

**Southern California Edison**  
**Stakeholder Comments**

**CAISO Energy Imbalance Market (EIM)**  
**Second Draft Tariff**  
**Dated January 16, 2014**

<b>Submitted by</b>	<b>Company</b>	<b>Date Submitted</b>
Paul Nelson – (626) 302-4814 Jeff Nelson – (626) 302-4834	Southern California Edison	January 31, 2014

Southern California Edison’s (SCE) comments on the California Independent System Operator’s (CAISO) Second Draft Tariff for an Energy Imbalance Market (EIM) issued on January 16, 2014. SCE appreciates the changes to the draft tariff to reflect that EIM is part of the CAISO’s Real-Time Market (RTM) and EIM is not a separate market. This change properly reflects that the CAISO tariffs apply equally to all RTM participants and Section 29 outlines differences necessary for EIM Entities and their participants.

SCE recommends comments on provisions of the draft tariff as described in the following priority items below. SCE also attaches a redline version of the tariff which includes specific language changes and comments on those recommended changes. The description below and the attachment should be taken together as SCE’s comments and recommendations.

[Item 1](#)

Section 29.1 General Provisions

The terms “Discontinuation” and “Termination” are too similar. SCE recommends changing the term “Discontinuation” to “Suspension”.

[Item 2](#)

Section 29.4 Roles and Responsibilities of an EIM Entity Schedule Coordinator

In Section 29.4 (c) (4) needs to make clear that an EIM Entity Schedule Coordinator will not submit bids as they will have confidential market information from other participants and non-participants.

[Item 3](#)

Section 29.10 (a) Telemetry Requirements

Since EIM resources are part of the real-time market, they should be held to the same standards as current CAISO participants. This section would grant EIM resources a different standard. A grace period to allow them to upgrade equipment is acceptable and a specific time period to achieve compliance should be specified in Section 29.

[Item 4](#)

Section 29.11(i) EIM Administrative Charge

The per documentation of the \$0.19/MWh was calculated based upon a forecast of the total energy requirements in the EIM area, not just based upon a subset of load from EIM participants. The calculation in Section 29.11 (i) (2) uses a calculation based upon only EIM market participants. The calculation of the fee and the application of the fee must be based upon the same definition of MWh otherwise the revenue collection will result in an over or under collection of cost.

[Item 5](#)

Section 29.26 Transmission Rates and Charges

The current practice of transmission rates for EIM in the adopted proposal was intended to be temporary. The tariff should reflect that the practice will terminate within one year and be replaced with a new provision.

[Item 6](#)

Section 29.31 Day-ahead

This section should not preclude a resource located in the EIM Entity from being represented in the Day-Ahead market by an eligible Schedule Coordinator that participates in the Day-ahead market. A provision should be added that an EIM Participating Resource represented by a Scheduling Coordinator can participate in the Day-ahead market.

[Item 7](#)

Section 29.31 Greenhouse Gas Regulation and EIM Bid Adders.

The CAISO does not regulate greenhouse gases so the term “Greenhouse Gas Regulation” term should be deleted. SCE appreciates renaming ‘GHG Bid Adders’ to ‘EIM Bid Adders’ as

the CAISO has stated all EIM participating resources are eligible to use the Bid Adder.<sup>1</sup> As SCE stated in comments on the first draft, the current language implies that the adder must cover the cost of compliance with greenhouse gas emission costs with the California Air Resource Board. This is contrary to the statements CAISO has made that all EIM participating resources are eligible to use the Bid Adder. SCE continues to recommend that this language be stricken as it implies a restriction that does not apply nor will be enforced. The definition of EIM bid adder should also be edited to remove references to GHG compliance.

Finally, an important bidding restriction of single Bid Adder per day should be included in the tariff as this was approved by the CAISO governing board.<sup>2</sup> In the response matrix, the CAISO indicated that this would be included in a business practice manual. This is an important restriction that has a material impact on bidding, and thus directly impacts rates, *terms*, and *conditions*. Moreover, it should require FERC approval to change and not be subject to CAISO authority over the business practice manual.

#### Item 8

##### Section 29.34 (f) Real-Time Base Schedules

Section 29.34 (f) (1) allows non EIM participants to submit schedules directly to the CAISO. As non-participants have no formal relationship with the CAISO, their base schedules should be submitted through the EIM Entity Schedule Coordinator. This provision should be removed, including 29.34 (f) (4) which would allow non-participants to directly submit base schedules. If the CAISO wants to create a tool to assist the EIM Entity and their non-participants in submitting and aggregating the base schedules, then it should be included in the business practice manual and not part of the tariff.

#### Item 9

##### Section 29.34 (m) Flexibility Ramping Constraint Requirement

Language needs to be added to be clear on how cost allocation is performed for any cost associated with acquiring flexible resources to resolve the constraint. Specifically, the allocation of cost should be based upon each Balancing Authority Area's flexibility requirement prior to any adjustment for EIM Internal Intertie import capability.

---

<sup>1</sup> However, the term EIM bid adder may be mistakenly assumed to apply to pricing in the EIM Entity.

<sup>2</sup> Final EIM proposal page 84.

[Item 10](#)

Section 29.37 Rule of Conduct

The EIM Entity needs to be added to Section 29.37. The CAISO will have no formal agreement with non-participants, therefore the EIM Entity and EIM Entity Scheduling Coordinator will need to obtain their information required for market operations and monitoring. Therefore language should be added to address this issue, which is included in the attached tariffs.

[Item 11](#)

New EIM Defined Terms

The term 'EIM Area' as the footprint covering the real-time market is very confusing. Instead, the term 'RTM Area' should be used as that is clear that it means all balancing authority areas. The term 'EIM Area' should just be the combination of EIM Entities. This change should also be made throughout Section 29.

[Item 12](#)

Section 11.5.4.1

The method to allocate the amount of the Real-Time Balancing Authority Area Neutrally Amount appears to be missing a description of how the CAISO BAA's share will be allocated to their participants.

[Item 13](#)

Section 11.25.3 Allocation of Costs

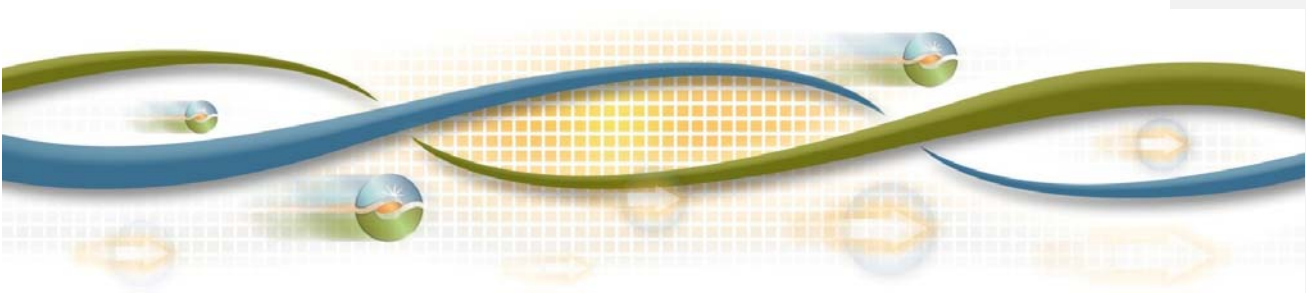
The mechanism to allocate the cost is very difficult to understand and lacks any description of the principle to allocate cost. SCE recommends replacing the language with the intended principle as follows:

“Market Participants will pay for the Flexible Ramping Constraint necessary to meet the requirements within their Balancing Authority. To the extent Flexible Ramping Constraint is purchased within one Balancing Authority to fulfill the requirements of a different Balancing Authority(ies), the cost will be allocated prorated to each Balancing Authority based on the amount of Flexible Ramping Constraint purchased to meet each Balancing Authority's requirement. Each Balancing Authority's Flexible Ramping Constraint requirement will not be reduced by EIM Internal Intertie adjustment used in Section 29.34(m) (6).”

