**ISO TARIFF APPENDIX A** 

Master Definitions Supplement

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Second Revised Sheet No. 301 FIRST REPLACEMENT VOLUME NO. I Superseding First Revised Sheet No. 301

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

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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. The price set by the ISO in place of a Market Clearing Price when, by reason of a System Emergency, the ISO determines that it no longer has the ability to maintain reliable operation of the ISO Controlled Grid relying solely on the economic Dispatch of Generation. This price will remain in effect until the ISO considers that the System Emergency has been contained and corrected.

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.

**Administrative Price** 

Affiliate

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATIONFERC ELECTRIC TARIFFFirst Revised Sheet No. 303FIRST REPLACEMENT VOLUME NO. ISuperseding Original Sheet No. 303

Aggrogato Final Acconted	ISO approved aggregated Final Schedules	
Aggregate Final Accepted Schedules Alert Notice	ISO approved aggregated Final Schedules.	
	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.	

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Ancillary Services and Realt-Time Energy Operations Charge The component of the Grid Management Charge that provides for the recovery of the ISO's costs of providing ancillary service and real-time energy related services, including, but not limited to:

- providing for Ancillary Services and Energy balancing services, including providing for open and nondiscriminatory access for market-making activities for participants through auctions;
- posting of market information;
- market surveillance and analysis; and

Settlement, billing, and metering related to the above.

Applicable Reliability<br/>CriteriaThe reliability standards established by NERC, WSCC, and<br/>Local Reliability Criteria as amended from time to time,<br/>including any requirements of the NRC.ApplicantsPacific Gas and Electric Company, San Diego Gas & Electric

 Applicants
 Pacific Gas and Electric Company, San Diego Gas & Electric

 Company, and Southern California Edison Company and any others as applicable.

### Approved Credit Rating

E NO. I Original Sheet No. 304 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.

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
 A Maintenance Outage which has been approved by the ISO

 Outage
 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.

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- Available Transfer
   For a given transmission path, the capacity rating in MW of the path established consistent with ISO and WSCC transmission

   capacity
   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. **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.

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BEEP Interval Ex Post	The prices charged to or paid by Scheduling Coordinators for		
<u>Prices</u>	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.		
<u>Business Day</u>	A day on which banks are open to conduct general banking		
	business in California.		
<u>C.F.R.</u>	Code of Federal Regulations.		
Completed Application	For purposes of Section 5.7, the date on which a New Facility		
<u>Date</u>	Operator submits an Interconnection Application to the ISO that		
	satisfies the requirements of the ISO Tariff and the TO Tariff of		
	the Interconnecting PTO.		
Completed	An Interconnection Application that meets the information		
Interconnection Application	requirements as specified by the ISO and posted on the ISO		
	Home Page.		
Conditional Energy Bids	A Bid for Energy to serve Demand at or below a specified		
	price.		
<u>Congestion</u>	A condition that occurs when there is insufficient Available		

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Second Revised Sheet No. 307 FIRST REPLACEMENT VOLUME NO. I Superseding First Revised Sheet No. 307

FIRST REPLACEMENT VOLU	ME NO. I Superseding First Revised Sheet No. 307		
<u>BEEP Interval Ex Post</u> Prices	The prices charged to or paid by Scheduling Coordinators for		
111003	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.		
<u>C.F.R.</u>	Code of Federal Regulations.		
Circular Schedule	A Schedule or set of Schedules that creates a closed loop of		
	Energy Schedules between the ISO Controlled Grid and one or		
	more other Control Areas that do not have a source and sink in		
	separate Control Areas, which includes Energy scheduled in a		
	counter direction over a Congested Inter-Zonal Interface		
	through two or more Scheduling Points. A closed loop of		
	Energy Schedules that includes a transmission segment on the		
	Pacific DC Intertie shall not be a Circular Schedule because		
	such a Schedule directly changes power flows on the network		
	and can mitigate Congestion between SP15 and NP15.		

	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.	
Congestion Management	The component of the Grid Management Charge that provides	
<u>Charge</u>	for the recovery of the ISO's costs of operating the Congestion	
	Management process.	

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Completed Application Date	For purposes of Section 5.7, the date on which a New Facility
	Operator submits an Interconnection Application to the ISO that
	satisfies the requirements of the ISO Tariff and the TO Tariff of
	the Interconnecting PTO.
<u>Completed</u>	An Interconnection Application that meets the information
Interconnection Application	requirements as specified by the ISO and posted on the ISO
	Home Page.
Conditional Energy Bids	A Bid for Energy to serve Demand at or below a specified
	price.
<u>Congestion</u>	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.
Congestion Management Charge	The component of the Grid Management Charge that provides
	for the recovery of the ISO's costs of operating the Congestion
	Management process.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Second Revised Sheet No. 308 FIRST REPLACEMENT VOLUME NO. I Superseding First Revised Sheet No. 308 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. Control Area Gross Load For the purpose of calculating and billing the Grid Management

- Charge, Minimum Load Costs, Emission Costs Charge and Start-Up Fuel Costs Charge, Control Area Gross Load is all Demand for Energy within the ISO Control Area. Control Area Gross Load shall <u>not</u> include Energy consumed by:
  - (a) generator auxiliary Load equipment that is dedicated to the production of Energy and is electrically connected at the same point as the Generating Unit (*e.g.*, auxiliary Load equipment that is served via a distribution line

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that is separate from the switchyard to which the Generating Unit is connected will not be considered to be electrically connected at the same point); and

(b) Load that is isolated electrically from the ISO Control Area (*i.e.*, Load that is not synchronized with the ISO Control Area).

 Control Area Services
 The component of the Grid Management Charge that provides

 Charge
 for recovery of the ISO's costs of ensuring safe, reliable

 operation of the transmission grid and dispatch of bulk power
 supplies in accordance with regional and national reliability

 standards, including, but not limited to:
 standards, but not limited to:

- performing operation studies;
- system security analyses;
- transmission maintenance standards;
- system planning to ensure overall reliability;
- integration with other Control Areas;
- emergency management;
- outage coordination;
- transmission planning; and
- scheduling generation, imports, exports, and wheeling in

the Day-Ahead and Hour-Ahead of actual operations.

<u>Converted Rights</u> Those transmission service rights as defined in Section

Cost ShiftingA transfer of costs from one group of customers to another orfrom one utility to another.

## **CPUC** The California Public Utilities Commission, or its successor.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF First Revised Sheet No. 309 FIRST REPLACEMENT VOLUME NO. I Superseding Original Sheet No. 309

FIRST REFLACEMENT VOLUM	
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	A non-bypassable charge that is the mechanism that the
Transition Charge)	California Legislature and the CPUC mandated to permit
	recovery of costs stranded as a result of the shift to the new
	market structure.
Curtailable Demand	Demand 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 Curtailable
	Demand may offer it to the ISO to meet Non-spinning or
	Replacement Reserve requirements.
Data Adequacy	Any applicable minimum data requirements of the state agency
<u>Requirement</u>	responsible for generation siting or of any Local Regulatory
	Authority.
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.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF First Revised Sheet No. 310 FIRST REPLACEMENT VOLUME NO. I Superseding Original Sheet No. 310

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.
Delivery Upgrade	The transmission facilities, other than Direct Assignment
	Facilities and Reliability Upgrades, necessary to relieve
	constraints on the ISO Controlled Grid and to ensure the
	delivery of energy from a New Facility to Load.
Demand	The rate at which Energy is delivered to Loads and Scheduling
	Points by Generation, transmission or distribution facilities. It is
	the product of voltage and the in-phase component of
	alternating current measured in units of watts or standard
	multiples thereof, e.g., 1,000W=1kW, 1,000kW=1MW, etc.
Demand Bid	A bid into the PX indicating a quantity of Energy that an Eligible
	Customer wishes to purchase and, if relevant, the maximum
	price that the customer is prepared to pay for that Energy. This
	bid will only be accepted in the PX auction process if the
	Market Clearing Price is at or below the price of the Demand
	Bid. A Buyer may state, for each hour, a different price
	preference for each demand quantity in each location, i.e., the
	maximum price in each hour at which it is prepared to take a
	specified amount of Energy in the Day-Ahead Schedule. If a
	bid is submitted without a price, it is assumed that the bidder is
	prepared to pay the Market-Clearing Price.
Demand Forecast	An estimate of Demand over a designated period of time.
Demand Market	Any Eligible Customer on behalf of whom Demand and
<u>Participant</u>	Ancillary Services are scheduled pursuant to the ISO Tariff.

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<u>Designated Contact</u> <u>Person</u>	The person designated by each Participating TO to coordinate	
	with the ISO on the processing and completion of all	
	Interconnection Applications.	
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.	

