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LYNN M. GALLAGHER

January 7, 2003

The Honorable Magalie R. Salas Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

Re: California Independent System Operator Corporation et al.

Docket Nos. ER98-3760-000; EC96-19-009; ER96-1663-010; EC96-19-030;

and ER96-1663-031

Dear Secretary Salas:

The California Independent System Operator Corporation ("ISO")¹ respectfully submits this filing in compliance with the Commission's November 22, 2002 order in the captioned docket concerning unresolved issues from the original ISO dockets ER98-3760-000, EC96-19-009, ER96-1663-010, EC96-19-030 and ER96-1663-031 [Not Consolidated], 101 FERC ¶ 61,219 (the "November 22 Order"). In the November 22 Order, the Commission directed the ISO to submit revised Tariff, Protocol and Transmission Control Agreement ("TCA") language consistent with the Order. On December 27, 2002, the Commission granted an extension of time for submitting this compliance filing until January 7, 2003.

# Allocation of Unaccounted For Energy (§ 11.2.4.3)

The November 22 Order required the ISO "to submit revised Tariff sheets to reflect that all market participants with revenue-quality meters at ISO take points should be allowed to pay their own UFE calculated separately with data from their own meters."

Capitalized terms not otherwise defined herein are used in the sense given in the Master Definitions Supplement, Appendix A to the ISO Tariff.

(November 22 Order at P 18) The ISO has filed a request for clarification or, in the alternative, a request for rehearing of this requirement, as Unaccounted for Energy ("UFE") is calculated on a Utility Distribution Company ("UDC") basis and cannot be calculated for "all market participants." The proponents arguing for this treatment were the California Department of Water Resources ("CDWR"), The Metropolitan Water District of Southern California ("MWD"), and the Northern California Power Agency ("NCPA"). NCPA has since executed a Metered Subsystem Aggregator Agreement and, in accordance with that agreement, it is considered a UDC for calculation of UFE.

UFE is the Energy attributable to meter measurement errors, power flow modeling errors, energy theft, statistical Load profile errors and distribution loss deviations. UFE is essentially imports less exports plus Generation less losses less the quantity of Load. Load meter data can be derived from interval meters, which include ISO Metered Entities and SC Metered Entities with revenue quality interval meters, or cumulative meters where the data has been allocated to each metering interval based on Load profiles. The ISO calculates UFE on a UDC Service Area basis and settles the UFE charge or credit by allocating it to Scheduling Coordinators ("SCs") on a pro-rata share basis based on their Loads and real-time exports. UFE is calculated on a UDC Service Area basis because each UDC is required to file with its Local Regulatory Authority its distribution loss factor ("DLF"). Since the DLF is a part of the Load calculation, if UFE were to be calculated at a Control Area-wide basis, there would be cost-shifting among SCs.

As the ISO does not have "take points," the ISO assumes that the Commission meant Take-Out Points as defined in the ISO Tariff. However, the ISO believes, as discussed further below, that for the ISO to calculate UFE for each "Market Participant" at appropriate Take-Out Points, those "Market Participants" must be ISO Metered Entities with respect to those metering points, and the ISO would have to make a change to the present UFE calculation methodology. Today, meter data is either submitted to the ISO by an SC (for SC Metered Entities) or directly polled by the ISO electronically (for ISO Metered Entities). In accordance with the Metering Protocol, an SC provides Settlement Quality Meter Data to the ISO, typically on a daily basis 45 calendar days after the Trading Day (i.e., December meter data is provided to the ISO in February). The ISO then validates and checks that meter data prior to pushing the data to Settlements to calculate ISO invoices that are released approximately 70 days after the end of the trade month (in early March for the above example). If data anomalies cannot be resolved, then the ISO has the ability to audit the meter data. On the other hand, meter data received from ISO Metered Entities is downloaded by the ISO automatically on a daily basis, without the 45-day delay in receiving SC meter data. This allows the ISO to monitor the meter data immediately and makes it easier to expeditiously identify and resolve data anomalies. Additionally, because this review process is automated for ISO Metered Entities, the SC avoids the administrative costs

of having to collect and produce Settlement Quality Meter Data on a daily interval basis for subsequent transmittal to the ISO.

Today, some Market Participants that are utilities have executed Utility Distribution Company Operating Agreements to allow the ISO to calculate UFE specifically for their UDC Service Area. In the cases where the intra-tie points between a UDC and neighboring utilities have remained metering points for SC Metered Entities and for which neither the UDC nor the other utility has installed ISO-polled meters, the ISO has had significant problems if the meter data is not submitted on time or if data anomalies are found. The delays in finalizing the meter data that result from late submittal and/or delays in resolving data anomalies may jeopardize the push of meter data to Settlements, which then would result in an inaccurate billing. Because a number of the ISO charges are spread to all SCs based on metered Demand, having late or incorrect meter data from one SC could impact the invoice of every SC in the ISO's markets.

The ISO notes for the Commission that the ISO has previously canvassed a number of Market Participants regarding the cost of installing ISO direct-polled metering. While every installation is different, the average actual cost of the directly-polled meter is approximately \$2,000. Depending upon whether the meter engineering and installation is done internally or externally, Market Participants report that the cost of meter installation, including the meter, averages approximately \$10,000 per meter.

Consequently, if the ISO is to now calculate UFE for each utility's Service Area, the ISO must insist on requiring the intra-tie data to be submitted as an ISO Metered Entity to ensure that ongoing timely settlement of the market is not affected. Pending the Commission's ruling on the ISO's request for clarification or rehearing on this issue, the ISO will comply with the Commission's directive by amending the ISO Tariff to specify that the ISO will calculate UFE separately for each "utility" in the ISO Control Area (rather than for each "UDC") that requests such separate UFE calculation, including each investor-owned utility and Local Publicly Owned Electric Utility.<sup>2</sup> In conjunction with these Tariff amendments, the ISO will specify that any such utility that requests separate UFE calculation must be an ISO Metered Entity. In addition, the ISO will delete the date restriction in the definition of "Service Area" to ensure that any new utility will receive the same treatment as a utility that existed prior to December 20, 1995. Revised Tariff sheets are attached. For the reasons discussed in the ISO's request for clarification or rehearing, the ISO has designated the date of the Order (*i.e.*, November 22, 2002) as the effective date of these changes.

The definition of Local Publicly Owned Electric Utility would include CDWR and MWD.

# ISO operating orders (§ 2.3.1.2.1)

The Commission directed the ISO to amend § 2.3.1.2.1 of its Tariff to reflect the ISO's commitment to honor the terms of Existing Contracts except when there is a System Emergency or circumstances in which the ISO considers that a System Emergency is imminent or threatened. (November 22 Order at P 38)<sup>3</sup> Revised Tariff sheets in compliance with the Commission's directive are attached.