**Energy Imbalance Market**

**Draft Final Tariff**

**January 16, 2014**



## Table of Contents

1. Introduction.....	3
2. Draft Final EIM Tariff .....	4
3. New EIM Defined Terms .....	<del>3937</del>
4. Changes to Existing ISO Tariff Provisions.....	<del>4340</del>
5. Changes to Existing ISO Defined Terms .....	<del>5046</del>
6. Pro Forma EIM Service Agreements.....	<del>5550</del>
EIM Entity Agreement (EIMEA) .....	<del>5651</del>
EIM Entity Scheduling Coordinator Agreement (EIMESCA).....	<del>6661</del>
EIM Participating Resource Agreement (EIMPRA).....	<del>7570</del>
EIM Participating Resource Scheduling Coordinator Agreement (EIMPRSCA) .....	<del>8681</del>

## 1. Introduction

The changes in this draft final tariff addresses: (i) stakeholder comments; (ii) compliance and market changes to the ISO tariff proposed in response to Order 764; (iii) reconciliation of EIM defined terms and ISO tariff defined terms; and (iv) reconciliation of EIM requirements and ISO tariff provisions. This results in a reasonably significant number of changes consistent with the approved EIM design and the ISO tariff, particularly with respect to operation and settlement of the real-time market. For example, the ISO has changed references from the EIM to the real-time market. This reflects the conceptual discussion presented in the first tariff stakeholder meeting – that the EIM is an extension of the ISO real time market and not a separate market.

In this document, the ISO has made changes impacting EIM market participants in Section 29, including those that may apply by reference to the ISO tariff. Changes that impact ISO participants in the real-time market are included as changes to existing ISO tariff provisions. Changes to the draft EIM tariff posted on November 12 are shown in redline. Changes to existing ISO tariff provisions and definitions are shown in redline against the ISO tariff. In some cases, the ISO has made changes to ISO tariff provisions pending before FERC, particularly the Order 764 and RIMPR1 changes. In these cases, the ISO has used the filed version of the ISO tariff. Any changes as a result of those proceedings will be reflected in the final filed version of the EIM tariff. A clean version, except for changes to existing ISO tariff provisions and definitions, is included for stakeholder comments.

The ISO will host a stakeholder meeting on February 10 to discuss all stakeholder comments received by January 31. In this meeting the ISO will do its best to explain whether it intends to accept or reject each requested change and the reason for doing so. Any further substantive changes to the draft final tariff will be posted by market notice and discussed in a stakeholder conference call as specified in the market notice. The final tariff changes will be filed with FERC no later than February 28, 2014.

## 2. Draft Final EIM Tariff

### 29 Energy Imbalance Market

#### 29.1 General Provisions.

- (a) **Operation of EIM.** Pursuant to Section 29, the CAISO shall operate and settle the Real-Time Market to provide for the purchase and sale of balancing Energy in any Balancing Authority Area for which the Balancing Authority executes an EIM Entity Agreement with the CAISO, in conjunction with the operation and settlement of the Real-Time Market in the CAISO Balancing Authority Area in accordance with the provisions of the CAISO Tariff.
- (b) **EIM Tariff Obligations.** EIM Market Participants shall comply with--
- (1) the provisions of Section 29; and
  - (2) other provisions of the CAISO Tariff that apply to the extent such provisions--
    - (A) expressly refer to Section 29 or EIM Market Participants;
    - (B) are cross referenced in Section 29; or
    - (C) are not limited in applicability to the CAISO Controlled Grid, the CAISO Balancing Authority Area, or CAISO Markets other than the Real-Time Market.
- (c) **Inconsistency Between Provisions.** If there is an inconsistency between a provision in Section 29 and another provision of the CAISO Tariff regarding the rights or obligations of EIM Market Participants, the provision in Section 29 shall prevail to the extent of the inconsistency.
- (d) **Suspension or Discontinuation of EIM Entity Participation.**
- (1) **Temporary ~~Discontinuation~~Suspension.** The CAISO may, within 60 days following ~~the an~~ EIM Entity Implementation Date for an EIM Entity, and pursuant to the terms of a Market Notice, temporarily ~~discontinue~~ suspend the participation of that EIM Entity in the Real-Time Market for a period not to exceed 60 days if market or system operational issues adversely impact any portion of the ~~EIM-RTM~~ Area, provided that the ISO may continue operation of the Real-Time Market without the participation of the EIM Entity for a reasonable additional period of time in order to implement a resolution of the market or system operational issues if the resolution is identified within 60 days after issuance of the Market Notice.
  - (2) **CAISO Termination.** If the CAISO is not able to identify a resolution of the EIM-related market or system operational issues within 60 days after issuance of the Market Notice of temporary ~~discontinuation-suspension~~ of EIM participation by an EIM Entity, the CAISO may, upon issuance of a subsequent Market Notice, extend the ~~discontinuation-suspension~~ of EIM

**Comment [PDN1]:** This is to clarify that it is not a one-time exception but occurs each time a new EIM Entity joins.



participation by the EIM Entity for a time sufficient to: (1) implement a resolution to resolve adverse impacts or (2) process termination of the EIM Entity's participation in the Real-Time Market.

(3) **Reinstatement.**

(A) **After Temporary Discontinuation.** The CAISO may reinstate EIM operations after a temporary ~~discontinuation-suspension~~ of EIM participation by an EIM Entity by issuing a Market Notice announcing the intended reinstatement no less than 5 days in advance of the reinstatement date.

(B) **After CAISO Termination.** The CAISO may only reinstate EIM operations with respect to an EIM Entity after termination of EIM participation by an EIM Entity pursuant to a filing accepted by FERC.

(4) **EIM Entity Action.** In the event the CAISO issues a Market Notice of the temporary discontinuation of EIM participation by an EIM Entity, the EIM Entity shall continue to submit EIM Base Schedules and the associated meter data to enable continued operation of the Real-Time Market until the CAISO issues a subsequent Market Notice either that—

(i) the cause of the temporary discontinuation has been resolved and the EIM Entity has been reinstated; or

(ii) EIM participation by the EIM Entity has been terminated.

(5) **CAISO Action.** In the event the CAISO issues a Market Notice of the temporary discontinuation of EIM participation by an EIM Entity, the CAISO shall—

(i) prevent EIM Transfers and separate the EIM Entity Balancing Authority Area from operation of the Real-Time Market in the ~~EIM~~ RTM Area;

(ii) suspend Settlement of Real-Time Market charges with respect the EIM Entity;

(iii) issue a subsequent Market Notice either that (i) the cause of the temporary discontinuation has been resolved and the EIM Entity has been reinstated or (ii) EIM participation by the EIM Entity has been terminated.

**29.2 EIM Access To The Real-Time Market.**

(a) **In general.** The CAISO shall make available for use in the Real-Time Market the transmission capacity that is available in Real-Time—

(1) on the CAISO Controlled Grid; and

- (2) that an EIM Entity registers in the EIM Transmission Service Registry pursuant to Section 29.17.

(b) **Implementation of Access as an EIM Entity.**

- (1) **EIM Implementation Agreement.** A Balancing Authority that wishes to become an EIM Entity must first execute an implementation agreement with the CAISO that establishes—
  - (A) the activities the parties must undertake to enable the Balancing Authority to participate in the Real-Time Market;
  - (B) the EIM Entity Implementation Date;
  - (C) the implementation fee the Balancing Authority must pay to the CAISO for the start-up costs the CAISO incurs to accommodate the participation of the Balancing Authority in the Real-Time Market as provided in the agreement; and
  - (D) the obligation of the Balancing Authority to enter into an EIM Entity Agreement governing its participation in the Real-Time Market.
- (2) **FERC Approval.** The EIM Entity Implementation Date must be not less than six months and not more than twenty-four months after the date that the EIM implementation agreement between the CAISO and the Balancing Authority is accepted by FERC.
- (3) **Implementation Period.** The CAISO shall in its discretion determine the EIM Entity Implementation Date based on the complexity and compatibility of the Balancing Authority's transmission and technology systems with the CAISO systems and the planned timing of the CAISO's implementation of software enhancements.

**29.3 [Not Used]**

**29.4 Roles And Responsibilities.**

(a) **CAISO Balancing Authority Obligations.**

- (1) **Reliability Responsibilities.** Nothing in Section 29 shall alter the CAISO's responsibilities under the other sections of the CAISO Tariff, under any agreement not required by Section 29, or under NERC Reliability Standards or any other Applicable Reliability Criteria as the Balancing Authority for the CAISO Balancing Authority Area and the transmission operator for the CAISO Controlled Grid.
- (2) **Operating Responsibilities.** During any interruption of the normal operation of the Real-Time Market, the CAISO as Balancing Authority shall remain responsible for managing the resources in its Balancing Authority Area and the flows on transmission lines internal to the CAISO Balancing Authority Area, including imports and exports, for the duration

of the interruption.

