capital additions (Accounts 301-399) funded on a pay-as-you-go basis.

Interest Earnings = Interest earnings on Operating and Capital Reserve balances (Account 419). Interest on bond or note proceeds specifically designated for capital projects or capitalized interest is excluded.

Other Revenues = Amounts booked to Account 456 subaccounts. Such amounts will include connection fees associated with communications equipment and application fees.

Reserve Transfer = the projected reserve balance for December 31 of the prior year less the Reserve Requirement as adopted by the ISO Board and FERC. If such amount is negative, the amount may be divided by two, so that the reserve is replenished within a two-year period. (Account 128 subaccounts)

Reserve Requirement = 15% of Annual Operating Expenses.

Part D – Information Requirements

Annual Filing

In accordance with the settlement reached in Docket No. ER98-211-000, beginning in 1999, the ISO will make an informational filing each year on December 15, or the first business day thereafter, which shall contain cost data on the ISO presented in conformance with the FERC Uniform System of Accounts (USA). This filing shall contain all information presented in the ISO's monthly financial report as provided in Paragraph 17 of the Offer of Settlement, and such additional information as is required to set the GMC unit rate for the following calendar year, including the criteria used to set the projected volumes. To the extent that any party objects to such unit rate to be established, such party must file a complaint with the FERC under Section 206 of the Federal Power Act. Except as provided in Paragraph 7 of the Offer of Settlement, the Settlement will not be construed as barring a party's rights to seek or obtain relief under Section 206 of the FPA.

Monthly Financial reports

In accordance with the settlement reached in Docket No. ER98-211-000, the ISO will create monthly financial reports that present financial data both in the form created for the ISO Board of Governors and in a manner that conforms with the FERC USA, and shall include an explanation of how the data are converted from one format to the other. The monthly financial reports and the conversion explanation will be posted on the ISO's Website monthly.

Triennial Filing

Special procedures will be applicable to the informational filing used to establish the GMC unit rate for the year 2002, (*i.e.*, the informational filing to be submitted December 15, 2001) and each third year thereafter (triennial filings). The ISO will submit all the information required under 18 C.F.R. § 35.13, with the exception of pre-filed testimony, with such triennial filings. The ISO further will provide discovery on the triennial filings limited to requests for existing documents related to these filings. The ISO will accept requests for such documents through the

following January 8, in accordance with Paragraph 18 of the Settlement and will answer such requests by the following January 24. In accordance with Paragraph 18, parties may request a hearing by filing pleadings with the FERC by the following February 15 or by the date for filing such pleadings as set by the Commission. The ISO will inform the FERC of these procedures in its transmittal letter for the filing. If the FERC orders a hearing pursuant to such pleadings, then the ISO agrees that it will have the burden of proof on all questions set for hearing, except for the continued use of a 25 percent Coverage Requirement, the continued use of a 15 per cent Reserve Requirement, or the justness and reasonableness of its initial debt financing, as provided in Paragraph 7 of the Offer of Settlement. The Offer of Settlement shall not limit discovery rights otherwise available if a hearing is ordered.

Part E

[Not used]

Schedule 2

Other Charges

Voltage Support Service

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

Regulation Service

Regulation Obligation:

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

Regulation Rates:

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

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

Spinning Reserve Service

Spinning Reserve Obligation:

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

Spinning Reserve Rates:

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

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

Non-Spinning Reserve Service

Non-Spinning Reserve Obligation:

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

Non-Spinning Reserve Rates:

