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.

16.1 Meter Service Agreements for ISO Metered Entities.

16.1.1 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

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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]

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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:

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:

$$GenDev_i = G_s * GMM_f - [(G_a - G_{adj}) * GMM_{ah} - G_{a/s} - G_{s/e}] - UnavailAncServMW_{ixt}$$

 $UnavailAncServMW_{ixt} = Max[-(G_{i, oblig}-G_{a/s}), Min(0, Pmax-Ga-(G_{i, oblig}-G_{a/s}))]$

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:

UnavailDispLoadMWixt= Max[0, (Li, oblig-La/s)-La

LoadDevC_i=LoadDev_i * P in case of (b) above, and

If $L_{a/s} + L_{s/e} > 0$ and $P < P_{eff}$ then:

 $ASSELoadDevC_i=Max[0,[L_{a/s}-Max[0,(L_a-L_{adj}-L_s)]]]^*$ $(P_{eff-l}-P)$ 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:

 $ImpDev_a = I_s * GMM_{fa} - [(I_a - I_{adi}) * GMM_{aha}] + I_{a/s}$

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 $ImpDevC_q = ImpDev_q * P in case of (b) above, and$

If $I_{a/s} > 0$ and $P < P_{eff}$ then

 $ASSEImpDevC_{q}=Max[0,[L_{a/s}-Max[0,(L_{a}-L_{adi}-L_{s})]]]^{*}$ ($P_{eff-q}-P$) 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:

 G_s = sum of effective schedules for Day-Ahead and Hour-Ahead

 GMM_f = estimated GMM for Day-Ahead

 G_a = actual metered Generation

 G_{adi} = deviations in real time ordered by the ISO for purposes such as

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

G_{s/e}= Energy generated from Supplemental Energy resource due to ISO

dispatch instruction

L_s = sum of Demand scheduled for Day-Ahead and Hour-Ahead

L_a = actual metered Demand

 L_{adi} = Demand deviation in real time ordered by ISO for purposes such as

Congestion Management

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 $L_{a/s}$ = Demand reduction from Ancillary Service resource due to ISO dispatch

instruction

 $L_{s/e}$ = Demand reduction from Supplemental Energy resource due to ISO dispatch instruction

GMMfq = estimated GMM for an Energy import at Scheduling Point q for Day-

Ahead

GMM_{ahq} = estimated GMM for an Energy import at Scheduling Point q for Hour-

Ahead (proxy for ex-post GMM)

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Is = sum of Scheduled Energy import through Scheduling Point q for Day-Ahead and Hour-Ahead

la = sum of actual Energy import through Scheduling Point q.

ladj = deviation in real time import ordered by ISO for purposes such as
 Congestion Management, and import curtailment.

I . Energy generated from Anaillany Convice Syst

I_{a/s} = Energy generated from Ancillary Service System Resources pursuant to
Existing Contracts 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 Hour-Ahead

Eadj = deviation in real time export ordered by ISO for purposes such as
 Congestion Management, and export curtailment

P = Hourly Ex Post Price for Uninstructed Imbalance Energy for the relevant hour, as defined 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,

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

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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 purshased, 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:

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:

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

Instructed Import Deviation Payment/Charge is calculated as follows:

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

and where:

IGDC_Etotal of instructed Generation deviation payments/charges for the Settlement

Period t

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

*IIDC*_Ftotal of instructed import deviation payments/charges for the Settlement Period t

G_a=instructed Energy (in MW) for Generating Unit g during BEEP Interval i

L_L=instructed Energy (in MW) for Load L during BEEP Interval i

I_i=instructed Energy (in MW) for import I during BEEP Interval I

P_Ethe 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

HBI= 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 Payment Options for ISO Dispatch Orders

With respect to all resources which have not bid into the Imbalance Energy or Ancillary Services markets but which have been dispatched by the ISO to avoid an intervention in market operations, to prevent or relieve a System Emergency, or to satisfy a locational requirement, the ISO shall calculate, account for and, if applicable, settle deviations from the Final Schedule submitted on behalf of each such resource, with the relevant Scheduling Coordinator for each Settlement Period for each such resource by application of either of the following payment options described below. For resources subject to a Reliability Must-Run Contract, the ISO will dispatch such resources according to the terms of the RMR Contract.