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Third Revised Sheet No. 311 FIRST REPLACEMENT VOLUME NO. I Superseding Second Revised Sheet No. 311			
Direct Access Generation	An Eligible Customer who is selling Energy or Ancillary		
	Services through a Scheduling Coordinator.		
Direct Assignment Facility	The transmission facilities necessary to physically and		
	electrically interconnect a New Facility Operator to the ISO		
	Controlled Grid at the point of interconnection.		
<u>Dispatch</u>	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.		
<b>Dispatch Instruction</b>	An instruction by the ISO to a resource for increasing or		
	decreasing its energy supply or demand from the Hour-Ahead		
	Schedule to a specified operating point.		
Dispatch Operating Point	The expected operating point of a resource that has received a		
	Dispatch Instruction. The resource is expected to operate at		
	the Dispatch Operating Point after completing the Dispatch		
	Instruction, taking into account any relevant ramp rate and time		
	delays. Energy expected to be produced or consumed above		
	or below the Final Hour-Ahead Schedule in response to a		
	Dispatch Instruction constitutes Instructed Imbalance Energy.		
	For resources that have not received a Dispatch Instruction,		
	the Dispatch Operating Point defaults to the corresponding		
	Final Hour-Ahead Schedule.		
Dispatchable Loads	Load which is the subject of an Adjustment Bid.		

CALIFORNIA INDEPENDENT SYSTEM OPERAT FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. I		R CORPORATION Second Revised Sheet No. 311A Superseding First Revised Sheet No. 311A
Distribution System	The distribution assets of an IOU or Local Publicly Owned	
	Electric Utility.	
<u>EEP (Electrical</u> Emergency Plan <u>)</u>	A plan to be developed by the ISO in consultation with UDCs to	
	address situations when Energy reserve margins are forecast	
	to be below establis	shed levels.
Effective Price	The price, applied to undelivered Instructed Imbalance Energy,	
	calculated by dividing the absolute value of the total payment	
	or charge for Instru	cted Imbalance Energy by the absolute
	value of the total In	structed 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 a	are negative, the Effective Price shall be
	multiplied by -1.0 (r	ninus one).
Electric Capacity	The continuous der	nand-carrying ability for which a Generating
	Unit, or other electr	ical apparatus is rated, either by the user or
	by the manufacture	r.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATIONFERC ELECTRIC TARIFFSubstitute Second Revised Sheet No. 312FIRST REPLACEMENT VOLUME NO. ISuperseding First Revised Sheet No. 312

Eligible Customer	(i) any utility (including Participating TOs, Market Participants and
	any power marketer), Federal power marketing agency, or any
	person generating Energy for sale or resale; Energy sold or
	produced by such entity may be Energy produced in the United
	States, Canada or Mexico; however, such entity is not eligible for
	transmission service that would be prohibited by Section
	212(h)(2) of the Federal Power Act; and (ii) any retail customer
	taking unbundled transmission service pursuant to a state retail
	access program or pursuant to a voluntary offer of unbundled
	retail transmission service by the Participating TO.
Eligible Intermittent	A Generating Unit that is powered solely by 1) wind, 2) solar
<u>Resource</u>	energy, or 3) hydroelectric potential derived from small conduit
	water distribution facilities that do not have storage capability.
Eligible Regulatory Must- Run Generation	Regulatory Must-Run Generation which (i) has been approved as
Run Generation	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.
Emissions Cost Charge	The charge determined in accordance with Section 2.5.23.3.6
Emissions Cost Demand	The level of Demand specified in Section 2.5.23.3.6.3

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. I Original Sheet No. 3 <sup>r</sup>		N Original Sheet No. 312A
Emissions Cost Invoice	The invoice submitted to the ISO in a	accordance with Section
	2.5.23.3.6.6.	
Emissions Cost Trust	The trust account established in acco	ordance with Section
<u>Account</u>	2.5.23.3.6.2.	
Emissions Costs	The mitigation fees, excluding capita	l costs, assessed against a
	generating unit by a state or federal a	agency, including air quality
	districts, for exceeding applicable NC	Ox emissions limitations.

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EMS (Energy Management	A computer control system used by electric utility dispatchers
<u>System)</u>	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.
<u>End-Use Customer</u> or End-User	A purchaser of electric power who purchases such power to
End-Oser	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.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF First Revised Sheet No. 3 FIRST REPLACEMENT VOLUME NO. I Superseding Original Sheet No. 3	
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 that are intended to assist End-Users in achieving
<u>Services</u>	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 Price.
<u>Ex Post Transmission</u> Loss	Transmission Loss that is calculated based on Ex Post GMM.

CALIFORNIA INDEPENDENT S FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUM <u>Existing Contracts</u>	SYSTEM OPERATOR CORPORATION Second Revised Sheet No. 315 ME NO. I Superseding First Revised Sheet No. 315 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.
<u>Existing High Voltage</u> <u>Facility</u>	A High Voltage Transmission Facility of a Participating TO that
	was placed in service on or before the Transition Date defined
	in section 4.2 of Schedule 3 of Appendix F.
Existing Rights	Those transmission service rights defined in Section 2.4.4.1.1
	of the ISO Tariff.
Expedited Interconnection Agreement	A contract between a party which has submitted a Request for
Agreement	Expedited Interconnection Procedures and an Interconnection
	PTO under which the ISO and an Interconnecting PTO agree
	to process, on an expedited basis, the Interconnection
	Application of a New Facility Operator and which sets forth the
	terms, conditions, and cost responsibilities for such
	interconnection.
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 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.

CALIFORNIA INDEPENDENT S FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUM	SYSTEM OPERATOR CORPORATION Second Revised Sheet No. 315A ME NO. I Superseding First Revised Sheet No. 315A
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.
FERC Annual Charges	Those charges assessed against a public utility by the FERC
	pursuant to 18 C.F.R. § 382.201 and any related statutes or
	regulations, as they may be amended from time to time.
FERC Annual Charge	The rate to be paid by Scheduling Coordinators for recovery of
<u>Recovery Rate</u>	FERC Annual Charges assessed against the ISO for
	transactions on the ISO Controlled Grid.
FERC Annual Charge	An account to be established by the ISO for the purpose of
<u>Trust Account</u>	maintaining funds collected from Scheduling Coordinators for
	FERC Annual Charges and disbursing such funds to the
	FERC.
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.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. I Original Sheet No. 316

FIRST REPLACEMENT VOLUN	IE NO. I Original Sheet No. 316
<u>Final Hour-Ahead</u> <u>Schedule</u>	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 Invoice	The invoice due from a RMR Owner to the ISO at termination
	of the RMR Contract.
Final Schedule	A Schedule developed by the ISO following receipt of a
	Revised Schedule from a Scheduling Coordinator.
Final Settlement	The restatement or recalculation of the Preliminary Settlement
<u>Statement</u>	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.
<u>FPA</u>	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	A contractual right, subject to the terms and conditions of the
<u>Right)</u>	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.

### CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. I Original Sheet No. 317

FIRST REPLACEIVIENT VOLUN		Original Sheet No. 517
FTR Bidder	An enti	ity 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 ow	vner of an FTR, as registered with the ISO.
FTR Market	A trans	mission path from an originating Zone to a contiguous
	receivi	ng Zone for which FTRs are auctioned by the ISO in
	accord	ance with Section 9.4 of the ISO Tariff.
Full Marginal Loss Rate	A rate	calculated by the ISO for each Generation and
	Schedu	uling Point location to determine the effect on total
	system	Transmission Losses of injecting an increment of
	Genera	ation at each such location to serve an equivalent
	increm	ental MW of Demand distributed proportionately
	throug	hout the ISO Control Area.
Generating Unit	An indi	vidual electric generator and its associated plant and
	appara	tus whose electrical output is capable of being
	separa	tely identified and metered or a Physical Scheduling
	Plant tl	hat, 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).
<u>Generation</u>	Energy	v delivered from a Generating Unit.

CALIFORNIA INDEPENDENT SYSTEM OPERATO	R CORPORATION
FERC ELECTRIC TARIFF	First Revised Sheet No. 318
FIRST REPLACEMENT VOLUME NO. I	Superseding Original Sheet No. 318

FIRST REFLACEIVIENT VOLU	
<u>Generation Dispatch</u> 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.
<u>Generator</u>	The seller of Energy or Ancillary Services produced by a
	Generating Unit.
GMM (Generation Meter	A number which when multiplied by a Generating Unit's
<u>Multiplier)</u>	Metered Quantity will give the total Demand to be served from
	that Generating Unit.
Good Faith Deposit	The deposit paid to the ISO by a New Facility Operator with
	submission of its Interconnection Application in accordance
	with Section 5.7.3.2, in an amount equal to \$10,000, including
	any interest that accrues on the original amount, less any bank
	fees or other charges assessed on the escrow account. A New
	Facility Operator may satisfy its deposit obligation through any
	commercially available financial instrument determined to be
	satisfactory by the ISO.
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.

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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 CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Second Revised Sheet No. 319 FIRST REPLACEMENT VOLUME NO. I Superseding First Revised Sheet No. 319

Grid Management ChargeThe ISO monthly charge on all Scheduling Coordinators and Other<br/>Appropriate Parties that provides for the recovery of the ISO's costs<br/>through the three service charges described in Section 8.3: 1) the<br/>Control Area Services Charge, 2) the Congestion Management<br/>Charge, and 3) the Ancillary Services and Real-Time Energy<br/>Operations Charge. The three component charges are formula rates.Grid Operations ChargeAn ISO charge that recovers redispatch costs incurred due to Intra-<br/>Zonal Congestion in each Zone. These charges will be paid to the<br/>ISO by the Scheduling Coordinators, in proportion to their metered<br/>Demand within, and metered exports from, the Zone to a neighboring<br/>Control Area.