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

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

Replacement Reserves

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

Black Start Capability

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

Imbalance Energy Charges

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

Replacement Reserve Charge

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

Unaccounted for Energy

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

Transmission Losses Imbalance Charges

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

Access Charges

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

Usage Charges

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

Default Usage Charge

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

Grid Operations Charge for Intra-Zonal Congestion

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

Wheeling Access Charges

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

Charge for Failure to Conform to Dispatch Instructions

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

Reliability Must-Run Charge

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

ISO Tariff Appendix F

Schedule 3

High Voltage Access Charges

1. Objectives and Definitions

1.1 Objectives

- (a) The Access Charge will remain utility-specific until a New Participating TO executes the Transmission Control Agreement, at which time the Access Charge will change as discussed below.
- (b) The Access Charge is the charge assessed for using the ISO Controlled Grid. It consists of three components, the High Voltage Access Charge (HVAC), the Transition Charge and the Low Voltage Access Charge (LVAC).
- (c) The HVAC ultimately will be based on one ISO Grid-wide rate. Initially, the HVAC will be based on TAC Areas, which will transition 10% per year to ISO Grid-wide. In the first year after the Transition Date described in Section 4.2 of this Schedule 3, the HVAC will be a blend based on 10% ISO Grid-wide and 90% TAC Area.
- (d) New High Voltage Transmission Facility additions and capital additions to existing High Voltage Transmission Facilities will be immediately included in the ISO Grid-wide component of the HVAC.
- (e) The LVAC will remain utility-specific and will be determined by each Participating TO.
- (f) The cost-shift associated with transitioning from utility-specific rates to one ISO Grid-wide rate will be mitigated in accordance with the ISO Tariff, including this schedule.

1.2 Definitions

(a) Master Definition Supplement

Unless the context otherwise requires, any word or expression defined in the Master Definition Supplement shall have the same meaning where used in this Schedule 3.

(b) Special Definitions for this Appendix

When used in this Schedule 3 with initial capitalization, the following terms shall have the meanings specified below.

"Existing High Voltage Transmission Facility" means a High Voltage Transmission Facility of a Participating TO that is not a New High Voltage Transmission Facility.

"TAC Benefit" means (a) the amount, if any, for each year by which the cost of High Voltage Transmission Facilities associated with deliveries of Energy to Gross Loads in the Service Area of, or directly served by, the New Participating TO is reduced by the implementation of the High Voltage Access Charge described in Schedule 3 to Appendix F; reduced by (b) the difference between (i) the amount that the New Participating TO pays for Grid Management Charges; and (ii) the amount that the New Participating TO would have paid for Grid Management Charges had the participant not been a New Participating TO. The TAC Benefit of a New Participating TO shall not be less than zero.

2. Assessment of High Voltage Access Charge and Transition Charge.

All UDCs or MSSs providing Energy delivered for the supply of all Gross Loads directly connected to the transmission facilities or Distribution System of the UDC or MSS, and all Scheduling Coordinators providing Energy delivered for the supply of all Gross Loads not directly connected to the transmission facilities or Distribution System of a UDC or MSS shall pay to the ISO a charge for transmission service on the High Voltage Transmission Facilities included in the

ISO Controlled Grid. The charge will be based on the High Voltage Access Charge applicable to the TAC Area in which the point of delivery is located and the applicable Transition Charge. A UDC or a MSS that is also a Participating TO shall pay, or receive payment of, if applicable, the difference between (i) the High Voltage Access Charge and Transition Charge applicable to its transactions as a UDC or MSS; and (ii) the disbursement of High Voltage Access Charge revenues to which it is entitled pursuant to Section 7.1.3 of the ISO Tariff.

3. TAC Areas.

- 3.1** TAC Areas are based on the Control Areas in California prior to the ISO Operations Date. Three TAC Areas will be established based on the Original Participating TOs: (1) a Northern Area consisting of the Service Area of Pacific Gas and Electric Company and the Service Area of any entity listed in Section 3.3 or 3.5 of this Schedule; (2) an East Central Area consisting of the Service Area of Southern California Edison Company and the Service Area of any entity listed in Section 3.4, 3.5 or 3.6 (as indicated therein) of this Schedule 3; and (3) a Southern Area consisting of the Service Area of San Diego Gas & Electric Company. Participating TOs that are not in one of the above cited Service Areas are addressed below.
- 3.2** If the Los Angeles Department of Water and Power joins the ISO and becomes a Participating TO, its Service Area will form a fourth TAC Area, the West Central Area.
- 3.3** If any of the following entities becomes a Participating TO, its Service Area will become part of the Northern Area: Sacramento Municipal Utility District, Western Area Power Administration - Sierra Nevada Region, Northern California Power Agency, City of Redding, Silicon Valley Power, City of Palo Alto, City and County of San Francisco, Alameda Bureau of Electricity, City of Biggs, City of Gridley, City of Healdsburg, City of Lodi, City of Lompoc Utility Department, Modesto Irrigation District, Turlock Irrigation District, Plumas County Water Agency, City of Roseville Electric Department, City of Shasta Lake, and City of Ukiah or any other entity owning or having

contractual rights to High Voltage or Low Voltage Transmission Facilities in Pacific Gas and Electric Company's Control Area prior to the ISO Operations Date.

