FERC ELECTRIC TARIFF
First Revised Sheet No. 307
FIRST REPLACEMENT VOLUME NO. 1

FIRST REPLACEMENT VOLUME NO. I Superseding Original Sheet No. 307

BEEP Interval Ex Post

Prices

The prices charged to or paid by Scheduling Coordinators for

Imbalance Energy in each Zone in each BEEP Interval.

BEEP Software The balancing energy and ex post pricing software which is

used by the ISO to determine which Ancillary Service and

Supplemental Energy resources to Dispatch and to calculate

the Ex Post Prices.

Black Start The procedure by which a Generating Unit self-starts without

an external source of electricity thereby restoring power to the

ISO Controlled Grid following system or local area blackouts.

Black Start Generator

A Participating Generator in its capacity as party to an Interim

Black Start Agreement with the ISO for the provision of Black

Start services, but shall exclude Participating Generators in

their capacity as providers of Black Start services under their

Reliability Must-Run Contracts

Bulk Supply Point A UDC metering point.

Business Day

A day on which banks are open to conduct general banking

business in California.

C.F.R. Code of Federal Regulations.

Completed Application

<u>Date</u>

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 TO Tariff of the

Interconnecting PTO.

Completed Interconnection

Application

An Interconnection Application that meets the information

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.

Congestion A condition that occurs when there is insufficient Available

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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.

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Requirement

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<u>Critical Protective System</u> 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.

<u>CTC (Competition</u> A non-bypassable charge that is the mechanism that the <u>Transition Charge</u>)

California Legislature and the CPUC mandated to permit

recovery of costs stranded as a result of the shift to the new

market structure.

<u>Curtailable Demand</u>

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.

<u>Data Adequacy</u> Any applicable minimum data requirements of the state agency

responsible for generation siting or of any Local Regulatory

Authority.

<u>Day-Ahead</u> Relating to a Day-Ahead Market or Day-Ahead Schedule.

<u>Day-Ahead Market</u> 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.

<u>Day-Ahead Schedule</u> 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.

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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.

<u>Delivery Upgrade</u> 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 BidA 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.

<u>Demand Forecast</u> An estimate of Demand over a designated period of time.

Demand Market Participant

Any Eligible Customer on behalf of whom Demand and

Ancillary Services are scheduled pursuant to the ISO Tariff.

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Designated Contact

Person

The person designated by each Participating TO to coordinate

with the ISO on the processing and completion of all

Interconnection Applications.

<u>Direct Access Demand</u> The Demand of Direct Access End-Users.

<u>Direct Access End-User</u> An Eligible Customer located within the Service Area of a UDC

who purchases Energy and Ancillary Services through a

Scheduling Coordinator.

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<u>Direct Access Generation</u> An Eligible Customer who is selling Energy or Ancillary

Services through a Scheduling Coordinator.

<u>Direct Assignment Facility</u> 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.

<u>Dispatchable Loads</u> Load which is the subject of an Adjustment Bid.

<u>Distribution System</u> The distribution assets of a TO or UDC.

EEP (Electrical A plan to be developed by the ISO in consultation with UDCs to

Emergency Plan) address situations when Energy reserve margins are forecast

to be below established levels...

Effective Price The price, applied to undelivered Instructed Imbalance Energy,

calculated by dividing the absolute value of the total payment

or charge for Instructed Imbalance Energy by the absolute

value of the total Instructed Imbalance Energy, for the

Settlement Period; provided that, if both the total payment or

charge and quantity of Instructed Imbalance Energy for the

Settlement Period are negative, the Effective Price shall be

multiplied by -1.0 (minus one).

Electric Capacity The continuous demand-carrying ability for which a Generating

Unit, or other electrical apparatus is rated, either by the user or

by the manufacturer.

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Second Revised Sheet No. 315 Superseding First Revised Sheet No. 315

Existing Contracts The contracts which grant transmission service rights in

existence on the ISO Operations Date (including any contracts

entered into pursuant to such contracts) as may be amended in

accordance with their terms or by agreement between the

parties thereto from time to time.

Existing Rights Those transmission service rights defined in Section 2.4.4.1.1

of the ISO Tariff.

Expedited Interconnection A contract between a party which has submitted a Request for

<u>Agreement</u> 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.

<u>Facility Study</u> 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.

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.

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First Revised Sheet No. 315A Superseding Original Sheet No. 315A

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

FERC Annual Charges assessed against the ISO for

transactions on the ISO Controlled Grid.

FERC Annual Charge Trust Account

Recovery Rate

An account to be established by the ISO for the purpose of

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.

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FERC ELECTRIC TARIFF

First Revised Sheet No. 318 Superseding Original Sheet No. 318

FIRST REPLACEMENT VOLUME NO. I

Generation Dispatch Constraints

Details of any mandatory Generating Unit commitment

requirements (e.g., Must-Run Generation) or dispatch limits

(minimum output or maximum output) that must be observed

due to system operating constraints (e.g., thermal, voltage, or

stability limits). These limits are in addition to limits that may

be specified by Generators in their Energy or Ancillary Service

bids to the ISO or PX.

Generation Scheduling

The ISO's planned hourly pattern of Generation.

<u>Generator</u> The seller of Energy or Ancillary Services produced by a

Generating Unit.

GMM (Generation Meter

Multiplier)

A number which when multiplied by a Generating Unit's

Metered Quantity will give the total Demand to be served from

that Generating Unit.

Good 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.

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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

Agreement

A contract between a party requesting interconnection and the

Participating TO that owns the transmission facility with which

the requesting party wishes to interconnect.

Interconnection Application

An application that requests interconnection of a New Facility

to the ISO Controlled Grid and that meets the information

requirements as specified by the ISO and posted on the ISO

Home Page.

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.