(b) **EIM Entity.**

(1) **Balancing Authority Obligations.**

- (A) **EIM Entity as Balancing Authority.** An EIM Entity must be a Balancing Authority registered and certified as such under the applicable authorities.
- (B) **Reliability Responsibilities.** Nothing in Section 29 shall alter an EIM Entity's responsibilities under NERC Reliability Standards as the Balancing Authority for the EIM Entity Balancing Authority Area and, to the extent applicable, as the transmission operator for transmission facilities within its Balancing Authority Area.
- (C) **Operating Responsibilities.** During any interruption of the normal operation of the Real-Time Market, the EIM Entity as Balancing Authority shall remain responsible for managing the resources in its Balancing Authority Area and the flows on internal transmission lines, including imports into and exports out of its Balancing Authority Area, for the duration of the interruption.
- (D) **Inadvertent Energy.** An EIM Entity remains responsible for tracking inadvertent Energy and administering the payback of inadvertent Energy for its Balancing Authority Area through processes established by WECC.

(2) **EIM Entity Agreement.** An EIM Entity must execute an EIM Entity Agreement no later than ninety (90) days before the EIM Entity Implementation Date.

(3) **EIM Entity Obligations.** An EIM Entity shall--

- (A) perform the obligations of an EIM Entity in accordance with the EIM Entity Agreement, Section 29, and other provisions of the CAISO Tariff that by their terms apply to EIM Entities;
- (B) have provisions in effect in its open access transmission tariff and ensure that each EIM Transmission Service Provider in its Balancing Authority Area has provisions in effect in its open access transmission tariff, as necessary, to enable operation of the Real-Time Market in its Balancing Authority Area;
- (C) qualify as or secure representation by no more than one EIM Entity Scheduling Coordinator;
- (D) review and validate information about available transmission capacity submitted to it by an EIM Transmission Service Provider and transmit such validated information to its EIM Entity Scheduling Coordinator;

- (E) provide the CAISO and its EIM Entity Scheduling Coordinator with information regarding the transmission capacity available to the Real-Time Market, including any information regarding Transmission Constraints of which it is aware;
  - (F) define Load Aggregation Points in its Balancing Authority Area; and
  - (G) determine and inform the CAISO which resource types and transmission service providers or holders of transmission rights are eligible to participate in the Real-Time Market as resources and transmission available to the EIM Entity Balancing Authority Area.
- (4) **EIM Entity Termination of EIM Participation.**
- (A) **EIM Entity Agreement.** An EIM Entity that wishes to terminate participation in the Real-Time Market must terminate the EIM Entity Agreement pursuant to its terms.
  - (B) **Notice.** Delivery to the CAISO of a written notice of termination pursuant to the terms of the EIM Entity Agreement shall represent the commitment by the EIM Entity to undertake all necessary preparations to disable the Real-Time Market within the EIM Entity Balancing Authority Area.
  - (C) **Actions Following Notice.** Upon receipt of such notice, the CAISO shall undertake all necessary preparations to disable the Real-Time Market within the EIM Entity Balancing Authority Area, as outlined in the Business Practice Manual for the Energy Imbalance Market, including issuance of a Market Notice within 10 days after receipt of such notice.
- (5) **EIM Entity Corrective Actions.** If the EIM Entity takes corrective action, subject to the provisions of its open access transmission tariff, to address an issue with EIM implementation or EIM operation, or the EIM Entity issues a notice of termination,—
- (A) the EIM Entity shall take those actions provided in Section 29.1(d)(4) during the implementation of its corrective action; and
  - (B) the CAISO shall issue a Market Notice in accordance with Section 29.1(d)(1) and take those actions provided in Section 29.1(d)(5) during the implementation of the EIM Entity corrective action.
- (c) **EIM Entity Scheduling Coordinator.**
- (1) **Certification.** An EIM Entity Scheduling Coordinator must meet or have met the certification requirements in Section 4.5.1 for a Scheduling Coordinator.
  - (2) **EIM Entity Scheduling Coordinator Agreement.** An EIM Entity Scheduling Coordinator must enter an EIM Entity Scheduling Coordinator

Agreement with the CAISO, which shall satisfy the obligation to enter a Scheduling Coordinator Agreement under Section 4.5.1 with regard to its representation of the EIM Entity.

- (3) **Representation.** An EIM Entity Scheduling Coordinator–
- (A) may represent a Market Participant other than an EIM Entity, but only if it enters a Scheduling Coordinator Agreement under Section 4.5.1 with regard to such Market Participant;
  - (B) may not also be an EIM Participating Resource Scheduling Coordinator or a Scheduling Coordinator for a Participating Generator, Participating Load, or Demand Resource Provider, unless the EIM Entity Scheduling Coordinator is a transmission provider subject to the standards of conduct set forth in 18 C.F.R. § 358; and
  - (C) may represent more than one EIM Entity if it has certified to the CAISO in the manner described in the Business Practice Manual for the Energy Imbalance Market that it has informed each EIM Entity of the multiple representation.
- (4) **Obligations.** An EIM Entity Scheduling Coordinator shall–
- (A) perform the obligations of an EIM Entity Scheduling Coordinator under the EIM Entity Scheduling Coordinator Agreement and Section 29;
  - (B) perform the obligations of a Scheduling Coordinator under provisions of the CAISO Tariff described in Section 29.1(b);
  - (C) obtain any transmission service necessary for the EIM Entity it represents to participate in the Real-Time Market under the terms of the CAISO Tariff or the tariff of another transmission service provider, as applicable;
  - (D) register in the manner set forth in the Business Practice Manual for the Energy Imbalance Market all non-participating resources in the Balancing Authority Area of each EIM Entity that it represents and update such information in a timely manner;
  - (E) verify in the manner set forth in the Business Practice Manual for the Energy Imbalance Market that all EIM Resources within the Balancing Authority Area of each EIM Entity represented by the EIM Entity Scheduling Coordinator have been registered with the CAISO;
  - (F) submit the Interchange schedules with other Balancing Authorities at the defined Interchange scheduling locations, including creating and processing E-Tags in accordance with NERC, North American Energy Standards Board, and WECC standards and business

practices for bilateral schedules between Balancing Authority Areas that are arranged no less than 20 minutes in advance of the Dispatch Interval of the Real-Time Market in which the Interchange will occur and that are included in an EIM Resource Plan;

- (G) match E-Tags and manage schedule curtailments at the defined Interchange scheduling locations with other Balancing Authorities;
- (H) register information in the EIM Transmission Service Registry in accordance with Section 29.17;
- (I) settle all financial obligations arising out of the Real-Time Market for the EIM Entity, including financial settlement with non-participating resources and non-participating load within the EIM Entity Balancing Authority Area; and
- (J) submit EIM Base Schedules, EIM Resource Plans and other required information on behalf of the EIM Entity.

(k) will not submit bids in the FMM or RTM.

**Comment [PDN2]:** This is to make clear that they are different from other SC in that as they have confidential market information they will not submit bids.

(d) **EIM Resources-**

- (1) **Eligibility.** Resources, including Generating Units, Physical Scheduling Plants, Loads of Participating Loads, Proxy Demand Resources, System Resources, non-generator resources, dynamic transfers, and other resources qualified to participate in the Real-Time Market are eligible to become an EIM Resource if the resource—
  - (A) meets the eligibility requirements established by the EIM Entity in whose Balancing Authority Area the resource is located or scheduled; and
  - (B) is capable of delivering Energy, Curtailable Demand, Demand Response Services, or similar services within the time specified by Section 29 for the Real-Time Market in which its EIM Participating Resource Scheduling Coordinator will submit Bids.
- (2) **EIM Participating Resource Agreement.** An EIM Participating Resource must execute an EIM Participating Resource Agreement.
- (3) **Obligations.** An EIM Participating Resource shall—
  - (A) perform the obligations of an EIM Participating Resource under the EIM Participating Resource Agreement and Section 29;
  - (B) perform the obligations applicable to Market Participants and resources under the provisions of the CAISO Tariff described in Section 29.1(b); and
  - (C) if it represents a Generating Unit, Load of a Participating Load,

Proxy Demand Resource, or other qualified resource, perform the obligations required for the resource under the provisions of the CAISO Tariff described in section 29.1(b).