# Invalidation period (§ 2.5.20.5.1 and SP §§ 3.2.6.3, 3.2.8.3 and 3.3.1.3)

The Commission directed the ISO to revise § 2.5.20.5.1 of its Tariff and related protocols to indicate that the failure to submit the required information for any hour shall lead to the invalidation of self-provision of ancillary services only for that hour and not for the entire Trading Day.<sup>4</sup> (November 22 Order at P 48) Revised Tariff and Protocol sheets in compliance with the Commission's directive are attached.

# Tax exempt debt (§ 2.3.3 of TCA)

The November 22 Order directed the ISO to delete from § 2.3.3 of the TCA the restriction "existing as of December 20, 1995." (November 22 Order at P 58) Revised pages of the TCA in compliance with the Commission's directive are attached. Those same changes will be made to Section 2.3.3 of the proposed amended TCA filed by the ISO with the Commission on November 25, 2002, for which the ISO has requested an effective date of January 1, 2003.

# Definition of Eligible Regulatory Must-Take Generation (Appendix A)

The Commission directed the ISO to revise the definition of Eligible Regulatory Must-Take Generation to include joint action agencies composed of entities that otherwise meet the definition. (November 22 Order at P 69) The term Eligible Regulatory Must-Take Generation is no longer used in the ISO Tariff and Protocols and thus is being deleted. Revised Tariff sheets reflecting this deletion are attached.

There appears to be a typographical error in Paragraph 38 of the Order. In light of the Commission's discussion of this issue, the ISO assumes that the Commission intended to allow for an exception where there *is* an existing, imminent or threatened system emergency, not when there is *no* such emergency as stated in this paragraph.

There appears to be a typographical error in Paragraph 48 of the Order. There, the Commission directed the ISO to revise Section 2.5.20.5.1 and related protocols to indicate that the failure to submit the required information for any hour "shall lead to self-provision for that hour." In light of the Commission's previous discussion of the issue, the ISO assumes that the Commission intended to state "shall lead to the invalidation of self-provision for that hour."

# Meter upgrades (§ 10.2.2 and MP 5.1.1)

The Commission directed the ISO to submit revised Tariff sheets to reflect the ISO's agreement to include language indicating that, when directing meter upgrades, the ISO will consider "whether the expected benefits of such equipment are sufficient to justify such increased costs" in ISO Tariff Section 10.2.2 and Metering Protocol 5.1.1. (November 22 Order at P 126-127) Revised Tariff sheets in compliance with the Commission's directive are attached.

Attached are revised Tariff, Protocol, and TCA pages that comply with the directives of the November 22 Order. Attachment 1 contains the revised Tariff, Protocol and TCA pages. Attachment 2 contains black-lined versions of the revised pages. Attachment 3 is a form Notice of Filing suitable for publication in the *Federal Register*.

Copies of this filing have been served on all of the entities on the service list for this docket. If there are questions concerning this filing, please contact the undersigned.

Respectfully submitted,

David B. Rubin

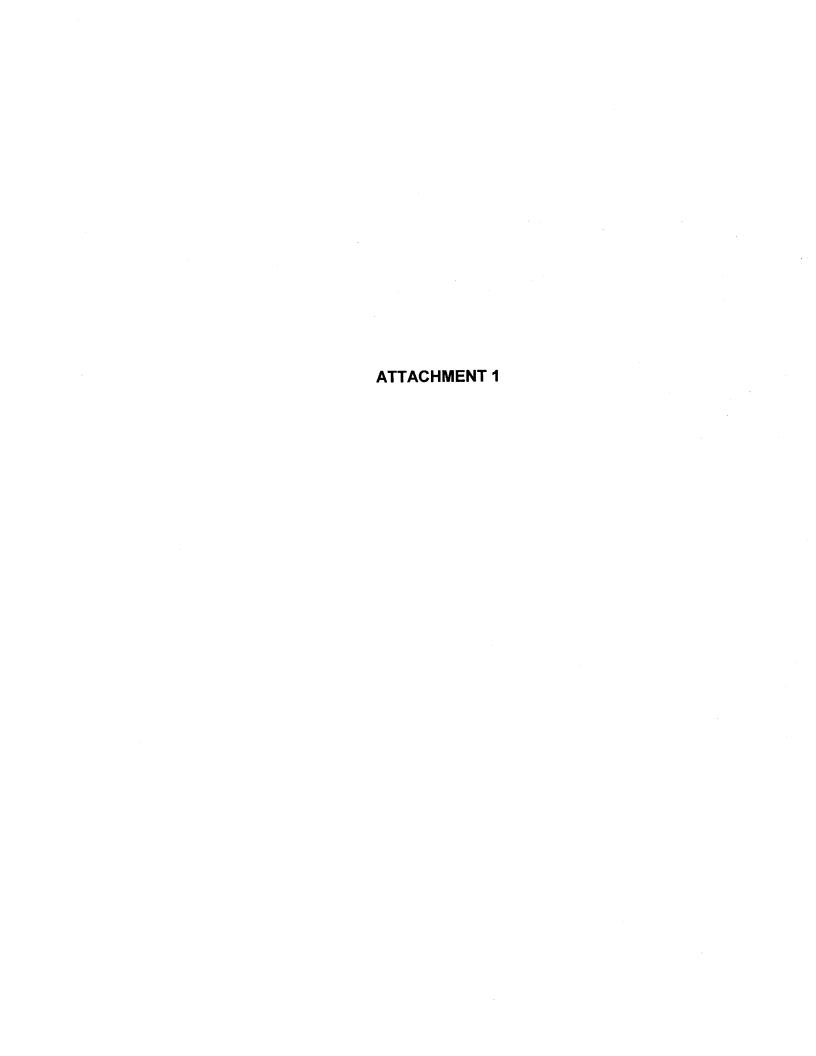
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### 2.3.1.2 Market Participant Responsibilities.

- Comply with Operating Orders Issued. With respect to this Section 2.3.1.2, all 2.3.1.2.1 Market Participants within the ISO Control Area shall comply fully and promptly with the ISO's operating orders, unless such operation would impair public health or safety. The ISO will honor the terms of Existing Contracts, except during a System Emergency and circumstances in which the ISO considers that a System Emergency is imminent or threatened. In a System Emergency and circumstances in which the ISO considers that a System Emergency is imminent or threatened, Existing Rights Holders must follow ISO operating orders even if those operating orders conflict with the terms of Existing Contracts. For this purpose ISO operating orders to shed Load shall not be considered as an impairment to public health or safety.
- Implementation of Instructions. All Market Participants shall respond to ISO 2.3.1.2.2 instructions with no more delay than specified in the response times set out in the ISO Protocols.