- 3.4** If any of the following entities becomes a Participating TO, its Service Area will become part of the East Central Area: City of Anaheim Public Utility Department, City of Riverside Public Utility Department, City of Azusa Light and Water, City of Banning Electric, City of Colton, City of Pasadena Water and Power Department, The Metropolitan Water District of Southern California and City of Vernon or any other entity owning or having contractual rights to High Voltage or Low Voltage Transmission Facilities in Southern California Edison Company's Control Area prior to the ISO Operations Date.
- 3.5** If the California Department of Water Resources becomes a Participating TO, its High Voltage Transmission Revenue Requirements associated with High Voltage Transmission Facilities in the Northern Area would become part of the High Voltage Transmission Revenue Requirement for the Northern Area while the remainder would be included in the East Central Area.
- 3.6** If the City of Burbank Public Service Department (Burbank) and/or the City of Glendale Public Service Department (Glendale) become Participating TOs after or at the same time as the Los Angeles Department of Water and Power becomes a Participating TO, then the Service Area of Burbank and/or Glendale would become part of the West Central Area. Otherwise, if Burbank or Glendale becomes a Participating TO, prior to Los Angeles, its Service Area will become part of the East Central Area. Once either Burbank or Glendale are part of the East Central Area, they will not move to the West Central Area if such area is established.
- 3.7** If the Imperial Irrigation District or an entity outside the State of California should apply to become a Participating TO, the ISO Governing Board will review the reasonableness of integrating the entity into one of the existing TAC Areas. If the entity cannot be integrated without the potential for

significant cost shifts, the ISO Governing Board may establish a separate TAC Area.

4. Transition Date

4.1 New Participating TOs shall provide the ISO with a notice of intent to join and execute the Transmission Control Agreement by either January 1 or July 1 of any year.

4.2 The transition shall begin on either January 1 or July 1 after the date the first New Participating TO's execution of the Transmission Control Agreement takes effect (Transition Date). The Transition Date shall be the same for the Northern Area, East Central Area and the Southern Area. The Transition Date shall also be the same for the West Central Area, should it come into existence in accordance with Section 3.2 of this Schedule 3, unless the ISO provides additional information demonstrating the need for a deferral. The 10-year transition defined in Section 5.8 of Schedule 3 shall start from that date. If the West Central TAC Area is created after the Transition Date, the applicable High Voltage Access Charge shall transition to an ISO Grid-wide High Voltage Access Charge over the period remaining from the Transition Date, on the same schedule as the other TAC Areas.

4.3 Application to Additional TAC Areas. For any TAC Areas other than those specified in Section 4.2 created after the Transition Date, including any TAC Area created as a result of the application of Section 3.7, whether and over what period the applicable High Voltage Access Charge shall transition to an ISO Grid-wide charge shall be determined by the ISO Governing Board.

4.4 Application to Wheeling Access Charges. The transition described in this Section 4 shall also apply, on the same schedule, to High Voltage Wheeling Access Charges.

5. Determination of the Access Charge.

- 5.1** The Access Charge consists of a High Voltage Access Charge (HVAC) that is based on a TAC Area component and an ISO Grid-wide component, a Transition Charge, and a Low Voltage Access Charge (LVAC) that is based on a utility-specific rate established by each Participating TO.
- 5.2** Each Participating TO will develop, in accordance with Section 6 of this Schedule 3, a High Voltage Transmission Revenue Requirement (HVTRR_{PTO}) consisting of a Transmission Revenue Requirement for Existing High Voltage Transmission Facility (EHVTRR_{PTO}) and a Transmission Revenue Requirement

for New High Voltage Transmission Facility (NHVTRR_{PTO}). The HVTRR_{PTO} deducts Transmission Revenue Credits.