(e) **EIM Participating Resource Scheduling Coordinator.**

- (1) **Certification.** An EIM Participating Resource Scheduling Coordinator must be either an existing Scheduling Coordinator or must meet or have met the certification requirements in Section 4.5.1 for a Scheduling Coordinator.
- (2) **EIM Participating Resource Scheduling Coordinator Agreement.** An EIM Participating Resource Scheduling Coordinator must enter an EIM Participating Resource Scheduling Coordinator Agreement with the CAISO, which shall satisfy the obligation to enter a Scheduling Coordinator Agreement under Section 4.5.1 with regard to its representation of the EIM Participating Resource.
- (3) **Representation.** An EIM Participating Resource Scheduling Coordinator—
  - (A) may represent a Market Participant other than an EIM Participating Resource, but only if it enters a Scheduling Coordinator Agreement under Section 4.5.1 with regard to such Market Participant;
  - (B) may not also be an EIM Entity Scheduling Coordinator unless the EIM Participating Resource Scheduling Coordinator is a transmission provider subject to the standards of conduct set forth in 18 C.F.R. § 358;
  - (C) may represent more than one EIM Participating Resource if it has certified to the CAISO in the manner described in the Business Practice Manual for the Energy Imbalance Market that it has notified each EIM Participating Resource of the multiple representation; and
  - (D) may represent non-EIM resources in CAISO Markets by entering into a Scheduling Coordinator Agreement under Section 4.5.1.1.11 if it has certified to the CAISO in the manner described in the Business Practice Manual for the Energy Imbalance Market that it has notified each entity it represents of the multiple representation.
- (4) **Obligations.** An EIM Participating Resource Scheduling Coordinator must—
  - (A) perform the obligations of an EIM Participating Resource Scheduling Coordinator under the EIM Participating Resource Scheduling Coordinator Agreement and Section 29;
  - (B) perform the obligations of a Scheduling Coordinator under the

provisions of the CAISO Tariff described in Section 29.1(b);

- (C) ensure that the entity it represents has obtained any transmission service necessary to participate in the EIM under the terms of the CAISO Tariff or the tariff of another transmission service provider, as applicable;
- (D) register in the manner set forth in the Business Practice Manual for the Energy Imbalance Market all EIM Participating Resources that it represents, provide such information to the EIM Entity Scheduling Coordinator, and update such information in a timely manner.

#### 29.5. [Not Used]

#### 29.6 Communications.

- (a) **EIM Entity.** The EIM Entity shall meet the technical and communication requirements specified in the Business Practice Manual for the Energy Imbalance Market, which shall be based on the Inter-Control Center Communication Protocol and Reliability Standards.
- (b) **EIM Communications and OASIS.** Section 6 shall govern communications and information availability regarding the participation of EIM Market Participants in the Real-Time Market except that—
  - (1) references to internal resources shall be deemed to include EIM Resources; and
  - (2) references in Sections 6.2.2.1 and 6.5.2.1 to the CAISO Controlled Grid and references in Sections 6.5.4.2.2(a) and 6.5.5.1.1 to CAISO Balancing Authority Area shall be deemed references to the **EIM Area**.
- (c) **Loss of Communications.**
  - (1) **Procedures.** The CAISO and each EIM Entity and EIM Entity Scheduling Coordinator shall establish procedures to address an interruption of Real-Time Market communications, which shall include steps to be taken to restore communications and address any impact on system or market operations as provided in Section 29.
  - (2) **Responsibilities.** An EIM Entity that loses communication with the CAISO remains responsible for managing its Balancing Authority Area imbalance needs without balancing Energy from the Real-Time Market.
- (d) **Variable Energy Resource Forecast Communications.** If the EIM Participating Resource Scheduling Coordinator for a Variable Energy Resource elects to use an independent forecasting service, it must make data transfer arrangements with the CAISO for the CAISO to receive the forecast in a format and on a schedule set forth in the Business Practice Manual for the Energy Imbalance Market.

**Comment [PDN3]:** Referring to all resources everywhere or just in the EIM Entities?



## 29.7 EIM Operations Under Normal And Emergency Conditions.

- (a) **CAISO Controlled Grid Operations.** Section 7 shall not apply to EIM Market Participants in their capacities as such.
- (b) **Normal EIM Operations.** The CAISO shall administer the transmission capacity made available to the Real-Time Market to manage Energy imbalances in the **EIM-RTM** Area under normal operations.
- (c) **Load Curtailment.** The CAISO will not issue Dispatch Instructions to an EIM Entity Scheduling Coordinator with respect to Load or Demand that has not been bid into the Real-Time Market.
- (d) **Dispatch Instructions for EIM Participating Resources.** The CAISO will not issue Dispatch Instructions to an EIM Participating Resource Scheduling Coordinator with respect to Supply that has not been bid into the Real-Time Market.
- (e) **EIM Transfers.** The CAISO shall manage the EIM Transfers as aggregate Dynamic Schedules with each EIM Entity Balancing Authority Area, which—
  - (1) shall not require individual resource E-Tags;
  - (2) shall not constitute inadvertent Energy;
  - (3) shall reflect intra-hour incremental EIM Transfers between the CAISO Balancing Authority Area and each EIM Entity Balancing Authority Area;
  - (4) shall be updated within 60 minutes after the end of each Operating Hour to include the integrated Energy during the hour for the sum of all EIM Transfers between each Balancing Authority Area in the **EIM-RTM** Area in accordance with WECC business practices for purposes of inadvertent Energy accounting; and
  - (5) shall be subsequently updated as necessary consistent with the requirements of WECC, NERC, and North American Energy Standards Board standards and business practices.
- (f) **Dynamic Imbalance Schedule to Net EIM Transfers.** The CAISO will—
  - (1) model changes in the net five-minute scheduled EIM Transfers that result from RTD Dispatch as a Dynamic Schedule between the CAISO and EIM Entity for AGC control accuracy; and
  - (2) calculate the dynamic net scheduled EIM Transfers for the CAISO and each EIM Entity Balancing Authority Area and derive from these dynamic net scheduled EIM Transfers the Dynamic Schedules on EIM Internal Interties for E-Tag purposes.
- (g) **EIM Manual Dispatch.** The EIM Entity may issue an EIM Manual Dispatch to an EIM Participating Resource or a non-participating resource in its Balancing

Authority Area, outside of the Market Clearing of the Real-Time Market, when necessary to address reliability or operational issues in the EIM Entity Balancing Authority Area that the CAISO is not able to address through normal economic Dispatch and Congestion Management.

(h) **EIM Entity Actions in Response to an EIM Manual Dispatch.** If the EIM Entity issues an EIM Manual Dispatch to address circumstances on its system—

- (1) the EIM Entity shall immediately inform the CAISO, as specified in the Business Practice Manual for the Energy Imbalance Market, if the EIM Entity Balancing Authority Area is under manual operation;
- (2) the EIM Entity shall immediately inform the CAISO of the EIM Manual Dispatch to any EIM Participating Resource or non-participating resource by submitting the EIM Manual Dispatch instruction for the affected resource to the CAISO as specified in the Business Practice Manual for the Energy Imbalance Market; and
- (3) the EIM Entity remains responsible for informing the Reliability Coordinator of the circumstances creating the need for the EIM Manual Dispatch and may enforce Transmission Constraints, as may be required.

(i) **CAISO Actions in Response to Notification of EIM Manual Dispatch.** Upon receipt of notice of an EIM Manual Dispatch, the CAISO shall—

- (1) reflect the EIM Manual Dispatch in the Real-Time Market;
- (2) disregard an EIM Manual Dispatch in the determination of the Location Marginal Price; and
- (3) treat an EIM Manual Dispatch to an EIM Participating Resource or non-participating resource as FMM or RTD Instructed Imbalance Energy for Settlement.