# Operating Reliability Criteria. 2.3.1.3

- 2.3.1.3.1 The ISO shall exercise Operational Control over the ISO Controlled Grid to meet planning and Operating Reserve criteria no less stringent than those established by WSCC and NERC as those standards may be modified from time to time, and Local Reliability Criteria that are in existence on the ISO Operations Date and have been submitted to the ISO by each Participating TO pursuant to Section 2.2.1(v) of the TCA. All Market Participants and the ISO shall comply with the ISO reliability criteria, standards, and procedures.
- 2.3.1.3.2 The ISO may establish planning and Operating Reserve criteria more stringent than those established by WSCC and NERC or revise the Local Reliability Criteria subject to and in accordance with the provisions of the TCA.

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

Original Sheet No. 35A

- 2.3.2 Management of System Emergencies.
- 2.3.2.1 Declaration of System Emergencies. The ISO shall, when it considers that conditions giving rise to a System Emergency exist, declare the existence of such System

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November 22, 2002, 101 FERC ¶ 61,219 (2002).

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF

FIRST REPLACEMENT VOLUME NO. I

First Revised Sheet No. 96 Superseding Original Sheet No. 96

The ISO may from time to time add other Ancillary Services to this list as it considers

appropriate.

2.5.20.5 Time Frame for Informing ISO of Self Provision.

Day-Ahead Schedule. At the Day-Ahead scheduling process, Scheduling 2.5.20.5.1

Coordinators shall be required to submit information on self provided Ancillary Services within

the time frame stated in Section 2.5.10.1. Failure to submit the required information within the

stated time frame for any hour shall lead to the self provision for that hour being declared invalid

by the ISO, and under such circumstances the ISO shall purchase sufficient Ancillary Services

to meet the Scheduling Coordinator's requirements to match its Day-Ahead Schedule.

Hour-Ahead Schedule. Increases in each Scheduling Coordinator's self-2.5.20.5.2

provided Ancillary Service between the Day-Ahead and Hour-Ahead Markets shall be limited to

the estimated incremental Ancillary Service requirement associated with the increase between

the Day-Ahead and Hour-Ahead Markets in that Scheduling Coordinator's scheduled Zonal

Demand. Notwithstanding this limit on increases in Hour-Ahead self-provision, a Scheduling

Coordinator may buy or sell Ancillary Services through Inter-Scheduling Coordinator Ancillary

Service Trades in the Hour-Ahead Market. In the Hour-Ahead scheduling process, Scheduling

Coordinators shall be required to submit information on self-provided Ancillary Services within

the time frame stated in Section 2.5.10.2. Failure to submit the required adjusted information

within the stated time frame shall lead to the self-provision being declared invalid by the ISO,

and under such circumstances the ISO shall purchase the additional Ancillary Services

necessary to meet the requirements for that Scheduling Coordinator.

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CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF

FIRST REPLACEMENT VOLUME NO. I

First Revised Sheet No. 233

Superseding Original Sheet No. 233

10.METERING.

10.1 Applicability. Unless otherwise expressly stated to the contrary, the requirements set forth in

these Sections 10.1 to 10.5 inclusive apply only to ISO Metered Entities.

**Responsibilities of ISO Metered Entities** 10.2

10.2.1 **Duty to Provide Meter Data.** 

ISO Metered Entities shall ensure that Meter Data from their meters directly connected to the ISO

Controlled Grid or at interconnections thereto, including interconnectins between utility Service Areas

which have separate UFE calculations, is made available to the ISO revenue meter data acquisition

and processing system in accordance with the requirements of these Sections 10.1 to 10.5 and the

ISO metering protocols. Pursuant to this obligation, the ISO shall establish revenue metering

protocols for such ISO Metered Entities.

10.2.2 **Duty to Install and Maintain Meters.** 

The ISO may require ISO Metered Entities to install, at their cost, additional meters and relevant

metering system components, including real time metering, at ISO specified Meter Points or other

locations as deemed necessary by the ISO, in addition to those connected to or existing on the ISO

Controlled Grid at the ISO Operations Date, including requiring the metering of transmission

interfaces connecting Zones. In directing the addition of meters and metering system components

that would impose increased costs on an ISO Metered Entity, the ISO shall give due consideration to

whether the expected benefits of such equipment are sufficient to justify such increased costs. ISO

Metered Entities, at their cost, shall install and maintain, or cause to be installed and maintained,

metering equipment and associated communication devices at ISO designated Meter Points to meet

the requirements of this Section 10 and the ISO metering protocols. Nothing in this Section 10 shall

preclude ISO Metered Entities from installing additional meters, instrument transformers and

associated communications facilities at their own cost.

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(b) the amount obtained by multiplying the Scheduling Coordinator's Net Negative Uninstructed Deviation for each BEEP Interval and a weighted average price. The weighted average price is equal to the total above-MCP costs divided by the MWh delivered as a result of ISO instructions with a cost component above the MCP.

The difference between ISO charges to Scheduling Coordinators with Net Negative Uninstructed Deviations and the total above-MCP costs incurred by the ISO due to Instructed Imbalance Energy and Dispatch instructions for reasons other than for a transmission facility outage or a location-specific requirement, as such difference is reduced pursuant to Section 11.2.4.1.2, shall be allocated amongst all Scheduling Coordinators in that BEEP Interval pro rata based on their metered Demand, including Exports.

The Scheduling Coordinator shall be exempt from the allocation of above-MCP costs in a BEEP interval if the Scheduling Coordinator has sufficient incremental Energy bids from physically available resources in the Imbalance Energy market to cover their net negative Uninstructed Deviation in the given interval and the prices of these Energy bids do not exceed the applicable maximum bid level as set forth in Section 28.1.2 of this Tariff.

# 11.2.4.3 Unaccounted For Energy (UFE)

For settlement purposes, UFE is treated as Imbalance Energy. For each BEEP Interval, the ISO will calculate UFE on the ISO Controlled Grid, for each utility Service Area for which separate UFE calculation is performed. The UFE will be settled as Imbalance Energy at the BEEP Interval Ex Post Price. UFE attributable to meter measurement errors, load profile errors, Energy theft, and distribution loss deviations will be allocated to each Scheduling Coordinator based on the ratio of their metered Demand (including exports to neighboring Control Areas) within the relevant utility Service Area to total metered Demand within the utility Service Area.

11.2.4.4 High Voltage Access Charges and Transition Charges will be levied in

accordance with Section 7.1 of this ISO Tariff and Appendix F, Schedule 3.