**Gross Load** For the purposes of calculating the transmission Access Charge, Gross Load is 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 customers site through arrangements as authorized by Section 218 of the California Public Utilities Code; (b) is a gualifying 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; and

(c) secures Standby Service from a Participating TO under terms approved by a Local Regulatory Authority or FERC, as applicable, or can be curtailed concurrently with an outage of the Generating Unit serving the Load. In the case of a Local Publicly Owned Electric Utility that (a) is a Participating TO, (b) is in compliance with all metering requirements of Section 10 and the Metering Protocols of the ISO Tariff applicable to a utility that is an ISO Metered Entity, and (c) has not received a waiver of such metering requirements, Gross Load shall also exclude the portion of the Local Publicly Owned Electric Utility's Load that is served by a Generating Unit that (a) is directly connected to the Load through the Local Publicly Owned Electric Utility's Distribution System, (b) has certified and polled metering, and (c) is operated at greater than 50% capacity in the current month as measured by such a meter. Gross Load forecasts consistent with filed TRR will be provided by each Participating TO to the ISO.

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

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, that is under the ISO Operational Control, 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 Facility** 

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION	
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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 that are under the ISO Operational Control.

### CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. I

Service provided by a Participating TO which allows a Standby High Voltage Transmission Standby Serve 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. The Wheeling Access Charge associated with the recovery of a **High Voltage Wheeling** Access Charge 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.

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The Energy-weighted average of the BEEP Interval Ex Post Hourly Ex Post Price Prices in each Zone during each settlement period. The Hourly Ex Post Price will vary between Zones if Congestion is present. This price is used in the Regulation Energy Payment Adjustment and in RMR settlements. **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 hydroelectric 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.

### CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. I

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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	The real time change in Generation output or Demand (from
<u>Energy</u>	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	Ancillary Service transactions between Scheduling
<u>Coordinator Ancillary</u> Service Trades	Coordinators.
Inter-Scheduling Energy Coordinator Trades	Energy transactions between Scheduling Coordinators.
Inter-Zonal Congestion	Congestion across an Inter-Zonal Interface.

Inter-Zonal InterfaceThe (i) group of transmission paths between two adjacent<br/>Zones of the ISO Controlled Grid, for which a physical, non-<br/>simultaneous transmission capacity rating (the rating of the<br/>interface) has been established or will be established prior to<br/>the use of the interface for Congestion Management; (ii) the<br/>group of transmission paths between an ISO Zone and an<br/>adjacent Scheduling Point, for which a physical, non-<br/>simultaneous transmission capacity rating (the rating of the<br/>interface) has been established or will be established prior to<br/>the use of the interface for Congestion Management; (ii) the<br/>group of transmission capacity rating (the rating of the<br/>interface) has been established or will be established prior to<br/>the use of the interface for Congestion Management; or (iii) the<br/>group of transmission paths between two adjacent Scheduling<br/>Points, where the group of paths has an established transfer<br/>capability and established transmission rights.

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

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF First Revised Sheet No. 325 FIRST REPLACEMENT VOLUME NO. I Superseding Original Sheet No. 325			
Interconnecting PTO	For purposes of Section 5.7, the Participating TO that will		
	supply the connection to the New Facility.		
Interconnection	A contract between a party requesting interconnection and the		
<u>Agreement</u>	Participating TO that owns the transmission facility with which		
	the requesting party wishes to interconnect.		
Interconnection	An application that requests interconnection of a New Facility		
<u>Application</u>	to the ISO Controlled Grid and that meets the information		
	requirements as specified by the ISO and posted on the ISO		
	Home Page.		
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.		
<u>10U</u>	An investor owned electric utility.		
<u>ISO (Independent System</u> <u>Operator)</u>	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.		

### CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. I Original Sheet No. 325A

 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.
 process in Section 13 of the ISO Tariff.

ISO ADR ProceduresThe procedures for resolution of disputes or differences set out<br/>in Section 13 of the ISO Tariff, as amended from time to time.ISO Audit CommitteeA Committee of the ISO Governing Board appointed pursuant<br/>to Article IV, Section 5 of the ISO bylaws to (1) review the<br/>ISO's annual independent audit (2) report to the ISO Governing<br/>Board on such audit, and (3) to monitor compliance with the<br/>ISO Code of Conduct.ISO Authorized InspectorA 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 AccountThe account in the name of the ISO with the ISO Bank to which<br/>payments are required to be transferred for allocation to ISO<br/>Creditors in accordance with their respective entitlements.ISO Code of ConductFor employees, the code of conduct for officers, employees<br/>and substantially full-time consultants and contractors of the<br/>ISO as set out in exhibit A to the ISO bylaws; for Governors,<br/>the code of conduct for governors of the ISO as set out in<br/>exhibit B to the ISO bylaws.

 ISO Control Area
 The real time Dispatch of Generation (and Curtailable

 Balancing Function
 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.

FIRST REFLACEIVIENT VOLUN	
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 Invoice	The invoices issued by the ISO to the Responsible Utilities or
	RMR Owners based on the Revised Estimated RMR Invoice
	and the Revised Adjusted RMR Invoice.

CALIFORNIA INDEPENDENT S FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUM		CORPORATION Substitute Second Revised Sheet No. 328 Superseding First Revised Sheet No. 328		
ISO Market	Any of the markets administered by the ISO under the ISO			
	Tariff, including, with	nout limitation, Imbalance Energy, Ancillary		
	Services, and FTRs.			
ISO Memorandum	The memorandum a	account established by each California IOU		
<u>Account</u>	pursuant to Californ	ia Public Utility Commission Order		
	D. 96-08-038 date A	August 2, 1996 which records all ISO		
	startup and develop	ment costs incurred by that California IOU.		
ISO Metered Entity	a) any one of t	he following entities that is directly		
	connected to the IS	O Controlled Grid:		
	i. a Generator oth	er than a Generator that sells all of its		
	Energy (excludi	ng any Energy consumed by auxiliary load		
	equipment elect	rically connected to that Generator at the		
	same point) and	Ancillary Services to the UDC in whose		
	Service Area it i	s located;		
	<ul><li>ii. an Eligible Customer; or</li><li>iii. an End-User other than an End-User that purchases all of</li></ul>			
	its Energy from	the UDC in whose Service Area it is		
	located; and			
	(b) any one of t	he following entities:		
	i. a Participating (	Generator;		
	ii. a Participating T	O in relation to its Tie Point Meters with		
	other TOs or Co	ontrol Areas;		
	iii. a Participating L	.oad;		
	iv. a Participating I	ntermittent Resource; or		
	v. a utility that requ	uests that UFE for its service area be		
	calculated sepa	rately, in relation to its meters at points of		
	connection of its	s Service Area with the systems of other		

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. I Substitute Original Sheet No. 328A		
	utilities.	
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	n 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.
   Restance
- ISO ProtocolsThe rules, protocols, procedures and standards attached to the<br/>ISO Tariff as Appendix L, promulgated by the ISO (as<br/>amended from time to time) to be complied with by the ISO<br/>Scheduling Coordinators, Participating TOs and all other<br/>Market Participants in relation to the operation of the ISO<br/>Controlled Grid and the participation in the markets for Energy<br/>and Ancillary Services in accordance with the ISO Tariff.ISO RegisterThe register of all the transmission lines, associated facilities<br/>and other necessary components that are at the relevant time<br/>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 AmountThe level of security provided in accordance with Section2.2.3.2 of the ISO Tariff by an SC Applicant who does not have<br/>an Approved Credit Rating. The ISO Security Amount may be<br/>separated into two components: (i) the level of security<br/>required to secure payment of the Grid Management Charge;<br/>and (ii) the level of security required to secure payment of all<br/>charges other than the Grid Management Charge.ISO TariffThe California Independent System Operator Corporation<br/>Operating Agreement and Tariff, dated March 31, 1997, as it<br/>may be modified from time to time.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF First Revised Sheet No. 330 FIRST REPLACEMENT VOLUME NO. I Superseding Original Sheet No. 330

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
Participating TO	by Local Furnishing Bonds.
Local Publicly Owned	A municipality or municipal corporation operating as a public
Electric Utilities	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.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF First Revised Sheet No. 331 FIRST REPLACEMENT VOLUME NO. I Superseding Original Sheet No. 331 Local Regulatory The state or local governmental authority responsible for the Authority 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 Controlled Grid, and transaction points for trades between Scheduling Coordinators. This will be the information used by the ISO to determine the location of the input, output, and trade points of Energy Schedules. Each Generation input and Demand Take-Out Point will have a designated Location Code identification for use in submitting Energy and Ancillary Service bids and Schedules. Loop Flow Energy flow over a transmission system caused by parties external to that system. Loss Scale Factor The ratio of expected Transmission Losses to the total Transmission Losses which would be collected if Full Marginal Loss Rates were utilized. The Access Charge applicable under Section 7.1 to recover the Low Voltage Access Charge Low Voltage Transmission Revenue Requirement of a Participating TO. A transmission facility owned by a Participating TO or to which Low Voltage Transmission Facility a Participating TO has an Entitlement that is represented by a Converted Right, which is not a High Voltage Transmission Facility, that is under the ISO Operational Control.