5.3 Gross Load forecasts, that are consistent with each Participating TO's filed Transmission Revenue Requirement, will be determined by the ISO based on information provided by Participating TOs (GL_{PTO}).

5.4 The HVAC applicable to each UDC, MSS and Scheduling Coordinator, shall be based on a TAC Area component (HVAC_A) and an ISO Grid-wide component (HVAC_I).

$$\text{HVAC} = \text{HVAC}_A + \text{HVAC}_I$$

5.5 The Existing Transmission Revenue Requirement for the TAC Area component (ETRR_A) is the summation of each Participating TO's EHVTRR_{PTO} in that TAC Area. The Gross Load in the TAC Area (GL_A) is the summation of each Participating TO's Gross Load in that TAC Area (GL_{PTO}). The TAC Area component will be based on the product of Existing Transmission Revenue Requirement for the TAC Area (ETRR_A) and the applicable annual transition percentage (%TA) in Section 5.8 of this Schedule 3, divided by the Gross Load in the TAC Area (GL_A).

$$\text{ETRR}_A = \sum \text{EHVTRR}_{\text{PTO}}$$

$$\text{GL}_A = \sum \text{GL}_{\text{PTO}}$$

$$\text{HVAC}_A = (\text{ETRR}_A * \%TA) / \text{GL}_A$$

5.6 The Existing Transmission Revenue Requirement for the ISO Grid-wide component (ETRR_I) will be the summation of all TAC Areas' ETRR_A multiplied by the applicable annual transition percentage (%IGW) in Section 5.8 of this Schedule 3. The New Transmission Revenue Requirement (NTRR) is the summation of each Participating TO's NHVTRR_{PTO}. The ISO Grid-wide component will be based on the ETRR_I plus the NTRR, divided by the summation of all Gross Loads in the TAC Areas (GL_A).

$$\text{ETRR}_I = \sum \text{ETRR}_A * \%IGW$$

$$\text{HVAC}_I = (\text{ETRR}_I + \text{NTRR}) / \sum \text{GL}_A$$

The foregoing formulas will be adjusted, as necessary to take account of new TAC Areas.

- 5.7** The Transition Charge shall be calculated separately for each Participating TO by dividing (i) the net difference between (1) the Participating TO's payment responsibility, if any, under Section 8.6 of the ISO Tariff and Section 7 of this Schedule 3; and (2) the amount, if any, payable to the Participating TO in accordance with Section 8.6 of the ISO Tariff and Section 7 of this Schedule 3; by (ii) the total of all forecasted Gross Load in the Service Area of the Participating TO, including UDCs and MSSs. If greater than zero, the Transition Charge shall be collected with the High Voltage Access Charge. If less than zero, the Transition Charge shall be credited with the High Voltage Access Charge.
- 5.8** The High Voltage Access Charge shall transition over a 10-year period from TAC Area to ISO Grid-wide. The transition percentage to be used for each year will be based on the following:

Year	TAC Area High Voltage (%TA)	ISO Grid-Wide High Voltage (%IGW)
1	90%	10%
2	80%	20%
3	70%	30%
4	60%	40%
5	50%	50%
6	40%	60%
7	30%	70%
8	20%	80%
9	10%	90%
10	0%	100%

5.9 After the completion of the transition period applicable to a TAC Area, the High Voltage Access Charge for all such TAC Areas which have completed the transition shall be equal to the sum of the High Voltage Transmission Revenue Requirements of all Participating TOs, divided by the sum of the Gross Loads of all Participating TOs.

6 High Voltage Transmission Revenue Requirement.

6.1 The High Voltage Transmission Revenue Requirement of a Participating TO will be determined consistent with ISO procedures posted on the ISO Home Page and shall be the sum of:

- (a) the Participating TO's High Voltage Transmission Revenue Requirement (including costs related to Existing Contracts associated with transmission by others and deducting transmission revenues actually expected to be received by the Participating TO related to transmission for others in accordance with Existing Contracts, less the sum of the Standby Transmission Revenues); and
- (b) the annual TRBA adjustment, which shall be calculated as a dollar amount based on the projected Transmission Revenue Credits as adjusted for the true up of the prior calendar year's difference between projected and actual credits.