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FERC ELECTRIC TARIFF

First Revised Sheet No. 311A

Superseding Original Sheet No. 311A FIRST REPLACEMENT VOLUME NO. I

**Distribution System** 

The distribution assets of an IOU or Local Publicly Owned

Electric Utility.

**EEP (Electrical Emergency Plan)**  A plan to be developed by the ISO in consultation with UDCs to

address situations when Energy reserve margins are forecast

to be below established levels...

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

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).

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

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

by the manufacturer.

FERC ELECTRIC TARIFF

Second Revised Sheet No. 312

FIRST REPLACEMENT VOLUME NO. I

Superseding 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

Resource

A Generating Unit that is powered solely by 1) wind, 2) solar

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

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

FERC ELECTRIC TARIFF

Second Revised Sheet No. 328

FIRST REPLACEMENT VOLUME NO. I

Superseding First Revised Sheet No. 328

# ISO Market

Any of the markets administered by the ISO under the ISO

Tariff, including, without limitation, Imbalance Energy, Ancillary

Services, and FTRs.

# ISO Memorandum Account

The memorandum account established by each California IOU

pursuant to California Public Utility Commission Order

D. 96-08-038 date August 2, 1996 which records all ISO

startup and development costs incurred by that California IOU.

# ISO Metered Entity

- a) any one of the following entities that is directly connected to the ISO Controlled Grid:
- i. a Generator other than a Generator that sells all of its
   Energy (excluding any Energy consumed by auxiliary load equipment electrically connected to that Generator at the same point) and Ancillary Services to the UDC in whose Service Area it is located;
- ii. an Eligible Customer; or
- iii. an End-User other than an End-User that purchases all of its Energy from the UDC in whose Service Area it is located; and
- (b) any one of the following entities:
- a Participating Generator;
- ii. a Participating TO in relation to its Tie Point Meters with other TOs or Control Areas;
- iii. a Participating Load;
- iv. a Participating Intermittent Resource; or
- a utility that requests that UFE for its Service Area be calculated separately, in relation to its meters at points of connection of its Service Area with the systems of other

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# CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF

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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 Section 2.3.3 of the ISO Tariff.

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FERC ELECTRIC TARIFF

First Revised Sheet No. 347

FIRST REPLACEMENT VOLUME NO. I

Superseding Original 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.

Self-Sufficiency Test

<u>Period</u>

For the initial Self-Sufficiency determination for a Participating

TO, the Self-Sufficiency Test Period shall be the twelve-month

period ending December 31, 1996. The Self-Sufficiency Test

Period for a Participating TO undergoing a new Self-Sufficiency

determination as a result of the termination or modification of

an Existing Contract as referred in Section 7.1.3.2 of the ISO

Tariff shall be the twelve-month period ending in the month

prior to the month that the Existing Contract was terminated or

modified.

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

is obligated to provide electric service to End-Use Customers.

<u>Set Point</u> Scheduled operating level for each Generating Unit or other

resource scheduled to run in the Hour-Ahead Schedule.

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FERC ELECTRIC TARIFF FIRST REPLACEMENT VOLUME NO. I Third Revised Sheet No. 355 Superseding Sub. Second Revised Sheet No. 355

Unaccounted for Energy (UFE)

UFE is the difference in Energy, for each utility Service Area 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
Penalty
Uninstructed Imbalance
Energy

The penalty as set forth in Section 11.2.4.1.2 of this ISO Tariff.

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

**Unit Commitment** 

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

Usage Charge

The amount of money, per 1 kW of scheduled flow, that the ISO charges a Scheduling Coordinator for use of a specific congested Inter-Zonal Interface during a given hour.

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Scheduling Coordinator Ancillary Service Trades, and Ancillary Services bids which were part of their Preferred Day-Ahead Schedules;

- (g) the ISO will validate (in accordance with the SBP) all contract usage templates received from SCs for scheduled uses of Existing Contract rights and Firm Transmission Rights;
- (h) the ISO will validate that all SC submitted Preferred Day Ahead Schedules are compatible with the RMR requirements of which SCs were notified for that Trading Day and with the SCs' elected options for delivering the required Energy;
- (i) the ISO will start the first iteration of Inter-Zonal Congestion Management process as described in SP 10; and
- (j) the ISO will start the Ancillary Services bid evaluation process as described in SP 9;

# SP 3.2.6.2 Pre-validation

At 10 minutes prior to the deadline for submittal of the Preferred Day-Ahead Schedules, Adjustment Bids, schedules for self-provided Ancillary Services, Inter-Scheduling Coordinator Ancillary Service Trades, and Ancillary Services bids (the "submittal"), the ISO shall conduct a pre-validation of the stage two validation described in the SBP. The purpose of this is to allow the SCs, particularly those involved in the Inter-Scheduling Coordinator Energy Trades, to identify and resolve any validation problems. The ISO will immediately communicate the results of each SC's pre-validation to that SC via WEnet.

# SP 3.2.6.3 Invalidation

Except with respect to invalidated contract usage associated with Existing Contract rights or Firm Transmission Rights, invalidation of the submittal for any Settlement Period results in rejection of the submittal for that Settlement Period. SCs will be notified of any invalid contract usage via an invalidated contract usage template issued, via the WEnet, by the ISO. Invalidation of contract usage will not cause the rejection of the SC's submittal; instead, invalid contract usage will be treated as new firm uses of ISO transmission service without the priorities and protections afforded the scheduled use of Existing Contract rights and Firm Transmission Rights. During the initial operations of the ISO, the ISO may assist SCs to resolve mismatches in the scheduled quantities or locations for Inter-Scheduling Coordinator Energy Trades contained in their Preferred Schedules in accordance with SP 3.2.6.4. Except with respect to contract usage templates (for which SCs can check whether or not their submittal will pass the ISO's validation checks between 9:00 am and 10:00 am), SCs may check at any time prior to 10:00 am whether or not their submittal will pass the ISO's validation checks at 10:00 am. It is the responsibility of the SCs to perform such checks since Preferred

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communicate the results of the pre-validation of each SC's submittal to that SC via WEnet.