CALIFORNIA INDEPENDENT S FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUM		R CORPORATION Fifth Revised Sheet No. 332 Superseding Fourth Revised Sheet No. 332	
<u>Low Voltage</u> Transmission Revenue	The portion of a Par	ticipating TO's TRR associated with and	
Requirement	allocable to the Par	ticipating TO's Low Voltage Transmission	
	Facilities and Conve	erted Rights associated with Low Voltage	
	Transmission Facili	ties that are under the ISO Operational	
	Control.		
Low Voltage Wheeling	The Wheeling Acce	ss Charge associated with the recovery of a	
Access Charge	Participating TO's L	ow Voltage Transmission Revenue	
	Requirement in acc	ordance with Section 7.1.	
Maintenance Outage	A period of time dur	ing which an Operator (i) takes its	
	transmission 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; or (ii) takes its Generating		
	Unit or System Unit out of service for the purposes of carrying out		
	routine planned ma	intenance, or for the purposes of new	
	construction work.		
Marginal Generators	Those Generating L	Jnits which, in an hour, are the sources of the	
	last increments of G	Seneration 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	r, or (iv) units operating at minimum operating	
	levels (when less co	ostly Generation must be backed down).	
Marginal Loss Factor	The marginal impac	t of a given Generating Unit's output on total	
	system Transmissic	n Losses.	

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION	
FERC ELECTRIC TARIFF	
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 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.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION		
FERC ELECTRIC TARIFF		Second Revised Sheet No. 333
FIRST REPLACEMENT VOLUME NO. I		Superseding First Revised Sheet No. 333
Market Particinant	An entity inc	luding a Scheduling Coordinator, who participates

 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.

CALIFORNIA INDEPENDENT S FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUM	Substitut	RATION e Second Revised Sheet No. 333A ding First Revised Sheet No. 333A	
Master File	A file containing information regarding Generating Units, Loads		
	and other resources.		
<u>Meter Data</u>	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 b	y a metering device.	
Metered Quantities	For each Direct Access End-l	Jser, the actual metered amount	
	of MWh and MW; for each Pa	rticipating Generator the actual	
	metered amounts of MWh, M	W, MVAr and MVArh.	
Minimum Load Costs	The costs a generating unit in	curs operating at minimum load.	
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 located within a single	
	Zone which has been operating as an electric utility for a number of years prior to the ISO Operations Date as a municipal utility, water district, irrigation district, State agency or		
	Federal power administration	subsumed within the ISO Control	
	Area and encompassed by IS	O certified revenue quality meters	
	at each interface point with th	e ISO Controlled Grid and ISO	
	certified revenue quality mete	rs on all Generating Units or, if	
	aggregated, each individual re	esource and Participating Load	
	internal to the system, which	is operated in accordance with a	
	MSS Agreement described in	Section 23.1.	
MSS Operator	An entity that owns an MSS a	nd has executed a MSS	
	Agreement described in Secti	on 3.3.1.	

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Fifth Revised Sheet No. 334 FIRST REPLACEMENT VOLUME NO. I Superseding Fourth Revised Sheet No. 334

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

Municipal Tax Exempt TOA Transmission Owner that has issued Municipal Tax ExemptDebt with respect to any transmission facilities, or rights<br/>associated therewith, that it would be required to place under<br/>the ISO's Operational Control pursuant to the Transmission<br/>Control Agreement if it were a Participating TO.

Must-Offer Generator	All entities defined in Section 5.11.1 of the ISO Tariff	
Native Load	Load required to be served by a utility within its Service Area	
	pursuant to applicable law, franchise, or statute.	
NERC	The North American Electric Reliability Council or its	
	successor.	
Net FTR Revenue	The sum of: 1) the revenue received by the New Participating	
	TO from the sale, auction, or other transfer of the FTRs	
	provided to it pursuant to Section 9.4.3 FTR, or any	
	substantively identical successor provision of the ISO Tariff;	
	and 2) for each hour: a) the Usage Charge revenue received	
	by the New Participating To associated with its Section 9.4.3	
	FTRs; minus b) Usage Charges that are: i) incurred by the	
	Scheduling Coordinator for the New Participating TO under	
	ISO Tariff Section 7.3.1.4, ii) associated with the New	
	Participating TO's Section 9.4.3 FTRs, and iii) incurred by the	

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incurred as a result of the use of the transmission by a thirdparty and minus c) the charges paid by the New Participating TO pursuant to Section 7.3.1.7, to the extent such charges are incurred by the Scheduling Coordinator of the New Participating TO on congested Inter-Zonal Interfaces that are associated with the Section 9.4.3 FTRs provided to the New Participating TO. The component of New FTR Revenue represented by item 2) immediately above shall not be less than zero for any hour.

Net Negative Uninstructed<br/>DeviationThe real time change in Generation or Demand associated with<br/>underscheduled Load (i.e., Load that appears unscheduled in<br/>real time) and overscheduled Generation (i.e., Generation that<br/>is scheduled in forward markets and does not appear in real<br/>time). Deviations are netted for each BEEP Interval, apply to a<br/>Scheduling Coordinator's entire portfolio, and include Load,<br/>Generation, Imports and Exports.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPO FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. I Supers		R CORPORATION Sixth Revised Sheet No. 334A Superseding Fifth Revised Sheet No. 334A	
New Facility	A planned or Existing Generating Unit that requests, pursuant		
	to Section 5.7 of the	e ISO Tariff, to interconnect or modify its	
	interconnection to the ISO Controlled Grid.		
New Facility License	A license issued by a federal, state or Local Regulatory		
	Authority that enable	es an entity to build and operate a	
	Generating Unit.		
New Facility Operator	The owner of a planned New Facility, or its designee.		
New High Voltage Facility	A High Voltage Transmission Facility of a Participating TO that		
	is placed in service after the beginning of the transition period		
	described in Section 4 of Schedule 3 of Appendix F, or a		
	capital addition made and placed in service after the beginning		
	of the transition period described in Section 4.1 of Schedule 3		
	of Appendix F to an Existing High Voltage Facility.		
New Participating TO	A Participating TO that is not an Original Participating TO.		
<u>Nomogram</u>	A set of operating or scheduling rules which are used to ensure		
	that simultaneous c	perating limits are respected, in order to	
	meet NERC and WSCC operating criteria.		

Transmission facilities, either inside or outside the State of Non-ISO Transmission Facilities California, over which the ISO does not exert Operational Control. Non-Participating A Generator that is not a Participating Generator. 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.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF First Revised Sheet No. 336 FIRST REPLACEMENT VOLUME NO. I Superseding Original Sheet No. 336

 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 ControlThe rights of the ISO under the Transmission ControlAgreement and the ISO Tariff to direct Participating TOs how to<br/>operate their transmission lines and facilities and other electric<br/>plant affecting the reliability of those lines and facilities for the<br/>purpose of affording comparable non-discriminatory<br/>transmission access and meeting Applicable Reliability Criteria.OperatorThe operator of facilities that comprise the ISO Controlled Grid

**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.

or a Participating Generator.

Order No. 888The final rule issued by FERC entitled "Promoting Wholesale<br/>Competition through Open Access Non- discriminatory<br/>Transmission Services by Public Utilities; Recovery of<br/>Stranded Costs by Public Utilities and Transmitting Utilities," 61<br/>Fed. Reg. 21,540 (May 10, 1996), FERC Stats. & Regs.,<br/>Regulations Preambles [1991-1996] ¶ 31,036 (1996), Order on<br/>Rehearing, Order No. 888-A, 78 FERC ¶ 61,220 (1997), as it<br/>may be amended from time to time.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Second Revised Sheet No. 33 FIRST REPLACEMENT VOLUME NO. I Superseding First Revised Sheet No. 33	
<b>Operating Reserve</b>	The combination of Spinning and Non-Spinning Reserve
	required to meet WSCC and NERC requirements for reliable
	operation of the ISO Control Area.
<b>Operating Transfer</b>	The maximum capability of a transmission path to transmit real
<u>Capability</u>	power, expressed in MW, at a given point in time.
<b>Operational Control</b>	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.
<u>Operator</u>	The operator of facilities that comprise the ISO Controlled Grid
	or a Participating Generator.
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.
<u>Order No. 888</u>	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.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Third Revised Sheet No. 337 FIRST REPLACEMENT VOLUME NO. I Superseding First Sheet No. 337

Order No. 889The final rule issued by FERC entitled "Open Access Same-Time<br/>Information System (formerly Real Time Information Networks)<br/>and Standards of Conduct," 61 Fed. Reg. 21,737 (May 10, 1996),<br/>FERC Stats. & Regs., Regulations Preambles [1991-1996] ¶<br/>31,035 (1996), Order on Rehearing, Order No. 889-A, 78 FERC ¶<br/>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.

 Other Appropriate Party
 A party that may be liable for a component of the ISO Grid

 Management Charge on a basis other than its role, if any, as
 Scheduling Coordinator. Such party may include out-of-state or

 in-state entity that provides real-time power through out-of-market
 Energy transactions or consumes real-time power through other

 arrangements over the ISO Controlled Grid, or a governmental or
 municipally-owned entity with Control Area Gross Load not

 generally served through, but continuously interconnected with,
 the ISO Controlled Grid.