**Comment [PDN4]:** Is this process covered in the current tariff? If yes, then include a reference.

(j) **EIM Disruption.**

- (1) **Declaration.** The CAISO may declare an interruption of the EIM Entity participation when in its judgment—
  - (A) operational circumstances (including a failure of the Real-Time Market operation to produce feasible results in the EIM-RTM Area or other CAISO Market Disruption) in the EIM-RTM Area have caused or are in danger of causing an abnormal system condition in the CAISO Balancing Authority Area or an EIM Balancing Authority Area that requires immediate action to prevent loss of Load, equipment damage, or tripping system elements that might result in cascading Outages, or to restore system operation to meet Applicable Reliability Criteria; or
  - (B) Communications between the CAISO and EIM Market Participants are disrupted and prevent an EIM Entity, EIM Entity Scheduling

Coordinator, or EIM Participating Resource Scheduling Coordinator from accessing CAISO systems to submit or receive information.

- (2) **CAISO Response to EIM Disruption.** If the CAISO declares an EIM interruption, the CAISO may in its judgment, among other things—
  - (A) separate the affected EIM Entity Balancing Authority Area from the ~~EIM-RTM~~ Area and maintain the Real-Time Market for other Balancing Authority Areas in the ~~EIM-RTM~~ Area by enforcing a net transfer constraint for the affected Balancing Authority Area to separate it from the remainder of the ~~EIM-RTM~~ Area;
  - (B) reduce or suspend EIM Transfers between one or more Balancing Authority Areas in the ~~EIM-RTM~~ Area;
  - (C) instruct one or more EIM Entities to assume dispatch authority over all resources within their Balancing Authority Area; or
  - (D) in addition or as an alternative, establish an Administrative Price per Section 7.7.4 in the Real-Time Market.
- (3) **EIM Entity Responsibility.** In response to an EIM interruption by the CAISO, all EIM Entities shall follow NERC Reliability Standards applicable to their roles as Balancing Authorities in an effort to alleviate operational and system conditions and restore routine operations.
- (4) **EIM Entity Scheduling Coordinator Responsibility.** All EIM Entity Scheduling Coordinators shall promptly inform the CAISO of actions taken by the EIM Entities they represent in response to an EIM interruption by the CAISO through updates to their EIM Base Schedules, Interchange E-Tags, transmission limit adjustments, or Outage and derate information, as applicable.
- (5) **System Restoration.** The CAISO shall reinstate normal operation of the Real-Time Market in the ~~EIM-RTM~~ Area at such time as it determines that the EIM disruption has been resolved.

(k) **Congestion Management and Unscheduled Flow.**

- (1) **Inability to Resolve Congestion.** The CAISO will provide information to EIM Entities about Congestion that the Real-Time Market cannot resolve.
- (2) **Initiation of Unscheduled Flow Procedures.** The CAISO or an EIM Entity may initiate WECC's unscheduled flow mitigation procedure if applicable for conditions in its Balancing Authority Area.
- (3) **EIM Entity Action.** When the WECC unscheduled flow mitigation procedure is initiated, each EIM Entity shall adjust its schedules as determined by the WECC procedure and immediately inform the CAISO of the changes.

- (4) **CAISO Action.** When WECC's unscheduled flow mitigation procedure is initiated, the CAISO shall reflect the affected EIM Market Participant schedules in the Real-Time Market as determined by the WECC procedure, EIM Entity, CAISO Operating Procedures, and Business Practice Manuals for the CAISO Balancing Authority Area and EIM Entity Balancing Authority Areas.

**29.8 [Not Used]**

**29.9 Outages and Critical Contingencies.**

- (a) **Applicability of Section 9.** Section 9 shall not apply to EIM Market Participants except as referenced in Section 29.9.
- (b) **Transmission ~~Maintenance~~ Scheduled Outages.**
  - (1) **Responsibility.** The EIM Entity shall be responsible for performing engineering studies with regard to, and modeling and approving, Outages on transmission facilities for maintenance purposes within the EIM Entity Balancing Authority Area, including the transmission capacity made available by an EIM Transmission Service Provider to the Real-Time Market.
  - (2) **Notice.** The EIM Entity Scheduling Coordinator shall submit notice of transmission Outages approved by the EIM Entity to the CAISO by the means set forth in the Business Practice Manual for the Energy Imbalance Market and in accordance with the deadlines set forth in Section 9.
  - (3) **Notice of Modification.** The EIM Entity Scheduling Coordinator may submit a notice of modification of an approved transmission Outage and any resulting updates to EIM Entity Intertie limits to the CAISO by the means set forth in the Business Practice Manual for the Energy Imbalance Market and in accordance with the deadlines set forth in Section 9.
  - (4) **Contents of Notice.** The EIM Entity Scheduling Coordinator notices of approved transmission Outages shall include —
    - (A) the start and finish date for each Outage for maintenance purposes; and
    - (B) such information other than start and finish date as is required in Section 9.3.6 for transmission Operators seeking approval of Outages.
- (c) **Generation Maintenance Outages.**
  - (1) **Responsibility.** The EIM Entity shall be responsible for performing engineering studies with regard to, and modeling and approving, Outages of EIM Resources and non-participating resources for maintenance

purposes within the EIM Entity Balancing Authority Area.

- (2) **Notice.** The EIM Entity Scheduling Coordinator shall submit notice of Outages of EIM Resources and non-participating resources approved by the EIM Entity to the CAISO by the means set forth in the Business Practice Manual for the Energy Imbalance Market and in accordance with the deadlines set forth in Section 9 for Generating Unit Outages.
- (3) **Contents of Notice.** The EIM Entity Scheduling Coordinator notices of approved Outages of EIM Resources and non-participating resources shall include—
  - (A) the start and finish date for each Outage for maintenance purposes; and
  - (B) such information other than start and finish date as is required in Section 9.3.6 for Operators seeking approval of Generating Unit Outages.

(d) **Actions Regarding ~~Maintenance-Scheduled~~ Outages.**

- (1) **CAISO Evaluation of ~~Maintenance-Scheduled~~ Outages.** The CAISO will implement the transmission and Generation Outages approved by the EIM Entity through the Day-Ahead Market process and will inform the EIM Entity Scheduling Coordinator of any anticipated overloads.
- (2) **EIM Entity Action.** Based on the information provided by the CAISO to the EIM Entity Scheduling Coordinator, the EIM Entity shall take such action to adjust or cancel Outages as it determines to be necessary and ~~inform the Reliability Coordinator.~~

**Comment [PDN5]:** Is this needed for operations?  
Is this requirement covered elsewhere?

- (e) **Forced Outages.** An EIM Entity Scheduling Coordinator shall comply with the reporting provisions of Section 9 with regard to Forced Outages of transmission facilities within the Balancing Authority Area of the EIM Entity it represents and an EIM Participating Resource Scheduling Coordinator shall comply with the reporting provisions of Section 9 with regard to Forced Outages of Generating Units it represents as EIM Resources.

- (f) **Transmission Limits.** An EIM Entity Scheduling Coordinator must notify the CAISO by the means specified in the Business Practice Manual for the Energy Imbalance Market with respect to transmission limits on the transmission capacity made available to the Real-Time Market within the EIM Entity Balancing Authority Area that need to be enforced in the Real-Time Market, including—

- (1) physical MVA or MW limits under base case and contingencies;
- (2) scheduling limits for EIM Intertie transactions based on E-Tags; and
- (3) contractual limits on Transmission Interfaces where the EIM Transmission Service Provider has transmission rights.

## 29.10. Metering and Settlement Data.

- (a) **Telemetry Requirements.** The EIM Entity shall ensure that each EIM Resource and non-participating resource in an EIM Entity Balancing Authority Area that is not a Generating Unit or is a Generating Unit with a nameplate capacity in excess of 10 MW (including each aggregated resource with a total nameplate capacity in excess of 10 MW) and each EIM Intertie has telemetry meeting the requirements of the Business Practice Manual for the Energy Imbalance Market.
- (b) **Metering for Settlement Purposes.** The EIM Entity shall ensure that each EIM Participating Resource and non-participating resource in an EIM Entity Balancing Authority Area becomes either a CAISO Metered Entity or a Scheduling Coordinator Metered Entity and complies with the requirements of Section 10 except as provided in Section 29.10(c).
- (c) **Exception to Requirements of Section 10.3.9.** In the absence of metering standards set by a Local Regulatory Authority, EIM Participating Resources and non-participating resources in an EIM Entity Balancing Authority Area may qualify as Scheduling Coordinator Metered Entities without the need for third party certification if the CAISO determines that the applicable metering standards meet or exceed the standards for CAISO Metered Entities.
- (d) **Interchange Meter Data.** Metering for Settlement purposes is required for all EIM Interties.
- (e) **EIM Energy Imbalance With an External Balancing Authority Area.** For each EIM External Intertie Bid that clears the FMM resulting in a 15-minute EIM External Intertie schedule, the EIM Entity Scheduling Coordinator must submit to the CAISO the corresponding hourly transmission profile and 15-minute Energy profiles from the respective E-Tags, which must reflect the Point of Receipt and Point of Delivery that was declared in the FMM Bid submittal, at least 20 minutes before the start of the Operating Hour.