# SP 3.2.8.3 Invalidation

Except with respect to invalidated contract usage associated with Existing Contract rights or Firm Transmission Rights, invalidation of the submittal for any Settlement Period results in rejection of the submittal for that Settlement Period. SCs will be notified of any invalid contract usage via an invalidated contract usage template issued, via the WEnet, by the ISO. Invalidation of contract usage will not cause the rejection of the SC's submittal; instead, invalid contract usage will be treated as new firm uses of ISO transmission service without the priorities and protections afforded the scheduled use of Existing Contract rights and Firm Transmission Rights. During the initial operations of the ISO, the ISO may assist SCs to resolve mismatches in the scheduled quantities or locations for Inter-Scheduling Coordinator Energy Trades in accordance with 3.2.8.4. Except with respect to contract usage templates, SCs may check at any time prior to 12:00 noon whether or not their submittal will pass the ISO's validation checks (which are undertaken at 12:00 noon). It is the responsibility of the SCs to perform such checks since Revised Day-Ahead Schedules, Adjustment Bids, schedules of self-provided Ancillary Services, Inter-Scheduling Coordinator Ancillary Service Trades, and Ancillary Services bids which are invalidated cannot be resubmitted after 12:00 noon for the Day-Ahead Market, except that during the initial period of operations, the ISO will allow resubmission of Schedules to resolve mismatches in the scheduled quantities and locations for Inter-Scheduling Coordinator Energy Trades. The ISO will immediately communicate the results of each SC's 12:00 noon validation to that SC via WEnet. If the usage or sum of the usages associated with an Existing Transmission Contract results in the contract being over-scheduled, the usages will be adjusted such that a usage in excess of the ETC rights will be considered a New Firm Use (NFU) and will be exposed to Congestion charges.

# SP 3.2.8.4 Inter-Scheduling Coordinator Energy Trades - Mismatches

During the initial period of ISO operations, if the ISO detects a mismatch in the scheduled quantities or locations for Inter-Scheduling Coordinator Energy Trades, the ISO will promptly notify both the receiving and sending SCs that a mismatch exists and will specify the time, which will allow them approximately one half-hour, by which they may submit modified Schedules which resolve the mismatch. If the SCs are unable to resolve the mismatch as to quantities in the allotted time and provided there is no dispute as to whether the trade occurred or over its location, the ISO may adjust the SCs' Schedules in accordance with the following procedure:

(a) The ISO will determine which Schedule contains the higher scheduled quantity of Energy for the Inter-Scheduling

Issued by: Charles F. Robinson, Vice President and General Counsel

Issued on: January 7, 2003 Effective: October 13, 2000

Filed to comply with order of the Federal Energy Regulatory Commission, Docket Nos. ER98-3760 et al.,

### D 2.2 **Unaccounted for Energy Charge**

The Unaccounted for Energy Charge on Scheduling Coordinator i for each BEEP Interval b of each Settlement Period t for each relevant Zone is calculated in the following manner:

The UFE for each utility Service Area k for which separate UFE calculation is performed is calculated as follows,

$$UFE_{UDC,bkt} = \sum_{q \in UDC_k} I_{a,bqxt} - \sum_{q \in UDC_k} E_{a,bqxt} + \sum_{i \in UDC_k} G_{a,bixt} - \sum_{i \in UDC_k} L_{a,bixt} - TL_{bkt}$$

The Transmission Loss TL<sub>bkt</sub> for BEEP Interval b of Settlement Period t for utility Service Area k is calculated as follows:

$$TL_{bkt} = \left(\sum_{i} \left[G_{a,bixt} * (1 - GMM_{a,ixt})\right] + \sum_{q} \left[I_{a,bqxt} * (1 - GMM_{a,qxt})\right]\right) * \frac{PFL_{kt}}{\sum_{k} PFL_{kt}}$$

Where PFLkt are the transmission losses for utility Service Area k as calculated by a power flow solution for Settlement Period t, consistent with the calculation of final forecasted Generation Meter Multipliers.

Each metered demand point z in utility Service Area k, either ISO grid connected or connected through UDC k, is allocated a portion of the UFE as follows:

$$UFE_{bixt} = UFE_{UDC,bkt} * \frac{L_{bixt}}{\sum_{i \in UDC_{t}}}$$

The UFE charge for Scheduling Coordinator j for BEEP Interval b of Settlement Period t in Zone x is calculated as follows:

$$UFEC_{jxt} = \left(\sum_{i \in SC_j} UFE_{bixt}\right) * P_{bxt}$$

### D 2.3 **Hourly Ex Post Price**

The Hourly Ex Post Price in Zone x in Settlement Period t is determined as follows:

$$HP_{xt} = \frac{\sum_{b} \left| Q_{bxt} \right| P_{bxt}}{\sum_{b} \left| Q_{bxt} \right|}$$

Where Q<sub>bxt</sub> is the total Instructed Imbalance Energy during BEEP Interval b in Zone x in Settlement Period t.

# **D** 3 Meaning of terms in the formulae

### D 3.1 DevC<sub>bixt</sub> - \$

The Uninstructed Imbalance Energy charge on Scheduling Coordinator i during BEEP Interval b in Settlement Period t in Zone x.

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November 22, 2002, 101 FERC ¶ 61,219 (2002).

D 3.23  $E_{a,bqxt}$  – MWh

The total actual Energy export of Scheduling Coordinator j through Scheduling Point q in BEEP Interval b of Settlement Period t. This is deemed to be equal to the total scheduled Energy export during the same interval.

D 3.24 E<sub>adi.baxt</sub> – MWh

The deviation in Real Time export of Scheduling Coordinator j through Scheduling Point q in BEEP Interval b during BEEP Interval b in Settlement Period t ordered by the ISO for Congestion Management, Overgeneration, etc. or as a result of an export curtailment. This value will be calculated based on the projected impact of the Dispatch Instruction(s) (or curtailment event) between the close of the Hour-Ahead Market and the end of the BEEP Interval for which such Dispatch Instruction (or curtailment event) applies.

D 3.25 P<sub>hxt</sub> - \$/MWh

The Ex Post Price for Imbalance Energy in Zone x during BEEP Interval b in Settlement Period t.

D 3.25.1 [Not Used]

D 3.26 UFEC<sub>ixt</sub> – \$

The Unaccounted for Energy Charge for Scheduling Coordinator j in Zone x in Settlement Period t. It is the cost for the Energy difference between the net Energy delivered into each UDC Service Area, adjusted for UDC Service Area Transmission Losses (calculated in accordance with ISO Tariff Section 7.4.3), and the total metered Demand within that UDC Service Area adjusted for distribution losses using Distribution System loss factors approved by the Local Regulatory Authority.

This Energy difference (UFE) is attributed to meter measurement errors, power flow modeling errors, energy theft, statistical Load profile errors, and distribution loss deviations.

D 3.27 UFE<sub>UDC,bkt</sub> – MWh

The Unaccounted for Energy (UFE) for utility Service Area k.

D 3.28 UFE – MWh

The portion of Unaccounted for Energy (UFE) allocated to metering point z.