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In circumstances where an RMR Unit would be used to resolve Intra-Zonal Congestion and there are no such RMR Units available, a resource may be called upon and paid under this Section to resolve the Intra-Zonal Congestion.

By December 31 of each year for the following calendar year, each Scheduling Coordinator for a resource shall select one of the following payment options for each resource it schedules:

- (a) the Uninstructed Imbalance Energy Charge price as calculated in accordance with Section 11.2.4.1 (i.e., using the Hourly Ex Post Price) or
- (b) a calculated price:
 - (i) for decremental dispatch orders that is an Energy payment to the ISO that is equal to the Market Clearing Price for the relevant Settlement Period for the applicable Energy market less verifiable daily gas imbalance charges, if any, that are solely attributable to the ISO's dispatch instruction and that the Scheduling Coordinator or Generator was not able to eliminate or reduce despite the application of best efforts, if the Scheduling Coordinator provides the resource's daily gas imbalance charges to the ISO within thirty (30) Business Days from the Settlement Period for which the resource is dispatched; and
 - (ii) for incremental dispatch orders is the sum of: 1) a capacity payment equal to the average Day-Ahead Market prices for Spinning Reserve and Non-Spinning Reserve for the three (3)

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most recent similar days for the same Settlement Period for which the resource is dispatched; 2) an Energy payment equal to the average calculated using the PX Day-Ahead, PX Hour-Ahead and ISO Real-Time Market Energy prices for the three (3) most recent similar days for the same Settlement Period for which the resource is dispatched; 3) such resource's verifiable start-up fuel costs, if the start-up was solely attributable to the ISO's dispatch instruction and if the Scheduling Coordinator provides the resource's start-up fuel costs to the ISO within thirty (30) Business Days from the Settlement Period for which the resource is dispatched; and 4) verifiable daily gas imbalance charges, if any, that are solely attributable to the ISO's dispatch instruction and that the Scheduling Coordinator or Generator was not able to eliminate or reduce despite the application of best efforts, if the Scheduling Coordinator provides the resource's daily gas imbalance charges to the ISO within thirty (30) Business Days from the Settlement Period for which the resource is dispatched. References to "similar days" in this Section refer to Business Days when the resource is dispatched on a Business Day and otherwise to days that are not Business Days.

To the extent a Scheduling Coordinator does not specify a payment option, the ISO will apply the payment provisions of Section 11.2.4.1.

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11.2.4.2.1 Allocation of Costs Resulting From ISO Dispatch Orders

Pursuant to Section 11.2.4.2, the ISO may, at its discretion, dispatch any Participating Generator, Participating Load and import, that has not bid into the Imbalance Energy or Ancillary Services markets, to avoid an intervention in market operations or to prevent or relieve a System Emergency. Such dispatch may result from, among other things, planned and unplanned transmission facility outages; bid insufficiency in the Ancillary Services and Real-Time Energy markets; and location-specific requirements of the ISO. All costs incurred by the ISO for such dispatch instructions necessary as a result of a transmission facility outage or in order to satisfy a location-specific requirement shall be payable to the ISO by the Participating Transmission Owner in whose Service Area the transmission facility is located or the location-specific requirement arose. All costs incurred by the ISO for such dispatch instructions other than for a transmission facility outage or a location-specific requirement shall be payable to the ISO by all Scheduling Coordinators in proportion to their metered Demand (including exports). To the extent that the ISO has procured such services on a Zonal basis, the ISO will allocate the cost of such dispatch orders to all Scheduling Coordinators in the applicable Zone in proportion to their metered Demand (including exports).

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- 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; and
- (e) awards payable by or to the ISO pursuant to good faith negotiations or ISO ADR Procedures that the ISO is not able to allocate to or to collect from a Market Participant or Market Participants in accordance with Section 13.5.3. These charges will be allocated amongst Scheduling Coordinators over an interval determined by the ISO and pro rata based on metered Demand (including exports) during that interval.

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 five (5) Business Days after issuance of the Preliminary Settlement Statement for the last day of the relevant calendar month. Payment for adjustments will be made five (5) Business Days after issuance of the Final Settlement Statement for the last day of the relevant 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.

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16. ISO GRID OPERATIONS COMMITTEE; CHANGES TO ISO PROTOCOLS.

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".

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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).

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