**Comment [PDN6]:** Metering requirements should be same for all RTM participants. The current threshold for telemetry is 1 MW in the CAISO. EIM Resources should meet the same standard. A phase in period for older resources is acceptable. In this is the case, then less than 10 mw but greater than 1 mw should be a phase in.

## 29.11. Settlements And Billing For EIM Market Participants.

- (a) **Applicability.** Section 29.11, rather than Section 11, shall apply to the CAISO Settlement with EIM Entity Scheduling Coordinators and EIM Participating Resource Scheduling Coordinators, except as otherwise provided.
- (b) **Imbalance Energy.**
  - (1) **FMM Instructed Imbalance Energy.**
    - (A) **Calculation.** The CAISO will calculate an EIM Participating Resource's FMM Instructed Imbalance Energy according to Section 11.5.1.1 and Section 11.5.1.2, except that references to the Day-Ahead Schedule in the relevant Appendix A definitions shall be deemed references to the EIM Base Schedule.
    - (B) **Settlement.** The CAISO will settle the FMM Instructed Imbalance Energy with the EIM Participating Resource Scheduling

Coordinator.

(2) **RTD Instructed Imbalance Energy.**

- (A) **Calculation.** The CAISO will calculate an EIM Participating Resource's RTD Instructed Imbalance Energy according to Section 11.5.1.2.
- (B) **Settlement.** The CAISO will settle the RTD Instructed Imbalance Energy with the EIM Participating Resource Scheduling Coordinator.

(3) **Uninstructed Imbalance Energy.**

(A) **EIM Participating Resources.**

- (i) **Calculation.** For EIM Participating Resources and an EIM Entity Balancing Authority Area's dynamic import/export schedules with external resources, the CAISO will calculate Uninstructed Imbalance Energy according to Section 11.5.2 except that references to the Day-Ahead Schedule in the relevant Appendix A definitions shall be deemed references to the EIM Base Schedule.
- (ii) **Settlement.** The CAISO will settle the Uninstructed Imbalance Energy with the EIM Participating Resource Scheduling Coordinator or the EIM Entity Scheduling Coordinator, as applicable.

(B) **Non-Participating Resources.**

- (i) **Calculation.** For non-participating resources in an EIM Entity Balancing Authority Area, the CAISO will calculate Uninstructed Imbalance Energy as the difference between the 5-minute Meter Data and the EIM Base Schedule, plus any EIM Manual Dispatch Energy identified by the EIM Entity Scheduling Coordinator.
- (ii) **Settlement.** The CAISO will settle the Uninstructed Imbalance Energy for non-participating resources at the RTD Locational Marginal Price with the EIM Entity Scheduling Coordinator.

(C) **Non-Participating Load.**

- (i) **Calculation.** For non-participating Load, the CAISO will calculate Uninstructed Imbalance Energy in accordance with 11.5.2.2, except that references to the Day-Ahead Schedule in the relevant Appendix A definitions shall be deemed references to the EIM Base Schedule.

(ii) **Settlement.** The CAISO will settle Uninstructed Imbalance Energy for non-participating Load with the EIM Entity Scheduling Coordinator.

(c) **Unaccounted For Energy of EIM Entities.**

- (1) **Calculation.** The CAISO will calculate Unaccounted For Energy for each EIM Entity Balancing Authority Area as the difference between metered Demand, and the sum of the metered Supply and the metered values at the interties, adjusted for losses.
- (2) **Settlement.** The CAISO will settle Unaccounted For Energy with the EIM Entity Scheduling Coordinator at the Hourly Real-Time LAP price.

**Comment [PDN7]:** This appears to be an different process that what is being proposed in the FERC 764 tariff (11.5.3), which will breakdown UFE by Service Areas. This appears to be aggregated by the EIM Entity.

(d) **Charges for Over- and Under-Scheduling of EIM Entities.**

**Comment [PDN8]:** This may need some editing to be clear that amount of 5-10% is a tier 1 penalty and the amount over 10% is subject to the tier 2 penalty.

(1) **Under-Scheduling Charges.**

- (A) **Tier 1.** If, during any Trading Hour, the amount of metered Demand within an EIM Entity Balancing Authority Area exceeds the EIM Base Schedule of Supply submitted by the EIM Entity by more than 5% but less than or equal to 10% and by at least 2 MW, the CAISO shall charge the EIM Entity Scheduling Coordinator for the Uninstructed Imbalance Energy at the EIM Entity Load Aggregation Point a price that is 125% of the Hourly Real-Time LAP Price.
- (B) **Tier 2.** If, during any Trading Hour, the amount of metered Demand within an EIM Entity Balancing Authority Area exceeds the EIM Base Schedule of Supply submitted by the EIM Entity by more than 10% and by at least 2 MW, the CAISO shall charge the EIM Entity Scheduling Coordinator the Uninstructed Imbalance Energy at the EIM Entity Load Aggregation Point a price that is 200% of the Hourly Real-Time LAP price.

(2) **Over-Scheduling Charges.**

- (A) **Tier 1.** If, during any Trading Hour, the amount of metered Demand within an EIM Entity Balancing Authority Area is less than the EIM Base Schedule of Supply submitted by the EIM Entity by more than 5% but less than or equal to 10% and by at least 2 MW, the CAISO shall pay the EIM Scheduling Coordinator for the Uninstructed Imbalance Energy at the EIM Entity Load Aggregation Point a price that is 75% of the Hourly Real-Time LAP Price.
- (B) **Tier 2.** If, during any Trading Hour, the amount of metered Demand within an EIM Entity Balancing Authority Area is less than the EIM Base Schedule of Supply submitted by the EIM Entity by more than 10% and by at least 2 MW, the CAISO shall pay the EIM Entity Scheduling Coordinator the Uninstructed Imbalance



Energy at the EIM Entity Load Aggregation Point a price that is 50% of the Hourly Real-Time LAP Price.

(3) **Distribution of Revenues.** The CAISO will calculate the total daily excess revenues received from under-scheduling charges and over-scheduling charges under Section 29.11(d)(1) and (2) and allocate them to Load in the EIM-RTM Area that ~~was not subject to~~ did not pay under-scheduling or over-scheduling charges according to metered Demand.

Comment [PDN9]: This makes it clear that the CAISO loads are eligible to receive penalty revenues

(4) **Exemption.** An EIM Entity will be exempt from under-scheduling and over-scheduling charges under Section 29.11(d)(1) and (2) if it uses the Demand Forecast prepared by the CAISO in its EIM Resource Plan and it approves EIM Base Schedules for its resources within +/- 1% of the CAISO Demand Forecast, as determined according to the Business Practice Manual for the Energy Imbalance Market.

(e) **Neutrality Accounts.**

(1) **In General.** The CAISO will collect neutrality amounts from EIM Market Participants to recover differences in Real-Time Market payments made and Real-Time Market payments received.

(2) **Real-Time Congestion Offset.** The CAISO will assess EIM Entity Scheduling Coordinators a Real-Time Congestion Offset Real-Time Market neutrality allocation calculated pursuant to Section 11.5.4.1.1.

(3) **EIM Balancing Authority Area Real-Time Market Neutrality Allocation.** The CAISO will assess EIM Entity Scheduling Coordinators a Real-Time Market neutrality allocation calculated pursuant to Section 11.5.4.1.

(4) ~~EIM Area~~ **Neutrality Allocation.** The CAISO will allocate EIM Entity Scheduling Coordinators residual neutrality amounts pursuant to Section 11.5.4.1(d).

Comment [PDN10]: Not needed.

(5) **Neutrality Adjustments.** The CAISO will adjust neutrality for EIM Market Participants in accordance with Section 11.14.