D 3.29 [Not Used]

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FERC ELECTRIC TARIFF
FIRST REPLACEMENT VOLUME NO. II

Second Revised Sheet No. 699 Superseding First Revised Sheet No. 699

D 3.30	[Not Used]
D 3.31	[Not Used]
D 3.32	[Not Used]
D 3.33	[Not Used]
D 3.34	[Not Used]
D 3.35	[Not Used]
D 3.36	[Not Used]
D 3.37	TL <sub>bkt</sub> – MWh
	The Transmission Losses per BEEP Interval b of Settlement Period t in utility Service Area k.
D 3.38	IGDC <sub>bixt</sub> – \$
	The Instructed Imbalance Energy payments/charges for Generator i in Zone x during BEEP Interval b in Settlement Period t.
D 3.39	ILDC <sub>bixt</sub> - \$
	The Instructed Imbalance Energy payments/charges for Load i in Zone x during BEEP Interval b in Settlement Period t.
D 3.40	IIDC <sub>bqxt</sub> – \$
	The Instructed Imbalance Energy payments/charges for import at Scheduling Point q during BEEP Interval b in Settlement Period t.

Issued by: Charles F. Robinson, Vice President and General Counsel Issued on: January 7, 2003

Issued on: January 7, 2003 Effective: April 1, 2002 Filed to comply with order of the Federal Energy Regulatory Commission, Docket Nos. ER98-3760 *et al.*, issued November 22, 2002, 101 FERC ¶ 61,219 (2002).

Superseding Original Sheet No. 745

10.6.7.7 of the ISO Tariff and this Protocol. Subject to any applicable Local Regulatory Authority requirements, the ISO will have the right to either conduct any audit or test it considers necessary or to witness such audit or test carried out by the SC, SC Metered Entity or an ISO Authorized Inspector engaged by the SC, SC Metered Entity or the ISO to carry out those audits or tests.

### **Failure to Comply** MP 4.2.2

The rights and measures available to the ISO with respect to any failure by a SC or a SC Metered Entity to comply with any applicable audit or test procedures contained in the ISO Tariff and this Protocol, will be set forth in the SC Meter Service Agreements.

# INSTALLATION OF ADDITIONAL METERING FACILITIES MP 5

### ISO Requirement to Install Additional Metering MP 5.1

# ISO Authority to Require Additional Metering Facilities MP 5.1.1

The ISO has authority under Section 10.2.2 the ISO Tariff to require an ISO Metered Entity to install Metering Facilities in addition to those Metering Facilities on the ISO Controlled Grid at the ISO Operations Date. In directing the addition of meters and metering system components that would impose increased costs on an ISO Metered Entity, the ISO shall give due consideration to whether the expected benefits of such equipment are sufficient to justify such increased costs. An ISO Metered Entity may not commence installing those additional Metering Facilities until the ISO has approved its Proposal for Installation.

### Requirement to Install MP 5.1.2

If the ISO determines that there is a need to install additional Metering Facilities on the ISO Controlled Grid, it will notify the relevant ISO Metered Entity of that need. The ISO's notice to that ISO Metered Entity will include the following information:

- the location of the Meter Point at which the additional Metering (a) Facilities are required;
- the date by which the ISO Metered Entity must install the (b) relevant Metering Facilities;
- the reason for the need to install the additional metering (c) Facilities: and
- (d) any other information that the ISO considers relevant.

# **Obligations of ISO Metered Entity** MP 5.1.3

An ISO Metered Entity that is notified by the ISO that it is required to install additional Metering Facilities must:

give the ISO written confirmation of receipt of that notice within (a) 3 business days of receiving that notice;

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Issued on: January 7, 2003

Effective: October 13, 2000 Filed to comply with order of the Federal Energy Regulatory Commission, Docket Nos. ER98-3760 et al.

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

Original Sheet No. 745A

(b) submit a Proposal for Installation to the ISO within 45 business days of receiving that notice. The Proposal for Installation must set out the following information:

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First Rev. Sheet No. 8

SECOND REPLACEMENT TRANSMISSION CONTROL AGREEMENT Superseding Orig. Sheet No. 8

unqualified opinion from its bond counsel at the earliest opportunity. Upon receipt of

such unqualified opinion, a Municipal Tax-Exempt TO shall provide a copy of the

opinion to the ISO and all other provisions of this Agreement shall become effective with

respect to such Municipal Tax-Exempt TO as of the date thereof. If the Municipal Tax-

Exempt TO is unable to provide to the ISO such unqualified opinion within one year of

the execution of this Agreement by the Municipal Tax-Exempt TO, without further act,

deed or notice this Agreement shall be deemed to be void ab initio with respect to such

Municipal Tax-Exempt TO.

2.3.2 **Acceptable Encumbrances.** A Transmission Owner that has

issued Local Furnishing Bonds may become a Participating TO under Section 2.2 even

though covenants or restrictions applicable to the Transmission Owner's Local

Furnishing Bonds require the ISO's Operational Control to be exercised subject to

Encumbrances, provided that such Encumbrances do not materially impair the ISO's

ability to meet its obligations under the ISO Tariff or the Transmission Owner's ability to

comply with the TO Tariff.

2.3.3 Savings Clause. Nothing in this Agreement shall compel any

Participating TO or Municipal Tax-Exempt TO which has issued Tax-Exempt Debt to

violate restrictions applicable to transmission facilities financed with Tax-Exempt Debt or

contractual restrictions and covenants regarding use of transmission facilities.

Issued by: Anthony Ivancovich, Senior Regulatory Counsel

# ATTACHMENT 2

# 2.3.1.2 Market Participant Responsibilities.

2.3.1.2.1 Comply with Operating Orders Issued. With respect to this Section 2.3.1.2, all Market Participants within the ISO Control Area shall comply fully and promptly with the ISO's operating orders, unless such operation would impair public health or safety. The ISO will honor the terms of Existing Contracts, except during a System Emergency and circumstances in which the ISO considers that a System Emergency is imminent or threatened. In a System Emergency and circumstances in which the ISO considers that a System Emergency is imminent or threatened, Existing Rights Holders must follow ISO operating orders even if those operating orders conflict with the terms of Existing Contracts. For this purpose ISO operating orders to shed Load shall not be considered as an impairment to public health or safety.

\*\*\*\*

2.5.20.5.1 Day-Ahead Schedule. At the Day-Ahead scheduling process, Scheduling Coordinators shall be required to submit information on self provided Ancillary Services within the time frame stated in Section 2.5.10.1. Failure to submit the required information within the stated time frame for any hour shall lead to the self provision for that hour all Settlement Periods of the relevant Trading Day being declared invalid by the ISO, and under such circumstances the ISO shall purchase sufficient Ancillary Services to meet the Scheduling Coordinator's requirements to match its Day-Ahead Schedule.

