Metered Entity or its Scheduling Coordinator may have provided to third parties, except as otherwise may be required by law, FERC, any Local Regulatory Authority or other provision of this ISO Tariff. Meter Data supplied by an ISO Metered Entity shall be made available by the ISO to the Scheduling Coordinator representing such ISO Metered Entity and the other authorized users identified in its Meter Service agreement, but shall not be disclosed to any other third party except as may otherwise be required by law, FERC, any Local Regulatory Authority or other provision of this ISO Tariff. Access by third parties other than authorized users to Meter Data held by the ISO shall be coordinated through the Scheduling Coordinator representing the relevant ISO Metered Entity that supplied the data and shall not be obtained directly from the ISO on any basis including, without limitation, by the polling of the ISO's revenue meter data acquisition and processing system via WEnet.

10.3 Meter Service Agreements for ISO Metered Entities.

10.3.1 Requirement for Meter Service Agreements.

The ISO shall establish meter service agreements with ISO Metered Entities for the collection of Meter Data. Such agreements shall specify that ISO Metered Entities shall make available to the ISO's revenue meter data acquisition and processing system, Meter Data meeting the requirements of these Sections 10.1 to 10.5 inclusive and the ISO metering protocols. The meter service agreement and the ISO metering protocols shall specify the format of Meter Data to be submitted, which shall be identified by TO, Distribution System, Zone, ISO Controlled Grid interface point and other information reasonably required by the ISO. Meter service agreements will identify other authorized users which are allowed to access the

Entities whom they represent are certified in accordance with any certification criteria prescribed by the relevant Local Regulatory Authority or, if no such criteria have been prescribed by that Local Regulatory Authority, certified in accordance with the ISO metering protocols. Scheduling Coordinators shall upon request of the ISO supply promptly copies of all certificates issued by the relevant Regulatory Authority. The End-Use Meter of an ISO Metered Entity or a Scheduling Coordinator Metered Entity in place as of the ISO Operations Date is deemed to be certified as in compliance with Appendix J. Once certified, meters for Scheduling Coordinator Metered Entities need not be recertified provided such meters are maintained so as to meet the standards and accuracy requirements prescribed by any relevant Local Regulatory Authority or, if no such standards have been prescribed by that Local Regulatory Authority, such requirements as referred to in Appendix J and the ISO metering protocols. Recertification is not required by the ISO upon an election by a Scheduling Coordinator Metered Entity to change its Scheduling Coordinator from which it takes service. Meter Service Agreements for Scheduling Coordinator Metered Entities. 10.6.7

10.6.7.1 Requirement for Meter Service Agreements. The ISO shall enter into meter service agreements with Scheduling Coordinators responsible for providing Settlement Quality Meter Data for Scheduling Coordinator Metered Entities to the ISO. Such agreements shall specify that Scheduling Coordinators require their Scheduling Coordinator Metered Entities to adhere to the meter requirements set forth in this Section 10.6.

10.6.7.2 [Not Used]

11.2.4.1 Net Settlements for Uninstructed Imbalance Energy.

Uninstructed Imbalance Energy attributable to each Scheduling Coordinator in each Settlement Period in the relevant Zone shall be deemed to be sold or purchased, as the case may be, by the ISO and charges or payments for Uninstructed Imbalance Energy shall be settled by debiting or crediting, as the case may be, the Scheduling Coordinator with an amount for each Settlement Period equal to the sum of:

- (a) The quantity of undelivered Instructed Imbalance Energy, multiplied by the Effective Price, and
- (b) The quantity of deviation from the Final Hour-Ahead Schedule multiplied by the Hourly Ex Post Price.

Imbalance Energy charge will be calculated as follows:

IE Charge = DevC + ASSEDevC

where:

$$DevC = \sum_{i} GenDevC_{i} + \sum_{i} LoadDevC_{i} + \sum_{q} ImpDevC_{q} + \sum_{q} ExpDevC_{q} + UFEC$$

$$ASSEDevC = \sum_{i} ASSEGenDevC_{i} + \sum_{i} ASSELoadDevC_{i} + \sum_{q} ASSEImpDevC_{q}$$

and

The deviation between scheduled and actual Energy Generation for Generator i represented by the Scheduling Coordinator for the Settlement Period is calculated as follows:

$$GenDev_{i} = G_{s} * GMM_{f} - \left[\left(G_{a} - G_{adj} \right) * GMM_{ah} - G_{a/s} - G_{s/e} \right] - UnavailAncServMW_{ixt}$$