(f) **Real-Time Bid Cost Recovery.**

(1) **In General.** The CAISO will provide EIM Participating Resources RTM Bid Cost Recovery.

(2) **Calculation of Real-Time Bid Cost Recovery.** The CAISO will calculate Real-Time Bid Cost Recovery in accordance with Section 11.8.4, except that the CAISO will treat a non-zero EIM Base Schedule of an EIM Participating Resource as a Self-Schedule and the EIM Participating Resource will not be eligible for recovery of Start-Up Costs and Minimum Load Costs.

(3) **Allocation of EIM Entity RTM Bid Cost Uplift.**

- (A) **Calculation of Charge.** The Net RTM Bid Cost Uplift will be determined in accordance with 11.8.6.3 for each EIM Entity Balancing Authority Area, except that it will be determined on a 5-minute basis.
  - (B) **Allocation.** The Net RTM Bid Cost Uplift will be allocated in accordance with Section 11.8.6.6, except that it will be allocated on a 5-minute basis.
  - (B) **Settlement.** The CAISO will charge the allocated Net RTM Bid Cost Uplift amounts to the EIM Entity Scheduling Coordinator for the EIM Entity Balancing Authority Area it represents.
- (g) **Flexible Ramping Constraint Allocation.**
- (1) **Compensation.** The CAISO will calculate awards for Flexible Ramping Constraint capacity according to Section 11.25.1 and rescission for non-performance in accordance with 11.25.2, except that the Real-Time Ancillary Service Market Price for Spinning Reserves will be deemed to be zero in determining awards to EIM Participating Resources.
  - (2) **Allocation.** The CAISO will allocate Flexible Ramping Constraint costs to each EIM Entity Balancing Authority Area and the CAISO Balancing Authority Area in accordance with Section 11.25.3.
  - (3) **EIM Flexible Ramping Constraint Charges.** The CAISO will charge each EIM Entity's allocated Flexible Ramping Constraint capacity costs to the EIM Entity Scheduling Coordinator.
- (h) **EIM Initial Fee.** The CAISO will charge Balancing Authority Areas that enter into an implementation agreement pursuant to Section 29.2(b) an initial fee to cover a share of the capital and operations and maintenance costs associated with setting up the Real-Time Market to accommodate the participation of the Balancing Authority as an EIM Entity. The fee will be established by the implementation agreement entered into pursuant to Section 29.2(b)(1) as accepted by FERC.
- (i) **EIM Administrative Charge.**
- (1) **In General.** The CAISO will charge EIM Market Participants a fixed EIM Administrative Charge rate of \$0.19/MWh, applied as specified in Section 29.11(i)(2) and (3).
  - (2) **EIM Entity Calculation.** The CAISO will calculate MWh subject to the EIM Administrative Charge rate for each EIM Entity as—
    - (i) the greater of the (a) the sum of the gross FMM Instructed Imbalance Energy, gross RTD Imbalance Energy, and gross Uninstructed Imbalance Energy of the EIM Market Participant's Supply, or (b) five percent of the total gross Supply of all EIM Market Participants; plus

(ii) the greater of (a) the gross Uninstructed Imbalance Energy of the EIM Market Participant's Demand, or (b) five percent of the total gross Demand of all EIM Market Participants.

(3) **Allocation.** The CAISO will calculate the total of the amount of the EIM Administrative Charge for each EIM Market Participant by multiplying the rate specified in Section 29.11(i)(1) by the MWh calculated pursuant to Section 29.11(i)(2) and will allocate that charge—

(i) to the sum of (a) the total gross FMM Instructed Imbalance Energy, gross RTD Imbalance Energy, and gross Uninstructed Imbalance Energy of the EIM Market Participant's Supply, and (b) the gross Uninstructed Imbalance Energy of the EIM Market Participant's Demand, and

(ii) to the extent not all EIM Administrative Charges are allocated pursuant to Section 29.11(i)(3)(i), the remaining amounts to the EIM Entity Scheduling Coordinator.

(4) **Application of Revenues.** The CAISO will apply revenues received from the EIM Administrative Charge against the costs to be recovered through the Grid Management Charge as described in Appendix F, Schedule 1, Part A.

(j) **Variable Energy Resource Forecast Charge.**

(1) **In General.** The CAISO will charge EIM Entity Scheduling Coordinators and EIM Participating Resource Scheduling Coordinators a fee for the Variable Energy Resource forecasting services in accordance with Appendix F, Schedule 4.

(2) **Waiver.** The CAISO will waive the Variable Energy Resource forecast charge if an EIM Entity has an independent forecast for its Variable Energy Resources and provides its forecast to the CAISO.

(k) **Transmission Service.** The CAISO will charge EIM Market Participants for transmission service according to Section 29.26.

(l) **Settlement Process.** With regard to the CAISO's assessment of charges to EIM Market Participants pursuant to Section 11 and 29.11, the CAISO shall assess such charges, address disputed invoices, and make any financial adjustments in accordance with the Settlements process and schedule set forth in Section 11.

## 29.12 Creditworthiness.

(a) **Requirements.** EIM Entity Scheduling Coordinators and EIM Participating Resource Scheduling Coordinators shall comply with the credit and other requirements of Section 12.

**Comment [PDN11]:** The calculation of the admin charged was based upon total EIM load, not a subset of EIM participant. These adjustments reduce the number of MWh and will result in an under collection of revenue.

- (b) **Credit Default.** In the event of a failure to satisfy the credit or other requirements in Section 12, the consequences specified in Section 12 shall apply to EIM Entity Scheduling Coordinators and EIM Participating Resource Scheduling Coordinators.

**29.13 Dispute Resolution.**

- (a) **Invoices.** Confirmation and validation of any dispute associated with the participation of EIM Market Participants in the Real Time Market is subject to Section 11.29.8 and shall be managed through the CAISO's customer inquiry, dispute, and information system and as provided in the Business Practice Manual for the Energy Imbalance Market.
- (b) **Other Disputes.** EIM Market Participants shall be subject to dispute resolution pursuant to Section 13.

**29.14 Force Majeure, Indemnity, Liabilities, and Penalties.** The provisions of Section 14 regarding Uncontrollable Forces, indemnity, liability, and penalties shall apply to the participation of EIM Market Participants in the Real-Time Market.

**29.15 [Not Used]**

**29.16 [Not Used]**

**29.17 EIM Transmission System.**

- (a) **Registration.** Each EIM Entity shall—
  - (1) register in the EIM Transmission Service Registry the static network topology information associated with transmission capacity that it owns, controls, or has a contractual entitlement to that may be used in the Real-Time Market;
  - (2) register in the EIM Transmission Service Registry the static network topology information associated with transmission capacity that each other EIM Transmission Service Provider owns, controls, or has a contractual entitlement to within the EIM Entity Balancing Authority Area that may be used in the Real-Time Market;
  - (3) update the information in the EIM Transmission Service Registry no less frequently than the timelines for updates to the Full Network Model as provided in the CAISO Tariff and Business Practice Manual for the Energy Imbalance Market; and
  - (4) ensure that the information provided to the EIM Transmission Service Registry is accurate and complete.
- (b) **Effectiveness.** The information provided in the EIM Transmission Service Registry shall only be used ~~by the market operator in the Real-Time Market~~ in accordance with the procedures set forth in the Business Practice Manual for the Energy Imbalance Market.

**Comment [PDN12]:** Isn't some of this information going to be used in the Day-Ahead Market run?

- (c) **Availability.** Each EIM Entity shall ensure that all EIM Transmission Service Providers in its Balancing Authority Area make available for use in the Real-Time Market transmission capacity that is registered in the EIM Transmission Service Registry and that is not otherwise encumbered, reserved, scheduled, or being used by its transmission customers or by others.
- (d) **Information on Availability.** Each EIM Entity Scheduling Coordinator shall inform the CAISO in the manner and by the deadlines specified in the Business Practice Manual for the Energy Imbalance Market regarding the availability of the registered transmission capacity for use in the Real-Time Market.
- (e) **EIM Transfer Limit.** A Balancing Authority that has entered an implementation agreement to become an EIM Entity shall establish and inform the CAISO of the maximum EIM Transfer limit at least ninety days prior to the Implementation Date in accordance with the Business Practice Manual for the Energy Imbalance Market .
- (f) **EIM Transfer Availability.** The EIM Transfer limit available for use in the Real-Time Market shall be determined by the EIM Entity Scheduling Coordinator and communicated to the CAISO prior to the start of the next Dispatch Interval in accordance with the procedures and timelines for submission and acceptance in the Business Practice Manual for the Energy Imbalance Market.