• \*\*\*\*

# 10.2.1 Duty to Provide Meter Data.

ISO Metered Entities shall ensure that Meter Data from their meters directly connected to the ISO Controlled Grid or at interconnections thereto, including interconnections between utility Service Areas which have separate UFE calculations, is made available to the ISO revenue meter data acquisition and processing system in accordance with the requirements of these Sections 10.1 to 10.5 and the ISO metering protocols. Pursuant to this obligation, the ISO shall establish revenue metering protocols for such ISO Metered Entities.

# 10.2.2 Duty to Install and Maintain Meters.

The ISO may require ISO Metered Entities to install, at their cost, additional meters and relevant metering system components, including real time metering, at ISO specified Meter Points or other locations as deemed necessary by the ISO, in addition to those connected to or existing on the ISO Controlled Grid at the ISO Operations Date, including requiring the metering of transmission interfaces connecting Zones. In directing the addition of meters and metering system components that would impose increased costs on an ISO Metered Entity, the ISO shall give due consideration to whether the expected benefits of such equipment are sufficient to justify such increased costs. ISO Metered Entities, at their cost, shall install and maintain, or cause to be installed and maintained, metering equipment and associated communication devices at ISO designated Meter Points to meet the requirements of this Section 10 and the ISO metering protocols. Nothing in this Section 10 shall preclude ISO Metered Entities from installing additional meters, instrument transformers and associated communications facilities at their own cost.

\* \* \* \* \*

# 11.2.4.3 Unaccounted For Energy (UFE)

For settlement purposes, UFE is treated as Imbalance Energy. For each BEEP Interval, the ISO will calculate UFE on the ISO Controlled Grid, for each UDC utility Service Area for which separate UFE calculation is performed. The UFE will be settled as Imbalance Energy at the BEEP Interval Ex Post Price. UFE attributable to meter measurement errors, load profile errors, Energy theft, and distribution loss deviations will be allocated to each Scheduling Coordinator based on the ratio of their metered Demand (including exports to neighboring Control Areas) within the relevant UDC utility Service Area to total metered Demand within the UDC utility Service Area.

\* \* \* \* \*

**Distribution System** 

The distribution assets of a TO or UDC an IOU or Local

Publicly Owned Electric Utility.

\* \* \* \*

# Eligible Intermittent Resource

**Take Generation** 

**Eligible Regulatory Must-**

A Generating Unit that is powered solely by 1) wind, 2) solar energy, or 3) hydroelectric potential derived from small conduit water distribution facilities that do not have storage capability.

Regulatory Must-Take Generation which (i) has been approved as Regulatory Must-Take Generation by a Local Regulatory

Authority within California, and (ii) is owned or produced by a Participating TO or UDC which has provided direct access to its End-Use Customers and serves load in the ISO Control Area.

# ISO Memorandum Account

The memorandum account established by each California IOU pursuant to California Public Utility Commission Order

D. 96-08-038 date August 2, 1996 which records all ISO startup and development costs incurred by that California IOU.

# **ISO Metered Entity**

- a) any one of the following entities that is directly connected to the ISO Controlled Grid:
- i. a Generator other than a Generator that sells all of its
   Energy (excluding any Energy consumed by auxiliary load equipment electrically connected to that Generator at the same point) and Ancillary Services to the UDC in whose Service Area it is located;
- ii. an Eligible Customer; or
- iii. an End-User other than an End-User that purchases all of

its Energy from the UDC in whose Service Area it is located; and

- (b) any one of the following entities:
- i. a Participating Generator;
- ii. a Participating TO in relation to its Tie Point Meters with other TOs or Control Areas;
- iii. a Participating Load; or
- iv. a Participating Intermittent Resource; or
- a utility that requests that UFE for its Service Area be
   calculated separately, in relation to its meters at points of
   connection of its Service Area with the systems of other
   utilities.

\* \* \* \* \*

# Service Area

An area in which, as of December 20, 1995, an IOU or a Local Publicly Owned Electric Utility was is obligated to provide electric service to End-Use Customers.

\* \* \* \* \*

# <u>Unaccounted for Energy</u> (UFE)

UFE is the difference in Energy, for each UDC utility Service

Area and Settlement Period, between the net Energy delivered into the UDC utility Service Area, adjusted for UDC utility

Service Area Transmission Losses (calculated in accordance with Section 7.4.2), and the total metered Demand within the UDC 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.

\* \* \* \* \*

# **Scheduling Protocol**

# SP 3.2.6.3 Invalidation

Except with respect to invalidated contract usage associated with Existing Contract rights or Firm Transmission Rights, invalidation of the submittal for any Settlement Period results in rejection of the submittal for that Settlement Period. all Settlement Periods of the relevant Trading Day. SCs will be notified of any invalid contract usage via an invalidated contract usage template issued, via the WEnet, by the ISO. Invalidation of contract usage will not cause the rejection of the SC's submittal; instead, invalid contract usage will be treated as new firm uses of ISO transmission service without the priorities and protections afforded the scheduled use of Existing Contract rights and Firm Transmission Rights. During the initial operations of the ISO, the ISO may assist SCs to resolve mismatches in the scheduled quantities or locations for Inter-Scheduling Coordinator Energy Trades contained in their Preferred Schedules in accordance with SP 3.2.6.4. Except with respect to contract usage templates (for which SCs can check whether or not their submittal will pass the ISO's validation checks between 9:00 am and 10:00 am), SCs may check at any time prior to 10:00 am whether or not their submittal will pass the ISO's validation checks at 10:00 am. It is the responsibility of the SCs to perform such checks since Preferred Day-Ahead Schedules, Adjustment Bids, Schedules of self-provided Ancillary Services, Inter-Scheduling Coordinator Ancillary Service Trades, and Ancillary Services bids which are invalidated cannot be resubmitted after 10:00 am for the Day-Ahead Market, except that, during the initial period of ISO operations, the ISO will allow resubmission of Preferred Schedules which have mismatches in the scheduled quantities or locations for Inter-Scheduling Coordinator Energy Trades. The ISO will immediately communicate the results of each SC's 10:00 am validation to that SC via WEnet. If the usage or sum of the usages associated with an Existing Transmission Contract results in the contract being over-scheduled, the usages will be adjusted such that a usage in excess of the ETC rights will be considered a New Firm Use (NFU) and will be exposed to Congestion charges.