<u>Interruptible Imports</u> Energy sold by a Generator or resource located outside the

ISO Controlled Grid which by contract can be interrupted or

reduced at the discretion of the seller.

Intra-Zonal Congestion Congestion within a Zone.

IOU An investor owned electric utility.

ISO (Independent System

Operator)

The California Independent System Operator Corporation, a

state chartered, nonprofit corporation that controls the

transmission facilities of all Participating TOs and dispatches

certain Generating Units and Loads.

ISO Account The ISO Clearing Account, the ISO Reserve Account or such

other trust accounts as the ISO deems necessary or

convenient for the purpose of efficiently implementing the funds

transfer system under the ISO Tariff.

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<u>ISO ADR Committee</u>

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.

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FERC ELECTRIC TARIFF Second Revised Sheet No. 334

FIRST REPLACEMENT VOLUME NO. I Superseding First Revised Sheet No. 334

Municipal Tax Exempt An obligation the interest on which is excluded from gross

Debt income for federal tax purposes pursuant to Section 103(a) of

the Internal Revenue Code of 1986 or the corresponding

provisions of prior law without regard to the identity of the

holder thereof. Municipal Tax Exempt Debt does not include

Local Furnishing Bonds.

Municipal Tax Exempt TO A Transmission Owner that has issued Municipal Tax Exempt

Debt with respect to any transmission facilities, or rights

associated therewith, that it would be required to place under

the ISO's Operational Control pursuant to the Transmission

Control Agreement if it were a Participating TO.

NERC The North American Electric Reliability Council or its

successor.

Net Negative Uninstructed The real time change in Generation or Demand associated with

Deviation underscheduled Load (i.e., Load that appears unscheduled in

real time) and overscheduled Generation (i.e., Generation that

is scheduled in forward markets and does not appear in real

time). Deviations are netted for each BEEP Interval, apply to a

Scheduling Coordinator's entire portfolio, and include Load,

Generation, Imports and Exports.

New Facility A planned or Existing Generating Unit that requests, pursuant

to Section 5.7 of the 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 enables an entity to build and operate a

Generating Unit.

New Facility Operator The owner of a planned New Facility, or its designee.

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FIRST REPLACEMENT VOLUME NO. I

First Revised Sheet No. 334A Superseding Original Sheet No. 334A

New High Voltage Facility

A High Voltage Transmission Facility of a Participating TO that

enters service after the beginning of the transition period

described in Section 4 of Schedule 3 of Appendix F, or a

capital addition made after the beginning of the transition

period described in Section 4.1 of Schedule 3 of Appendix F to

an Existing High Voltage Transmission Facility.

New Participating TO

A Participating TO that is not an Original Participating TO.

Nomogram

A set of operating or scheduling rules which are used to ensure that simultaneous operating limits are respected, in order to meet NERC and WSCC operating criteria.

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First Revised Sheet No. 339 Superseding Original Sheet No. 339

v) metered output is available only for the combined output of related multiple generating components and separate generating component metering is either impractical or economically inefficient.

Planning Procedures Pro

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 System)

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

Power Flow Model

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

Preferred Day-Ahead Schedule

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

Preferred Hour-Ahead Schedule

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

Preferred Schedule

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

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Reliability Must-Run
Contract (RMR Contract)

A rate schedule on file at FERC and in effect, or a contract

between the ISO and a Generator, giving the ISO the right to

call on the Generator to generate Energy or provide Ancillary

Services from the Generating Unit as and when required to

ensure the reliability of the ISO Controlled Grid, in return for

certain payments.

Reliability Must-Run Generation

Generation that the ISO determines is required to be on line to

meet Applicable Reliability Criteria requirements. This includes

i) Generation constrained on line to meet NERC and WSCC

reliability criteria for interconnected systems operation;

ii) Generation needed to meet Load demand in constrained

areas; and iii) Generation needed to be operated to provide

voltage or security support of the ISO or a local area.

Reliability Must-Run Unit

A Generating Unit which is the subject of a Reliability Must-Run

Contract

Reliability Upgrade

The transmission facilities, other than Direct Assignment

Facilities, beyond the first point of Interconnection necessary to

interconnect a New Facility safely and reliably to the ISO

Controlled Grid, which would not have been necessary but for

the interconnection of a New Facility, including network

upgrades necessary to remedy short circuit or stability

problems resulting from the interconnection of a New Facility

Operator to the ISO Controlled Grid. Reliability Upgrades also

include, consistent with WSCC practice, the facilities necessary

to mitigate any adverse impact a New Facility's interconnection

may have on a path's WSCC path rating.

REMnet The Wide Area Network through which the ISO acquires meter

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 Interconnection Procedures

A written request, submitted pursuant to Section 5.7.3.1.1 of the ISO Tariff, by which a New Facility Operator can request expedited processing of its Interconnection Application.

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System Emergency Conditions beyond the normal control of the ISO that affect the

ability of the ISO Control Area to function normally including

any abnormal system condition which requires immediate

manual or automatic action to prevent loss of Load, equipment

damage, or tripping of system elements which might result in

cascading outages or to restore system operation to meet the

minimum operating reliability criteria.

System 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 Unit One or more individual Generating Units and/or Loads within a

Metered Subsystem controlled so as to simulate a single

resource with specified performance characteristics, as

mutually determined and agreed to by the MSS Operator and

the ISO. The Generating Units and/or Loads making up a

System Unit must be in close physical proximity to each other

such that the operation of the resources comprising the System

Unit does not result in significant differences in flows on the

ISO Controlled Grid.

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TAC Area A portion of the ISO Controlled Grid with respect to which

Participating TOs' High Voltage Transmission Revenue

Requirements are recovered through a High Voltage Access

Charge. TAC Areas are listed in Schedule 3 of Appendix F.

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