 Outage
 Disconnection or separation, planned or forced, of one or more

 elements of an electric system.
 A conditional the leaves of base base base base base base based based

 Overgeneration
 A condition that occurs when total Generation exceeds total

 Demand in the ISO Control Area.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Third Revised Sheet No. 337 FIRST REPLACEMENT VOLUME NO. I Superseding Second Sheet No. 337

Order No. 889The final rule issued by FERC entitled "Open Access Same-Time<br/>Information System (formerly Real Time Information Networks)<br/>and Standards of Conduct," 61 Fed. Reg. 21,737 (May 10, 1996),<br/>FERC Stats. & Regs., Regulations Preambles [1991-1996] ¶<br/>31,035 (1996), Order on Rehearing, Order No. 889-A, 78 FERC ¶<br/>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.

Other Appropriate PartyA party that may be liable for a component of the ISO GridManagement Charge on a basis other than its role, if any, as<br/>Scheduling Coordinator. Such party may include out-of-state or<br/>in-state entity that provides real-time power through out-of-market<br/>Energy transactions or consumes real-time power through other<br/>arrangements over the ISO Controlled Grid, or a governmental or<br/>municipally-owned entity with Control Area Gross Load not<br/>generally served through, but continuously interconnected with,<br/>the ISO Controlled Grid.OutageDisconnection 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.

 Oversight and
 Any of the following: FERC, the United States Department of

 Enforcement Agency
 Justice or any of its subdivisions, the California Department of

 Justice or any of its subdivisions, the California Public Utilities

 Commission, or the California Electricity Oversight Board.

### CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. I Original Sheet No. 337A

 Participating Buyer
 A Direct Access End-User or a wholesale buyer of Energy or

 Ancillary Services through Scheduling Coordinators.

 Participating Intermittent
 One or more Eligible Intermittent Resources that meets the requirements of the technical standards for Participating

 Intermittent Resources adopted by the ISO and published on the ISO Home Page.

# 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 Services

 through a Scheduling Coordinator over the ISO Controlled Grid
 from a Generating Unit with a rated capacity of 1 MW or greater,

 or from a Generating Unit providing Ancillary Services and/or
 submitting Supplemental Energy bids through an aggregation

 arrangement approved by the ISO, which has undertaken to be
 bound by the terms of the ISO Tariff, in the case of a Generator

 through a Participating Generator Agreement.
 Controlled Grid

Original Sheet No. 338

Participating TOA party to the TCA whose application under Section 2.2 of the<br/>TCA has been accepted and who has placed its transmission<br/>assets and Entitlements under the ISO's Operational Control in<br/>accordance with the TCA. A Participating TO may be an<br/>Original Participating TO or a New Participating TO.Payment DateThe date by which invoiced amounts are to be paid under the<br/>terms of the ISO Tariff.

## PBR (Performance-Based Regulated rates based in whole or in part on the achievement Ratemaking) 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

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF First Revised Sheet No. 339 FIRST REPLACEMENT VOLUME NO. I Superseding Original Sheet No. 339		
	v) metered output is availa	ble only for the combined output of
	related multiple generating	components and separate
	generating component me	tering is either impractical or
	economically inefficient.	
Planning Procedures	Procedures governing the	planning, expansion and reliable
	interconnection to the ISO	Controlled Grid that the ISO may,
	from time to time, develop.	
PMS (Power Management	The ISO computer control	system used to monitor the real time
<u>System)</u>	performance of the various	s elements of the ISO Controlled
	Grid, control Generation, a	and perform operational power flow
	studies.	
Power Flow Model	The computer software us	ed by the ISO to model the voltages,
	power injections and powe	er flows on the ISO Controlled Grid
	and determine the expecte	ed Transmission Losses and
	Generation Meter Multiplie	rs.
Preferred Day-Ahead	A Scheduling Coordinator	s Preferred Schedule for the ISO
<u>Schedule</u>	Day-Ahead scheduling pro	cess.
Preferred Hour-Ahead Schedule	A Scheduling Coordinator	s Preferred Schedule for the ISO
	Hour-Ahead scheduling pr	ocess.
Preferred Schedule	The initial Schedule produc	ced by a Scheduling Coordinator that
	represents its preferred mi	x of Generation to meet its Demand.
	For each Generator, the S	chedule will include the quantity of
	output, details of any Adjus	stment Bids, and the location of the
	Generator. For each Load	I, the Schedule will include the
	quantity of consumption, d	etails of any Adjustment Bids, and
	the location of the Load. T	he Schedule will also specify
	quantities and location of t	rades between the Scheduling
	Coordinator and all other S	Scheduling Coordinators. The

Preferred Schedule will be balanced with respect to

Generation, Transmission Losses, Load and trades between

Scheduling Coordinators.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Fourth Revised Sheet No. 340 FIRST REPLACEMENT VOLUME NO. I Superseding Third Revised Sheet No. 340

FIRST REPLACEMENT VOLU	ME NO. I Superseding Third Revised Sheet No. 340
<u>Preliminary Settlement</u> <u>Statement</u>	The initial statement issued by the ISO of the calculation of the
otatement	Settlements and allocation of the charges in respect of all
	Settlement Periods covered by the period to which it relates.
Price Overlap	The price range of bids for Supplemental Energy or Energy
	associated with Ancillary Services bids for any BEEP Interval
	that includes decremental and incremental Energy Bids where
	the price of the decremental Energy Bids exceeds the price of
	the incremental Energy Bids.
Project Sponsor	A Market Participant or group of Market Participants or a
	Participating TO that proposes the construction of a
	transmission addition or upgrade in accordance with
	Section 3.2 of the ISO Tariff.
Proxy Price	The value determined for each gas-fired Generating Unit
	owned or controlled by a Must-Offer Generator in accordance
	with Section 2.5.23.3.4.
PTO Service Area	An area in which a Participating TO provides transmission
	service to itself, a UDC, a MSS, or End-Use Customers.
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.
Qualifying Hours	Qualifying Hours has the meaning set forth in Section
	5.12.7.1.1.2.5.

Original Sheet No. 341 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** Protective systems that typically utilize a combination of Schemes) 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.
 Those items of technical data and operating characteristics

### Original Sheet No. 342

<u>Regulation</u>

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 Adjustment

The additional value of regulating Energy.

<u>Regulatory Must-Run</u> <u>Generation</u>	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 specified or designated by the
	jurisdictional regulatory authority as it existed on December 20,
	1995, or as revised by Federal or California law or Local
	Regulatory Authority.
Regulatory Must-Take	Those Generation resources identified by CPUC, or a Local
<u>Generation</u>	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	The sum payable each month by a Responsible Utility to the
<u>Charge</u>	ISO for the cost of Reliability Must-Run Generation.

CALIFORNIA INDEPENDENT SYSTEM OPERATO	R CORPORATION
FERC ELECTRIC TARIFF	First Revised Sheet No. 344
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<u>Reliability Must-Run</u> <u>Contract (RMR Contract)</u>	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.
<u>Reliability Must-Run</u> <u>Generation</u>	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 constrainedareas; and iii) Generation needed to be operated to providevoltage 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 Contract

Reliability UpgradeThe transmission facilities, other than Direct AssignmentFacilities, beyond the first point of interconnection necessary to<br/>interconnect a New Facility safely and reliably to the ISO<br/>Controlled Grid, which would not have been necessary but for<br/>the interconnection of a New Facility, including network<br/>upgrades necessary to remedy short circuit or stability<br/>problems resulting from the interconnection of a New Facility Upgrades also include,<br/>consistent with WSCC practice, the facilities necessary to<br/>mitigate any adverse impact a New Facility's interconnection<br/>may have on a path's WSCC path rating.REMnetThe Wide Area Network through which the ISO acquires meter<br/>data.

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Replacement Reserve	Generating capacity that is dedicated to the ISO, capable of
	starting up if not already operating, being synchronized to the
	ISO Controlled Grid, and ramping to a specified Load point
	within a sixty (60) minute period, the output of which can be
	continuously maintained for a two hour period. Also,
	Curtailable Demand that is capable of being curtailed within
	sixty minutes and that can remain curtailed for two hours.
Request for Expedited	A written request, submitted pursuant to Section 5.7.3.1.1 of
Procedures	the ISO Tariff, by which a New Facility Operator can request
	expedited processing of its Interconnection Application.

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**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. **Revised Adjusted RMR** The monthly invoice issued by the RMR Owner to the ISO pursuant Invoice to the RMR Contract reflecting any appropriate revisions to the Adjusted RMR Invoice based on the ISO's validation and actual data for the billing month. **Revised Estimated RMR** The monthly invoice issued by the RMR Owner to the ISO pursuant Invoice to the RMR Contract reflecting appropriate revisions to the Estimated RMR Invoice based on the ISO's validation of the Estimated RMR

**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 A voluntary organization approved by FERC and composed of Transmission Group) 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. A computer system that allows an electric system operator to SCADA (Supervisory **Control and Data** Acquisition) 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.

Invoice.