 $UnavailAncServMW_{ixt} = Max[-(G_{i, oblig}-G_{a/s}), Min(0, Pmax-Ga-(G_{i, oblig}-G_{a/s}))]$ $GenDevC_i$ = $GenDev_i * P$ in case of (b) above, and If $G_{a/s} + G_{s/e} > 0$ and $P < P_{eff}$ then: ASSEGenDevC_i=Max[0,[G_{a/s} -Max[0,(G_a -G_{adj}-G_s)]]]* (P_{eff-l} -P) in case of (a) above, or If $G_{a/s} + G_{s/e} < 0$ and $P > P_{eff}$ then: ASSEGenDevC_i=Min[0,[$G_{a/s}$ -Min[0,(G_a - G_{adi} - G_s)]]]* (P_{eff-l} -P) in case of (a) above The deviation between scheduled and actual Load consumption for Load i represented by the Scheduling Coordinator for the Settlement Period is calculated as follows: $LoadDev_i = L_s - [(L_a - L_{adj}) + L_{a/s} + L_{s/e}] - UnavailDispLoadMW_{ixt}$ Where: UnavailDispLoadMW_{ixt}= Max[0, (L_{i, oblig}-L_{a/s})-L_a LoadDevC_i=LoadDev_i * P in case of (b) above, and If $L_{a/s} + L_{s/e} > 0$ and $P < P_{eff}$ then: ASSELoadDevC_i=Max[0,[L_{a/s} -Max[0,(L_a -L_{adi}-L_s)]]]* (P_{eff-l} -P) in case of (a) above, or If $L_{a/s} + L_{s/e} < 0$ and $P > P_{eff}$ then: ASSELoadDevC_i=Min[0,[$L_{a/s}$ -Min[0,($L_a - L_{adi} - L_s$)]]]* ($P_{eff-l} - P$) in case of (a) above The deviation between forward, scheduled and Real Time adjustments to Energy imports, adjusted for losses, for Scheduling Point q represented by the Scheduling Coordinator for the Settlement Period is calculated as follows: $ImpDev_{q} = I_{s} * GMM_{fq} - [(I_{a} - I_{adj}) * GMM_{ahq}] + I_{a/s}$

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF ORIGINAL VOLUME NO. I

 $ImpDevC_q = ImpDev_q * P$ in case of (b) above, and If $I_{a/s} > 0$ and $P < P_{eff}$ then ASSEImpDevC_a=Max[0,[$L_{a/s}$ -Max[0,($L_a - L_{adi} - L_s$)]]]* ($P_{eff-a} - P$) in case of (a) above, or If $I_{a/s} < 0$ and $P > P_{eff}$ then: $ASSEImpDevC_q=Min[0,[L_{a/s} - Min[0,(L_a - L_{adj} - L_s)]]]^* (P_{eff-q} - P)$ in case of (a) above The deviation between forward, scheduled and Real Time adjustments to Energy exports for Scheduling Point q represented by the Scheduling Coordinator for the Settlement Period is calculated as follows: $ExpDevC_q = ExpDev_q * P$ and where: Gs sum of effective schedules for Day-Ahead and Hour-Ahead = $GMM_f =$ estimated GMM for Day-Ahead G_a actual metered Generation = deviations in real time ordered by the ISO for purposes such as Gadi = **Congestion Management** GMM_{ah}= hour-ahead GMM (proxy for ex-post GMM) G_{a/s} Energy generated from Ancillary Service resource due to ISO dispatch = instruction Energy generated from Supplemental Energy resource due to ISO G_{s/e}= dispatch instruction Ls sum of Demand scheduled for Day-Ahead and Hour-Ahead = actual metered Demand La = Demand deviation in real time ordered by ISO for purposes such as Ladj = **Congestion Management**

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION FERC ELECTRIC TARIFF ORIGINAL VOLUME NO. I

L _{a/s} instruc	= tion	Demand reduction from Ancillary Service resource due to ISO dispatch
<i>L_{s∕e}</i> dispato	= h instruc	Demand reduction from Supplemental Energy resource due to ISO stion.
GMM _f	q =	estimated GMM for an Energy import at Scheduling Point q for Day-
Ahead		
GMMa	hq =	estimated GMM for an Energy import at Scheduling Point q for Hour-
Ahead	(proxy f	pr ex-post GMM)
I _S	=	sum of Scheduled Energy import through Scheduling Point q for Day-
Ahead	and Hou	ır-Ahead
la	=	sum of actual Energy import through Scheduling Point q.
ladj	=	deviation in real time import ordered by ISO for purposes such as
Conge	stion Ma	nagement, and import curtailment.
l _{a/s}	=	Energy generated from Ancillary Service System Resources pursuant to
Existin	g Contra	cts or Supplemental Energy from interties due to dispatch instruction
Es	=	sum of scheduled Energy export scheduled through Scheduled Point q
for Day	/-Ahead	and Hour-Ahead
Ea	=	sum of actual Energy export through Scheduling Point q for Day_Ahead
and Ho	our-Ahea	d
E _{adj}	=	deviation in real time export ordered by ISO for purposes such as
Conge	stion Ma	nagement, and export curtailment
Ρ	=	Hourly Ex Post Price for Uninstructed Imbalance Energy for the relevant
bour o	s define	d in Section 2.5.23.2.2