\*\*\*\*

# SP 3.2.8.3 Invalidation

Except with respect to invalidated contract usage associated with Existing Contract rights or Firm Transmission Rights, invalidation of the submittal for any Settlement Period results in rejection of the submittal for that Settlement Period.all Settlement Periods of the relevant Trading Day. SCs will be notified of any invalid contract usage via an invalidated contract usage template issued, via the WEnet, by

the ISO. Invalidation of contract usage will not cause the rejection of the SC's submittal; instead, invalid contract usage will be treated as new firm uses of ISO transmission service without the priorities and protections afforded the scheduled use of Existing Contract rights and Firm Transmission Rights. During the initial operations of the ISO, the ISO may assist SCs to resolve mismatches in the scheduled quantities or locations for Inter-Scheduling Coordinator Energy Trades in accordance with 3.2.8.4. Except with respect to contract usage templates, SCs may check at any time prior to 12:00 noon whether or not their submittal will pass the ISO's validation checks (which are undertaken at 12:00 noon). It is the responsibility of the SCs to perform such checks since Revised Day-Ahead Schedules, Adjustment Bids, schedules of self-provided Ancillary Services, Inter-Scheduling Coordinator Ancillary Service Trades, and Ancillary Services bids which are invalidated cannot be resubmitted after 12:00 noon for the Day-Ahead Market, except that during the initial period of operations, the ISO will allow resubmission of Schedules to resolve mismatches in the scheduled quantities and locations for Inter-Scheduling Coordinator Energy Trades. The ISO will immediately communicate the results of each SC's 12:00 noon validation to that SC via WEnet. If the usage or sum of the usages associated with an Existing Transmission Contract results in the contract being over-scheduled, the usages will be adjusted such that a usage in excess of the ETC rights will be considered a New Firm Use (NFU) and will be exposed to Congestion charges.

# SABP Appendix D

# D 2.2 Unaccounted for Energy Charge

The Unaccounted for Energy Charge on Scheduling Coordinator j for each BEEP Interval b of each Settlement Period t for each relevant Zone is calculated in the following manner:

The UFE for each utility service territory Service Area k for which separate UFE calculation is performed is calculated as follows,

$$UFE_{UDC,bkt} = \sum_{q \in UDC_k} I_{a,bqxt} - \sum_{q \in UDC_k} E_{a,bqxt} + \sum_{i \in UDC_k} G_{a,bixt} - \sum_{i \in UDC_k} L_{a,bixt} - TL_{bkt}$$

The Transmission Loss  $TL_{bkt}$  for BEEP Interval b of Settlement Period t for utility service territory. Service Area k is calculated as follows:

$$TL_{bkt} = \left(\sum_{i} \left[G_{a,bixt} * (1 - GMM_{a,ixt})\right] + \sum_{q} \left[I_{a,bqxt} * (1 - GMM_{a,qxt})\right]\right) * \frac{PFL_{kt}}{\sum_{i} PFL_{kt}}$$

Where  $PFL_{kt}$  are the transmission losses for utility service territory-Service Area k as calculated by a power flow solution for Settlement Period t, consistent with the calculation of final forecasted Generation Meter Multipliers.

Each metered demand point z in utility service territory Service Area k, either ISO grid connected or connected through UDC k, is allocated a portion of the UFE as follows:

$$UFE_{bixt} = UFE_{UDC,bkt} * \frac{L_{bixt}}{\sum_{i \in UDC}}$$

The UFE charge for Scheduling Coordinator j for BEEP Interval b of Settlement Period t in Zone x is calculated as follows:

$$UFEC_{jxt} = \left(\sum_{i \in SC_t} UFE_{bixt}\right) * P_{bxt}$$

# D 3.27 UFE<sub>UDC,bkt</sub> – MWh

The Unaccounted for Energy (UFE) for utility service territory Service Area k.

\* \* \* \* \*

# D 3.37 TL<sub>bkt</sub> – MWh

The Transmission Losses per BEEP Interval b of Settlement Period t in utility service territory-Service Area k.

# **Metering Protocol**

MP 5 Installation of Additional Metering Facilities

MP 5.1 ISO Requirement to Install Additional Metering

# MP 5.1.1 ISO Authority to Require Additional Metering Facilities

The ISO has authority under Section 10.2.2 the ISO Tariff to require an ISO Metered Entity to install Metering Facilities in addition to those Metering Facilities on the ISO Controlled Grid at the ISO Operations Date. In directing the addition of meters and metering system components that would impose increased costs on an ISO Metered Entity, the ISO shall give due consideration to whether the expected benefits of such equipment are sufficient to justify such increased costs. An ISO Metered Entity may not commence installing those additional Metering Facilities until the ISO has approved its Proposal for Installation.

# **Transmission Control Agreement**

2.3.3 **Savings Clause.** Nothing in this Agreement shall compel any Participating TO or Municipal Tax-Exempt TO which has issued Tax-Exempt Debt to violate restrictions applicable to transmission facilities financed with Tax-Exempt Debt or contractual restrictions and covenants regarding use of transmission facilities—existing as of December 20, 1995.

# ATTACHMENT 3

# NOTICE OF FILING SUITABLE FOR PUBLICATION IN THE FEDERAL REGISTER

# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

California Independent System ) Operator Corporation )	Docket No. ER98-3760-000	
Pacific Gas and Electric Company, ) San Diego Gas & Electric Company and ) Southern California Edison Company )	Docket Nos. EC96-19-009, ER96-1663-010	
California Independent System ) Operator Corporation )	Docket Nos. EC96-19-030, ER96-1663-031	

# **Notice of Filing**

On January 7, 2003, the California Independent System Operator Corporation (ISO) tendered for filing a compliance filing made in compliance with the Commission's November 22, 2002 Order on Outstanding Issues Relating to the California Independent System Operator Corporation, 101 FERC ¶ 61,219. The compliance filing revises a number of sections of the ISO's Tariff, Protocols, and in accordance with the November 22 Order.

The ISO states that this filing has been served on all entities that are on the official service list for this docket.

Any person desiring to be heard to protest said filing should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426, in accordance with Rules 211 or 214 of the Commission's Rules of Practice and Procedure (18 C.F.R. §§ 385.211, 385.214). All such motions or protests must be filed in accordance with § 35.9 of the Commission's regulations. Protests filed with the Commission will be considered in determining the appropriate action to be taken but will not serve to make the protestant parties to the proceeding. Any person wishing to become a party must file a motion to intervene. Copies of this filing are on file with the Commission and are available for public inspection in the Public Reference Room. This filing may also be viewed on the internet at <a href="http://www.ferc.fed.us/ferris.htm">http://www.ferc.fed.us/ferris.htm</a> (call 202-208-2222 for assistance).