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	A factor calculated by the ISO for a given Generator location
<u>Rate</u>	for each hour by multiplying the Full Marginal Loss Rate for
	such Generator location by the Loss Scale Factor for the
	relevant hour.
<u>Schedule</u>	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	means a Generator, Eligible Customer or End-User that is not
Metered Entity	an ISO Metered Entity.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Second Revised Sheet No. 347 FIRST REPLACEMENT VOLUME NO. I Superseding First Revised Sheet No. 347

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.
Service Area	An area in which an IOU or a Local Publicly Owned Electric
	Utility is 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.

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

Settlement PeriodFor all ISO transactions the period beginning at the start of the<br/>hour, and ending at the end of the hour. There are twenty-four<br/>Settlement Periods in each Trading Day, with the exception of<br/>a Trading Day in which there is a change to or from daylight<br/>savings time.

Settlement Quality Meter<br/>DataMeter Data gathered, edited, validated, and stored in a<br/>settlement-ready format, for Settlement and auditing purposes.Settlement StatementEither or both of a Preliminary Settlement Statement or Final<br/>Settlement Statement.

Settlement Statement Rerun The re-calculation of a Settlement Statement in accordance with the provisions of the ISO Tariff including any protocol of the ISO. CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF First Revised Sheet No. 349 FIRST REPLACEMENT VOLUME NO. I Superseding Original Sheet No. 349

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 RateA rate assessed a Standby Service Customer by theParticipating TO that also provides retail electric service, as<br/>approved by the Local Regulatory Authority, or FERC, as<br/>applicable, for Standby Service which compensates the<br/>Participating TO, among other things, for costs of High Voltage<br/>Transmission Facilities.
- Standby ServiceService provided by a Participating TO that also provides retail<br/>electric service, which allows a Standby Service Customer,<br/>among other things, access to High Voltage Transmission<br/>Facilities for the delivery of backup power on an instantaneous<br/>basis to ensure that Energy may be reliably delivered to the<br/>Standby Service Customer in the event of an outage of a<br/>Generating Unit serving the customer's Load.Standby Service<br/>CustomerA retail End-Use Customer of a Participating TO that also<br/>provides retail electric service that receives Standby Service<br/>and pays a Standby Rate.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION	
FERC ELECTRIC TARIFF	
FIRST REPLACEMENT VOLUME NO. I	Original Sheet No. 349.01

<u>Standby Transmission</u> <u>Revenue</u>	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.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF						
FIRST REPLACEMENT VOLUM	/IE NO. I	Substitute Original Sheet No. 349A				
Start-Up Fuel Cost Charge	The charge determined in a	The charge determined in accordance with Section 2.5.23.3.7.				
<u>Start-Up Fuel Cost</u> Demand	The level of Demand specif	ied in Section 2.5.23.3.7.3.				
Start-Up Fuel Cost Invoice	The invoice submitted to the	e ISO in accordance with Section				
	2.5.23.3.7.6.					
Start-Up Fuel Cost Trust	The trust account established in accordance with Section					
<u>Account</u>	2.5.23.3.7.2.					
Start-Up Fuel Costs	The cost of the fuel consum	ned by a particular generating unit				
	from the time of first fire, the	e time of receipt of an ISO Dispatch				
	instruction, or the time the unit was last synchornized to the					
	grid, whichever is later, unti	I the time the generating unit is				
	synchronized or re-synchro	nized to the grid and producing				
	Energy. Start-Up Fuel Cos	ts are determined by multiplying the				
	actual amount of fuel consu	imed by the proxy gas price as				
	determined in accordance v	with Section 2.5.23.3.4 at the time				
	the fuel is consumed.					

Original Sheet No. 350

Suggested Adjusted	The output of the ISO's initial Congestion Management for				
<u>Schedule</u>	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.				
<u>Supply</u>	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.				

#### CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF First Revised Sheet No. 351 FIRST REPLACEMENT VOLUME NO. I Superseding Original Sheet No. 351

- System EmergencyConditions beyond the normal control of the ISO that affect the<br/>ability of the ISO Control Area to function normally including<br/>any abnormal system condition which requires immediate<br/>manual or automatic action to prevent loss of Load, equipment<br/>damage, or tripping of system elements which might result in<br/>cascading outages or to restore system operation to meet the<br/>minimum operating reliability criteria.
- System Impact Study
   An engineering study conducted to determine whether a New

   Facility Operator's request for interconnection to the ISO

   Controlled Grid would require new transmission additions,

   upgrades or other mitigation measures.
- **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 UnitOne or more individual Generating Units and/or Loads within aMetered Subsystem controlled so as to simulate a single<br/>resource with specified performance characteristics, as<br/>mutually determined and agreed to by the MSS Operator and<br/>the ISO. The Generating Units and/or Loads making up a<br/>System Unit must be in close physical proximity to each other<br/>such that the operation of the resources comprising the System<br/>Unit does not result in significant differences in flows on the<br/>ISO Controlled Grid.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION	
FERC ELECTRIC TARIFF	
FIRST REPLACEMENT VOLUME NO. I	Original Sheet No. 351A

TAC AreaA portion of the ISO Controlled Grid with respect to whichParticipating TOs' High Voltage Transmission RevenueRequirements are recovered through a High Voltage AccessCharge. TAC Areas are listed in Schedule 3 of Appendix F.

Original Sheet No. 352

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	A Participating TO that is the beneficiary of outstanding Tax-				
<u>TO</u>	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	The agreement between the ISO and Participating TOs				
Control Agreement)	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.				
<u>TO Tariff</u>	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.				

#### CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Second Revised Sheet No. 353 FIRST REPLACEMENT VOLUME NO. I Superseding First Revised Sheet No. 353

Transfer ScheduleA Schedule for Energy that is delivered from one SchedulingCoordinator to another. Each Transfer Schedule mustoriginate and terminate completely within the ISO Control Areaand may not involve more than two (one sending and onereceiving) Scheduling Coordinators.

Transition ChargeThe component of the Access Charge collected by the ISO with<br/>the High Voltage Access Charge in accordance with Section<br/>5.7 of Appendix F, Schedule 3.

Transition PeriodThe period of time established by the California Legislature and<br/>CPUC to allow IOUs and Local Publicly Owned Electric Utilities<br/>an opportunity to recover Transition Costs or Severance Fees.Transmission LossesEnergy that is lost as a natural part of the process of<br/>transmitting Energy from Generation to Load delivered at the<br/>ISO/UDC boundary or Control Area boundary.

**Transmission Revenue** For an Original Participating TO, the proceeds received from Credit 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. For a New Participating TO during the 10-year transition period described in Section 4 of Schedule 3 of Appendix F, the proceeds received from the ISO for Wheeling service and Net FTR Revenue, 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. After the 10-year transition period, the New Participating TO Transmission

## CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. I Original Sheet No. 353A

Revenue Credit shall be calculated the same as the

Transmission Revenue Credit for the Original Participating TO.

TRBA (Transmission Revenue Balancing Account) A mechanism to be established by each Participating TO 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.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Second Revised Sheet No. 354 FIRST REPLACEMENT VOLUME NO. I Superseding First Revised Sheet No. 354

TRR (Transmission The TRR is the total annual authorized revenue requirements **Revenue Requirement**) associated with transmission facilities and Entitlements turned over to the Operational Control of the ISO by a Participating TO. 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 relating to the Ex Parte Interim Approval of a Loan Guarantee and Trust Mechanism to Fund the Development of an Independent System Operator (ISO) and a Power Exchange (PX) pursuant to Decision 95-12-063 as modified. **UDC (Utility Distribution** An entity that owns a Distribution System for the delivery of Company) 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.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF Substitute Third Revised Sheet No. 355

FIRST REPLACEMENT VOLUME NO. I Superseding Sub. Second Revised Sheet No. 355 Unaccounted for Energy UFE is the difference in Energy, for each utility Service Area (UFE) and Settlement Period, between the net Energy delivered into the utility Service Area, adjusted for utility Service Area Transmission Losses (calculated in accordance with Section 7.4.2), and the total metered Demand within the utility Service Area adjusted for distribution losses using Distribution System loss factors approved by the Local Regulatory Authority. This difference is attributable to meter measurement errors, power flow modeling errors, energy theft, statistical Load profile errors, and distribution loss deviations. **Uncontrollable Force** Any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm, flood, earthquake, explosion, any curtailment, order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities or any other cause beyond the reasonable control of the ISO or Market Participant which could not be avoided through the exercise of Good Utility Practice. Uninstructed Deviation The penalty as set forth in Section 11.2.4.1.2 of this ISO Tariff. Penaltv **Uninstructed Imbalance** The real time change in Generation or Demand other than that Energy 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.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF First Revised Sheet No. 356 FIRST REPLACEMENT VOLUME NO. I Superseding Original Sheet No. 356

-IRST REPLACEMENT VOLU	ME NO. I Superseding Original Sheet No. 356
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.
Waiver Denial Period	The period determined in accordance with Section 5.11.6.
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	An electronic network that facilitates communications and data
<u>Network)</u>	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 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.

CALIFORNIA INDEPENDENT S FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUM	SYSTEM OPERATOR CORPORATION Fourth Revised Sheet No. 357 IE NO. I Superseding Third Revised Sheet No. 357				
Wheeling Out	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.				
WSCC Reliability Criteria	The Western Systems Coordinating Council Reliability Criteria				
<u>Agreement</u>	Agreement dated June 18, 1999 among the WSCC and certain				
	of its Member transmission operators, as such may be				
	amended from time to time.				
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.