P_{eff} = Effective Price for Instructed Imbalance Energy for the relevant Settlement Period

 $G_{i, oblig}$ = the amount of Spinning Reserve, the amount of Non-Spinning Reserve, and the amount of Replacement Reserve that Generating Unit or System Resource i has been selected to supply to the ISO, as reflected in final Ancillary Services schedules.

*PMax*_i = the maximum capability (in MW) at which Energy and Ancillary Services may be scheduled from the Generating Unit or System Resource i.

 $L_{i, oblig}$ = the amount of Non-Spinning Reserve and Replacement Reserve that dispatchable Load i has been selected to supply to the ISO, as reflected in final Ancillary Services schedules for Settlement Period t.

UFEC = the Unaccounted for Energy Charge for the Scheduling Coordinator

calculated as follows:

Unaccounted for Energy Charge

The hourly Unaccounted for Energy Charge on Scheduling Coordinator j for Settlement

Period t for each relevant Zone is calculated in the following manner:

The UFE for each utility service territory *k* is calculated as follows,

 $E_{UFE \ UDC \ k} = \left(I_k - E_k + G_k - \left(RTM_k + LPM_k\right) - TL_k\right)$

The ISO shall develop protocols and procedures for the monitoring of persistent

intentional excessive imbalances by Scheduling Coordinators and for the imposition of

appropriate sanctions and/or penalties to deter such behavior.

11.2.4.1.1 Settlement for Instructed Imbalance Energy

Instructed Imbalance Energy attributable to each Scheduling Coordinator j in each settlement Period t in the relevant Zone shall be deemed to be sold or purchased, as the case may be, by the ISO and charges or payments for Instructed Imbalance Energy shall be settled by debiting or crediting, as the case may be, the Scheduling Coordinator with an amount for each Settlement Period t equal to:

 $IIEC_{j} = IGDC_{j} + ILDC_{j} + IIDC_{j}$

where:

Instructed Generation Deviation Payment/Charge is calculated as follows:

$$IGDC = \sum_{gi} \frac{G_{gi}^* P_i}{HBI}$$

Instructed Load Deviation Payment/Charge is calculated as follows:

$$ILDC = \sum_{Li} \frac{L_{Li} * P_i}{HBI}$$

Instructed Import Deviation Payment/Charge is calculated as follows:

$$IIDC = \sum_{Ii} \frac{I_{Ii} * P_i}{HBI}$$

and where:

*IGDC_F*total of instructed Generation deviation payments/charges for the Settlement Period t

ILDC_j=total of instructed Demand deviation payments/charges for the Settlement Period t

IIDC_j=total of instructed import deviation payments/charges for the Settlement Period t

	<i>G_{gi}=</i> instructed Energy (in MW) for Generating Unit g during BEEP Interval i
	L_{Li} =instructed Energy (in MW) for Load L during BEEP Interval i
	<i>I_{li}=</i> instructed Energy (in MW) for import I during BEEP Interval i
	P_i = the BEEP incremental Ex Post Price for BEEP Interval i if the net instructed Energy for resources is positive. Or, the BEEP decremental Ex Post Price for BEEP Interval i if the net instructed Energy for resources is negative
	<i>HBI=</i> the Number (2-12) of BEEP Intervals in the Settlement Period: the maximum number of intervals in the Settlement Period that BEEP can instruct a resource for incremental/decremental Energy.
11.2.4.2	With respect to Regulatory Must-Take and Regulatory Must-Run
Generation, a	and with respect to Generating Units, Loads and imports which have not bio
into the Imba	lance Energy markets but which have been dispatched by the ISO to avoid
an interventio	on in market operations or to prevent a System Emergency, the ISO shall
calculate, acc	count for and settle deviations from the Final Schedule submitted on behalf
of each such	Generating Unit, Load or import with the relevant Scheduling Coordinator
for each Settl	ement Period for each such Generating Unit, Load or import by way of the
Uninstructed	Imbalance Energy Charge price as calculated in accordance with Section

Scheduling Coordinators who traded on that Trading Day pro rata to their metered Demand (including exports) in MWh of Energy for that Trading Day.