7 Limitation

- (a) During each year of the transition period described in Section 4 of this Schedule 3, the increase in the total payment responsibility applicable to deliveries of Energy to Gross Loads in the Service Area of an Original Participating TO attributable to the total for the year of (i) the amount applicable for the Original Participating TO under Section 8.6 of the ISO Tariff; plus (ii) the amount applicable to the implementation of the High Voltage Access Charge; less (iii) the amount by which the GMC payable with respect to deliveries of Energy to Gross Loads in the Service Area of the Original Participating TO is reduced due to the inapplicability to New Participating TOs of the exclusion of certain volumes in the calculation of GMC responsibility in accordance with Schedule 1 to this Appendix F, shall not exceed the amount specified in paragraph (b), below. This limitation shall be calculated individually for each Original Participating TO, provided that, if the net effect of items (i), (ii) and (iii) above is positive for one or more Original Participating TOs for any year, the combined net effect shall be allocated among all Original Participating TOs in proportion to the amounts specified in paragraph (b). This limitation shall be applied by the ISO's calculation annually of amounts payable by New Participating TOs to Original Participating TOs such that the combined effect of items (i), (ii), and (iii) above, and the payments received by each Original Participating TO shall not exceed the amounts specified in paragraph (b). The amount receivable by the Original Participating TO from the New Participating TOs to implement the limitation in paragraph (b) below, shall be credited through the Transition Charge established pursuant to Section 5.7 of this Schedule 3. Payment responsibility under this section, if any, shall be allocated among New Participating TOs in proportion to their positive TAC Benefits.

- (b) The maximum annual amounts for Original Participating TO shall be as follows:
 - (i) For Pacific Gas and Electric Company and Southern California Edison Company, the maximum annual amount shall be thirty-two million dollars (\$32,000,000.00) each; and
 - (ii) For San Diego Gas & Electric Company, the maximum annual amount shall be eight million dollars (\$8,000,000.00).

8. Updates to High Voltage Access Charges.

- 8.1** High Voltage Access Charges shall be adjusted effective January 1 and July 1 of each year to reflect: (1) the addition of any New Participating TO during the preceding six months and (2) changes to the High Voltage Transmission Revenue Requirements of any Participating TO that were accepted by the FERC or the ISO during the preceding six months. Additionally, differences between the High Voltage Transmission Revenue Requirement of a Participating TO approved by FERC or the ISO and the High Voltage Revenue Requirement of the Participating TO reflected in the High Voltage Access Charge shall be trued-up on an annual basis each July 1.
- 8.2** Any refund associated with a Participating TO's Transmission Revenue Requirement that has been accepted by FERC, subject to refund, shall be included in the Transmission Revenue Balancing Account.

9. Approval of Updated High Voltage Revenue Requirements

- 9.1** Participating TOs that are FERC-jurisdictional entities will make the appropriate filings at FERC to establish their Transmission Revenue Requirements for their Low Voltage Access Charges and the applicable High Voltage Access Charges, and to obtain approval of any changes thereto. All such filings with the FERC will include appropriate Gross Load data and other information required by the FERC to support the Access Charges. The Participating TO will provide a copy of its filing to the ISO.

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

Market Participants the opportunity to participate and to submit information to the panel. In deciding upon a just and reasonable TRR for the Participating TO, the Revenue Review Panel shall, to the extent practicable, apply the guidelines and rulings of the FERC applicable to the determination of the TRR of a Participating TO that is FERC jurisdictional. The decision of the panel shall be subject to review and acceptance by the FERC.

9.3 Federal power marketing agencies whose transmission facilities are under ISO Operational Control shall develop their High Voltage Transmission Revenue Requirement pursuant to applicable federal laws and regulations, including filing with FERC. The procedures for public participation in a federal power marketing agency's ratemaking process shall be posted on the federal power marketing agency's website. The federal power marketing agency's shall also post on the website the Federal Register Notices and FERC orders for rate making processes that impact the federal power marketing agency's High Voltage Transmission Revenue Requirement.