Original Sheet No. 361

ISO:	
Name of Primary Represer	ntative:
Name of Alternative Repres	sentative:
Address:	
	State: Zip Code:
E-Mail Add	Iress:
Phone No:	
Fax No:	
Scheduling Coordinator:	
Name of Primary R	Representative:
Name of Alternative	e Representative:
Address:	
State:	Zip Code:
E-Mail Add	Iress:
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
Schedu	ling Coordinator:		
	3		
By:			
,	Name	Title	Date

# ISO TARIFF APPENDIX C

## **ISO Scheduling Process**

	Responsible	Parties	i					
Line	Time (Before or on)	ISO	Non- PX SCs	РХ	Must-Take and Reliability generation	UD C	PX Participa nts	Actions
	Two days ahead		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 ahe							
1	5:00 AM	X						Notify Scheduling Coordinators of unit-specific Reliability Must Run requirements
2	6:00 AM	х						Update system load forecast and Ancillary Service requirements.
3			Х					Notify ISO of price option for Reliability Must Run Units for which notification was provided at 5:00 a.m.
4			х					Provide direct access load forecasts to the ISO.
5	6:30 AM	Х						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	1		х	x	<u> </u>			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.

Issued by: Roger Smith, Senior Regulatory Counsel Issued on: October 13, 2000

13		х				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	х				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		х				Inform all SCs advisory AS schedules and prices if inter-zonal congestion exists.
21	11:05 PM		x	x	х	Start the process of developing revised schedules and price bids (the PX may iterate with PX participants).
22			x	x	х	Start the process of developing revised AS schedules and price bids (the PX may iterate with PX participants).
23	12:00 PM		Х	х		Submit revised preferred schedules and price bids to the ISO.
24			х	Х		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	х		Complete final dispatch schedules and transmission prices.
29		х		Complete final schedules and prices of each Ancillary Service.
30	1:00 PM	х		Complete final schedules.
31	1:00 PM	х		Inform all SCs their final dispatch schedules.
32		х		Inform all SCs their final AS schedules and prices.
33		х		Publish transmission prices if inter-zonal congestion exists.
34		x		Calculate and communicate with SC the specific SCs zonal prices if asked.
35			х	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 noncompliance 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 consists of three separate service charges: the Control Area Services Charge, the Congestion Management Charge, and the Ancillary Services and Real-Time Energy Operations Charge.

- 1. The rate for the Control Area Services Charge will be calculated by dividing the GMC costs allocated to this service charge by the total Control Area Gross Load and exports, in MWh.
- 2. The rate for the Congestion Management Charge will be calculated by dividing the GMC costs allocated to this service charge by the total Scheduling Coordinators' inter-zonal scheduled flow (excluding flows pursuant to Existing Contracts) per path in MWh.
- 3. The rate for the Ancillary Services and Real-Time Energy Operations Charge will be calculated by dividing the GMC costs allocated to this service charge by the total purchases and sales (including out-of-market transactions) of Ancillary Services, Supplemental Energy, and Imbalance Energy (both instructed and uninstructed) in MWh.

## Part B – Quarterly Adjustment, If Required

Each component rate of the Grid Management Charge will be adjusted automatically on a quarterly basis, up or down, so that rates reflect the ISO's FERC approved revenue requirement, if the estimated billing determinant volumes for that component, on an annual basis, change by 5% or more during the year.

Each year the Grid Management Charge may be recalculated to reflect the following year's budget estimates and to adjust for any difference between the previous year's revenue and cost estimates and actual revenues and costs, as reflected in Part D of this Schedule, "Information Requirements". The annual or periodic filing (which is described in Part D and is not the quarterly adjustment) shall not affect the automatic adjustment of the Grid Management Charge on a quarterly basis, as set forth in the first paragraph of this Part B.

### Part C – Costs Recovered through 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 and
- Operating and Capital Reserve costs (as defined in Section 8.2.4)

Such costs, for the ISO as a whole, are allocated to the three service charges that comprise the Grid Management Charge: (1) Control Area Services Charge, (2) Congestion Management Charge, and (3) Ancillary Services and Real-Time Operations Charge, using appropriate methodologies, and

adjusted annually for:

 any surplus revenues from the previous year as deposited in the Operating and Capital Reserve Account, as defined under Section 8.5, or deficiency of revenues, as recorded in a memorandum account;

divided by:

• forecasted annual billing determinant volumes in MWh;

adjusted quarterly for:

• a change in the volume estimate used to calculate the individual Grid Management Charge components, 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 + [(Coverage Requirement x Senior Lien Debt Service) and/or (Cash Funded Capital Expenditures)] - Interest Earnings -Other Revenues - Reserve Transfer

Where,

• **Operating Expenses** = O&M Expenses plus Taxes Other Than Income Taxes and Penalties

- **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)
- **Taxes Other Than Income Taxes =** those taxes other than income taxes which relate to ISO operating income (Account 408.1)
- **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 include but are not limited to application fees, WSCC security coordinator reimbursements, and fines assessed and collected by the ISO.
- **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.

A separate Revenue Requirement shall be established for each component of the Grid Management Charge by developing the Revenue Requirement for the ISO as a whole and then assigning such costs to the three service categories using appropriate allocation methodologies.

## Part D – Information Requirements

### **Budget Schedule**

The ISO Governing Board shall set forth a budget schedule that shall specify the dates for the budget posting and public workshop events noted below and other significant budget related milestones providing an opportunity for public input.

## **Budget Posting**

The ISO will post on its Internet site the preliminary proposed ISO operating and capital budget to be effective during the subsequent fiscal year, and the projected billing determinant volumes used to develop the rate for each component of the Grid Management Charge.

#### Public Workshop

Subsequent to the website posting, and prior to the Board approval of the budget, the ISO shall hold a public budget workshop where it will provide an overview of and answer questions from stakeholders on the proposed budget, cost allocation, and the charges for each of the ISOs services for the following year.

#### Annual or Periodic Filing

If a change is proposed in the ISO annual revenue requirement from the most recent FERC approved annual revenue requirement, the ISO will make a filing under Section 205 of the Federal Power Act at FERC that shall contain cost data on the ISO presented in conformance with the FERC Uniform System of Accounts (USA). This filing shall contain such information as is required to set the GMC unit rate for the following fiscal year or period, including the criteria used to set the projected billing determinant volumes, and a description of the process used to allocate the ISO's total costs into the revenue requirements for each of the component charges of the GMC.

### Periodic Financial reports

The ISO will create periodic financial reports consisting of an income statement, balance sheet, statement of operating reserves, and such other reports as are required by the ISO Board of Governors. The periodic financial reports will be posted on the ISO's Website not less than quarterly.

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.

Issued by: Roger Smith, Senior Regulatory Counsel Issued on: October 13, 2000

### 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 7.2.6.1 and 7.2.6.2.

### 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.

### FERC Annual Charge Recovery Rate

The FERC Annual Charge Recovery Rate will be determined in accordance with ISO Tariff Section 7.5.

# 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 the ISO Grid-wide rate. 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 Facility additions and capital additions to Existing High Voltage Facilities will be immediately included in the ISO Grid-wide component of the HVAC. The Transmission Revenue Requirement for New High Voltage Facilities will not be included in the calculation of the Transition Charge.
- (e) The LVAC will remain utility-specific and will be determined by each Participating
   TO. Each Participating TO will charge for and collect the LVAC.
- (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.

**"High Voltage Utility-Specific Rate"** means a Participating TO's High Voltage Transmission Revenue Requirement divided by such Participating TO's forecasted Gross Load. **"TAC Benefit"** means the amount, if any, for each year by which the cost of Existing High Voltage Transmission Facilities associated with deliveries of Energy to Gross Loads in the PTO Service Area of, or directly served by, the Participating TO is reduced by the implementation of the High Voltage Access Charge described in Schedule 3 to Appendix F. The Tac Benefit of a New Participating TO shall not be less than zero.

"Transition Date" means the date defined in Section 4.2 of this Schedule.

- 2. Assessment of High Voltage Access Charge and Transition Charge. All UDCs or MSSs in a PTO Service Area providing Energy delivered for the supply of all Gross Loads directly connected to the transmission facilities or Distribution System of the UDC or MSS in a PTO Service Area, 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 PTO Service Area of Pacific Gas and Electric Company and the PTO Service Area of any entity listed in Section 3.3 or 3.5 of this Schedule; (2) an East Central Area consisting of the PTO Service Area of Southern California Edison Company and the PTO 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 PTO Service Area of San Diego Gas & Electric Company. Participating TOs that are not in one of the above cited PTO 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 PTO 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 PTO Service Area will become part of the Northern Area: Sacramento Municipal Utility District, Western Area Power Administration Sierra Nevada Region, the Department of Energy California Labs, 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 PTO 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 PTO 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 PTO 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 and provide the ISO with an application within 15 days of such notice of intent.
- 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 of this Schedule 3, created after the Transition Date, including any TAC Area created as a result of the application of Section 3.7 of this Schedule 3, 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.
- 4.5 Conversion of Existing Rights. During the process by which a New Participating TO executes the Transmission Control Agreement, the ISO and potential New Participating TO that has an obligation to serve Load shall determine the amount of FTRs to be allocated to the New Participating TO for each Existing Right that the New Participating TO converts to Converted Rights. In making that determination, the ISO will consider the amount of contracted transmission capacity, the firmness of the contracted transmission capacity, and other characteristics of the contracted

transmission capacity to determine the amount of FTRs to be given to the New Participating TO in accordance with Section 9.4.3 of the ISO Tariff.