(d) amounts required with respect to payment adjustments for regulating Energy as calculated in accordance with Section 2.5.27.1. These charges will be allocated amongst the Scheduling Coordinators who traded on that Trading Day pro rata to their metered Demand (excluding exports) in MWh for that Trading Day.

11.3 Billing and Payment Process.

11.3.1 The billing and payment process shall be based on the issuance of Preliminary and Final Settlement Statements for each Settlement Period in each Trading Day.

11.3.2 Payment for the charges referred to in Section 11.1.6 of the ISO Tariff (except for the charges payable under long term contracts) for each Trading Day in each calendar month shall be made fifty-six (56) Business Days after the last day of the relevant calendar month.

- 11.3.3 [Not used]
- 11.3.4 [Not used]
- 11.4 General Principles for Production of Settlement Statements.
- 11.4.1 Basis of Settlement.

The basis of each Settlement Statement shall be the debiting or crediting of an account in the name of the relevant Scheduling Coordinator in the general ledger set up by the ISO to reflect all transactions, charges or payments settled by the ISO.

11.4.2 Right to Dispute.

All Scheduling Coordinators shall have the right to dispute any item or calculation set

forth in any Preliminary Settlement Statement in accordance with this ISO Tariff.

11.4.3 Data Files.

Settlement Statements relating to each Scheduling Coordinator shall be accompanied by a data file of supporting information that includes the following for each Settlement Period of the Trading Day on a Zone-by-Zone basis:

- (a) the aggregate quantity (in MWh) of Energy supplied or withdrawn by the Metered
 Entities represented by the Scheduling Coordinator;
- (b) the aggregate quantity (in MW) and type of Ancillary Services capacity provided or purchased;
- (c) the relevant prices that the ISO has applied in its calculations;
- (d) details of the Scheduled quantities of Energy and Ancillary Services accepted by the ISO in the Day-Ahead Market and the Hour-Ahead Market;
- (e) details of Imbalance Energy and penalty payments; and
- (f) detailed calculations of all fees, charges and payments allocated amongst
 Scheduling Coordinators and each Scheduling Coordinator's share.

16.1 ISO Grid Operations Committee.

The ISO Grid Operations Committee shall coordinate activities relating to the ISO Controlled Grid and shall consider suggestions for changes to the ISO Protocols in accordance with the procedures set out in Article IV, Section 4 of the ISO's bylaws.

16.2 ISO Protocol Amendment Process

The ISO Governing Board shall establish an ISO Protocol amendment process in order to ensure that all affected parties have an opportunity to participate. Under that process, the ISO shall file for acceptance at the FERC any amendment to an ISO Protocol that is on file with the FERC.

16.3 Market Surveillance: Changes to Operating Rules and Protocols

The ISO shall keep the operation of the markets that it administers under review to determine whether changes in its operating rules or ISO Protocols would improve the efficiency of those markets or prevent the exercise of market power by any Market Participant; and it shall institute necessary changes in accordance with this Section 16. The details of the ISO Market Monitoring and Information Protocol are set forth in Appendix L, "ISO Protocols".

notice as is reasonably practicable. Any notices issued under this provision shall be delivered in accordance with the procedures set out in Section 20.1 of this ISO Tariff, and, in the case of the ISO Protocols, Section 16.2 of this ISO Tariff.

20.2 Waiver.

Any waiver at any time by the ISO or any Market Participant of its rights with respect to any default under this ISO Tariff, or with respect to any other matter arising in connection with this ISO Tariff, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this ISO Tariff. Any delay short of the statutory period of limitations in asserting or enforcing any right shall not constitute or be deemed a waiver.

20.3 Confidentiality.

20.3.1 ISO

The ISO shall maintain the confidentiality of all of the documents, data and information provided to it by any Market Participant that are treated as confidential or commercially sensitive under Section 20.3.2; provided, however, that the ISO need not keep confidential: (1) information that is explicitly subject to data exchange through WEnet pursuant to Section 6 of this ISO Tariff; (2) information that the ISO or the Market Participant providing the information is required to disclose pursuant to this ISO Tariff, or applicable regulatory requirements (provided that the ISO shall comply with any applicable limits on such disclosure); or (3) information that becomes available to the public on a non-confidential basis (other than as a result of the ISO's breach of this ISO Tariff).