## 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 Transmission Charge, and a Low Voltage Access Charge (LVAC) that is based on a utility-specific rate established by each Participating TO in accordance with its TO Tariff..
- 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 Facility (EHVTRR PTO) and a Transmission Revenue Requirement for New High Voltage Facility (NHVTRR PTO). The HVTRR PTO includes the TRBA adjustment described in Section 6.1 of this Schedule 3.
- **5.3** The Gross Load amount in MWh shall be established by each Participating TO and filed at FERC with each Participating TO's Transmission Revenue Requirement (GL<sub>PTO</sub>).
- **5.4** The HVAC applicable to each UDC and MSS in a PTO Service Area and Scheduling Coordinator serving Demand in the PTO Service Area, shall be based on a TAC Area component (HVAC<sub>A</sub>) and an ISO Grid-wide component (HVAC<sub>I</sub>).

$$HVAC = HVAC_A + HVAC_I$$

**5.5** The Existing Transmission Revenue Requirement for the TAC Area component (ETRR<sub>A</sub>) is the summation of each Participating TO's EHVTRR  $_{PTO}$  in that TAC Area. The Gross Load in the TAC Area (GL<sub>A</sub>) is the summation of each Participating TO's Gross Load in that TAC Area (GL<sub>PTO</sub>). The TAC Area component will be based on the product of Existing Transmission Revenue Requirement for the TAC Area (ETRR<sub>A</sub>) 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<sub>A</sub>).

ETRR 
$$_{\rm A} = \Sigma$$
 EHVTRR  $_{\rm PTO}$ 

$$GL_A = \Sigma GL_{PTO}$$

HVAC 
$$_{A} = (ETRR _{A} * \%TA) / GL_{A}$$

5.6 The Existing Transmission Revenue Requirement for the ISO Grid-wide component (ETRR<sub>I</sub>) 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<sub>I</sub> plus the NTRR, divided by the summation of all Gross Loads in the TAC Areas (GL<sub>A</sub>).

$$ETRR_{I} = \Sigma ETRR_{A} * \% IGW$$

$$HVAC_{I} = (ETRR_{I} + NTRR) / \Sigma GL_{A}$$

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

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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 PTO Service Area, 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. The amount of

each Participating TO's NHVTRR shall not be included in the Transition Charge calculation.

**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	ISO Grid-Wide
	High Voltage	High Voltage
	(%TA)	(%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 described in Section 4 of this Schedule 3, the High Voltage Access Charge 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 shall be based on the principal balance in the TRBA as of September 30, which shall be calculated as a dollar amount based on the projected Transmission Revenue Credits as adjusted for the true up of the prior year's difference between projected and actual credits.

### 7 Limitation

- (a) During each year of the transition period described in this Schedule 3, the increase in the total payment responsibility applicable to deliveries of Energy to Gross Loads in the PTO 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 shall not exceed the amount specified in paragraph (b) of this section. This limitation shall be calculated individually for each Original Participating TO, provided that, if the net effect of clauses (i) and (ii) of this paragraph 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) of this section. 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 clauses (i) and (ii) of this paragraph, and the payments received by each Original Participating TO shall not exceed the amounts specified in paragraph (b) of this section. The amount receivable by the Original Participating TO from the New Participating TOs to implement the limitation in paragraph (b) of this section, 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 TAC Benefits.
- (b) The maximum annual amounts for Original Participating TO shall be as follows:
  - 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 and High Voltage Wheeling Access Charges shall be adjusted: (1) on January 1 and July 1 of each year when necessary to reflect the addition of any New Participating TO and (2) on the date FERC makes effective a change to the High Voltage Transmission Revenue Requirements of any Participating TO. Using the High Voltage Transmission Revenue Requirement accepted or authorized by FERC, consistent with Section 9 of this Schedule 3, for each Participating TO, the ISO will recalculate on a monthly basis the High Voltage Access Charge and Transition Charge applicable during such period. Revisions to the Transmission Revenue Balancing Account adjustment shall be made effective annually on January 1 based on the principal balance in the TRBA as of September 30 of the prior year and a forecast of Transmission Revenue Credits for the next year.
- 8.2 For service provided by a Participating TO prior to the Transition Date, no refund ordered by FERC or amount accrued to that Participating TO's Transmission Revenue Balancing Account related to such service shall be reflected in the High Voltage Access Charge, Low Voltage Access Charge, the High Voltage Transmission Revenue Requirement, or the Low Voltage Transmission Revenue Requirement of a Participating TO. For service provided by a Participating TO following the Transition Date, any refund associated with a Participating TO's Transmission Revenue Requirement that has been accepted by FERC, subject to refund, shall be provided as ordered by FERC. Such refund shall be invoiced separately from the Market Invoice.
- 8.3 If the Participating TO withdraws one or more of its transmission facilities from the ISO Operational Control, then the ISO will no longer collect the TRR for that transmission facility through the ISO's Access Charge effective upon the date the transmission facility is no longer under the Operational Control of the ISO. The withdrawing Participating TO shall be obligated to provide the ISO will all necessary information to implement the withdrawal of the Participating TO's transmission facilities and to make any necessary filings at FERC to revise its TRR. The ISO shall revise its transmission Access Charge to reflect the withdrawal of one or more transmission facilities from ISO Operational Control.

# 9. Approval of Updated High Voltage Revenue Requirements

9.1 Participating TOs 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 a separate appendix that states the HVTRR,

LVTRR (if applicable) and the approriate 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 and the other Participating TOs in accordance with the notice provisions in the Transmission Control Agreement. 9.2 Federal power marketing agencies whose transmission facilities are under ISO Operational Control shall develop their High Voltage Transmission Revenue Requirements pursuant to applicable federal laws and regulations, including filing with FERC. All such filings with FERC will include a separate appendix that states the HVTRR, LVTRR (if applicable) and the appropriate Gross Load data and other information required by the FERC tos upport the Access Charges. 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 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. The Participating TO will provide a copy of its filing to the ISO and the other Participating TOs in accordance with the notice provisions in the Transmission Control Agreement.

## 10. Disbursement of High Voltage Access Charge and Transition Charge Revenues.

- **10.1** High Voltage Access Charge and Transition Charge revenues shall be calculated for disbursement to each Participating TO on a monthly basis as follows:
  - the amount determined in accordance with Section 7.1.2 of the ISO Tariff ("Billed HVAC/TC");

(b) calculate the amount each UDC or MSS Scheduling Coordinators serving Gross Load of End-Use Customers in the PTO Service Area not directly connected to the facilities of a UDC or MSS would have paid and the Participating TO would have received by multiplying the High Voltage Utility-Specific Rates for the Participating TO whose High Voltage Facilities served such UDC or MSS and Scheduling Coordinators serving Gross Load of End-Use Customers in the PTO Service Area not directly connected to the facilities of a UDC or MSS times the actual Gross Load of such UDC's or MSS's and Scheduling Coordinator's serving Gross Load of End-Use Customers in the PTO Service Area not directly connected to the facilities of a UDC or MSS ("Utility-specific HVAC");

- (c) if the total Billed HVAC/TC in subsection (a) received by the ISO less the total Utility-specific HVAC in subsection (b) is different from zero, the ISO shall allocate the positive or negative difference among Participating TOs based on the ratio of each Participating TO's High Voltage Transmission Revenue Requirement to the sum of all of the Participating TOs' High Voltage Transmission Revenue Requirement. This monthly distribution amount is the "HVAC Revenue Adjustment";
- (d) the sum of the Utility-specific HVAC in subsection (b) and the HVAC Revenue
   Adjustment in subsection (c) will be the monthly disbursement to the Participating TO.
- **10.2** If the same entity is both a Participating TO and a UDC or MSS, then the monthly High Voltage Access Charge and Transition Charge amount billed by the ISO will be the charges payable by the UDC or MSS in accordance with Section 7.1.2 of the ISO Tariff less the disbursement determined in accordance with Section 10.1(d). If this difference is negative, that amount will be paid by the ISO to the Participating TO.
- 11 Determination of Transmission Revenue Requirement Allocation Between High Voltage and Low Voltage Transmission Facilities.
- **11.1** Each Participating TO shall allocate its Transmission Revenue Requirement between the High Voltage Transmission Revneue Requirement and Low Voltage Transmission Revenue Requirement based on the "Procedure for Division of Certain Costs Between the High and Low Voltage Transmission Access Charges" posted on the ISO Home Page.

### ISO Tariff Appendix F

### Schedule 4

#### Participating Intermittent Resources Forecasting Fee

A charge up to \$.10 per MWh shall be assessed on the metered Energy from Participating

Intermittent Resources. The amount of the charge shall be specified in the ISO Protocols.