**29.18 [Not Used]**

**29.19 [Not Used]**

**29.20 Confidentiality.** The confidentiality provisions of Section 20 shall apply to participation of EIM Market Participants in the Real-Time Market.

**29.21 [Not Used]**

**29.22 Miscellaneous Provisions in Addition to Section 22.**

- (a) **Tax Liability.** To the extent that the CAISO would incur any tax liability as a result of the participation of EIM Market Participants in the Real-Time Market, as market operator or as central counterparty to EIM transactions, for example, the CAISO will pass those taxes on to the EIM Entity Scheduling Coordinator for the EIM Entity area where the transactions triggered the tax liability.
- (b) **Purchasing Selling Agent.** Neither the CAISO nor the EIM Entity is a "Purchasing Selling Entity" for purposes of E-Tagging or EIM Transfers, nor shall either be listed as a "Purchasing Selling Entity" for purposes of E-Tagging or EIM Transfers.
- (c) **Title for Energy.** Title to Energy in the Real-Time Market passes directly from the entity that holds title when the Energy enters the CAISO Controlled Grid or the transmission system of an EIM Transmission Service Provider, whichever is first following Dispatch, to the entity that removes the Energy from the CAISO Controlled Grid or the transmission system of a EIM Transmission Service Provider, whichever last precedes delivery to Load.

29.23 [Not Used]

29.24 [Not Used]

29.25 [Not Used]

**29.26 Transmission Rates And Charges.**

(a) **Transmission Charges for CAISO Facilities.**

(1) **Access Charge.** Transmission service charges for Real-Time Market transactions serving Load within the CAISO Balancing Authority Area that use the CAISO Controlled Grid are governed by Section 26.

(2) **Wheeling Access Charge.** EIM Transfers from the CAISO Controlled Grid to another EIM Entity Balancing Authority Area using the contractual or ownership rights of an EIM Entity shall not constitute Wheeling Out and shall not be subject to the Wheeling Access Charge under Section 26.

(b) **Non-CAISO Facilities.** The determination and charges for transmission service for Real-Time Market transactions on facilities that are part of the contractual or ownership rights made available to the EIM by an EIM Transmission Service Provider through an EIM Entity will be the responsibility of the EIM Entity that made the facilities available, except that no EIM Transmission Service Provider may impose a separate charge for EIM Transfers that use its facilities, provided that charges for transmission service in excess of contractual limits shall not be considered a separate charge.

(c) These provisions apply for the first year of EIM operations until new provisions regarding transmission charges are implemented.

**29.27 CAISO Markets And Processes.** The provisions of Section 27 that are applicable to the Real-Time Market shall apply to EIM Market Participants.

**29.28 Inter-SC Trades.** EIM Entity Scheduling Coordinators and EIM Participating Resource Scheduling Coordinators may not submit Inter-SC Trades.

29.29 [Not Used]

**29.30 Bid and Self-Schedule Submission For CAISO Markets.** The provisions of Section 30 that are applicable to the Real-Time Market shall apply to EIM Market Participants.

**29.31 Day-Ahead.** EIM Entity Scheduling Coordinators and EIM Participating Resource Scheduling Coordinators may not submit Bids in the CAISO's Day-Ahead Market on behalf of EIM Market Participants that they represent in their capacity as an EIM Entity Scheduling Coordinator or EIM Participating Resource Scheduling Coordinator. This does not preclude a resource from being also represented by a Scheduling Coordinator in the Day-Ahead Market.

**29.32 ~~Greenhouse Gas Regulation and~~ EIM Bid Adders.**

**Comment [PDN13]:** Trying to be clear that if SCE has a resource located in PacifiCorp, they are not precluded from DA participation to determine their base schedule which can then be bid into the RT market as an EIM participant.

(a) **EIM Bid Adders.**

- (1) ~~In General. EIM Participating Resources will have an opportunity to recover costs of compliance with California Air Resources Board greenhouse gas regulations, which may include the cost of allowances, uncertainty on the final resource specific emission factor, and other costs of greenhouse gas regulation compliance.~~
- (2) **Bid Submission.** EIM Participating Resource Scheduling Coordinators may submit an EIM Bid Adder as a separate Bid component ~~to recover costs of compliance with California Air Resources Board greenhouse gas regulations.~~
- (3) **Cap on Bid Adder.** The sum of the EIM Bid Adder and the Energy cost portion of the Bid cannot exceed \$1000/MWh.
- (4) **Minimum Bid Adder.** The EIM Bid Adder shall not be less than \$0/MWh.
- (5) ~~There is a limit of one Bid Adder per day.~~

**Comment [PDN14]:** This could cause confusion since its application does not impact pricing to EIM Entities.

**Comment [PDN15]:** Resources without a GHG compliance are eligible to use the bid adder. This language implies something different and will lead to confusion.

**Comment [PDN16]:** This restriction was part of the proposal adopted by the governing board. The CAISO has suggested this can be in the business practice manual. This is an important restriction that has a material impact on bids. Changing it should require FERC approval and not simply a change in the BPM.

- (b) **Consideration of EIM Bid Adders in Market Clearing.** The CAISO shall modify its Security Constrained Economic Dispatch in the Real-Time Unit Commitment and Real-Time Dispatch to take into account EIM Bid Adders in selecting Energy produced by EIM Resources outside the CAISO Balancing Authority Area for import into the CAISO Balancing Authority Area but not when selecting EIM Resources to serve Load outside of the CAISO Balancing Authority Area.
- (c) **Effect on Locational Marginal Price.** EIM Bid Adders shall be included as a component in the Locational Marginal Prices for power deemed to flow into the CAISO Balancing Authority from the EIM Entity Balancing Authority Areas in addition to those specified in Appendix C.
- (d) **Notice to EIM Participating Resource.** The CAISO will notify the EIM Participating Resource Scheduling Coordinator through the Dispatch Instruction whether an EIM Resource is deemed to have been imported in to the CAISO Balancing Authority Area as a result of the Market Clearing of the Real-Time Market.
- (e) **Reporting Requirements.** The CAISO will report to each EIM Participating Resource Scheduling Coordinator the portion of the FMM Energy Schedule and the portion of RTD Energy Dispatch that is associated with Energy deemed to have been imported to the CAISO Balancing Authority Area from all EIM Resources as part of the Real-Time Market results publication from each of its EIM Resources.

**29.33 [Not Used.]**

**29.34 EIM Operations**

- (a) **In General.** ~~Except as provided in Section 29.34,~~ Section 34 will govern the

**Comment [PDN17]:** Section 34 should be the primary section that covers the RTM, except for specific provisions associated with EIM Entities, etc.

operation of the Real-Time Market within the EIM-RTM Area-, except for provisions in Section 29.34 that apply to EIM Entities and EIM Participating Resources, and their respective Scheduling Coordinators.-

- (b) **Applicability.** EIM Entity Scheduling Coordinators and EIM Participating Resource Scheduling Coordinators will submit EIM Base Schedules and other necessary information to the CAISO for use in the Real-Time Market pursuant to Section 29.34 and not pursuant to Section 34.
- (c) **Submission Deadlines.** If an EIM Entity Scheduling Coordinator or EIM Participating Resource Scheduling Coordinator fails to submit an EIM Base Schedule according to the timelines established in this Section 29.34, the CAISO will not accept the EIM Base Schedule or use it in the Real-Time Market.
- (d) **Demand Forecast.**
  - (1) **In General.** In accordance with procedures set forth in the Business Practice Manual for the Energy Imbalance Market, the CAISO shall develop short-term and mid-term Demand Forecasts by Demand Forecast zone within each EIM Entity Balancing Authority Area, separately from the CAISO Balancing Authority Area.
  - (2) **Short Term Forecast.** The CAISO's short-term Demand Forecast for an EIM Entity Balancing Authority Area shall produce a value every five minutes for the duration of the CAISO's Dispatch horizon, which has five-minute granularity and extends several Dispatch Intervals.
  - (3) **Mid-Term Forecast.** The CAISO's mid-term Demand Forecast for an EIM Entity Balancing Authority Area shall produce hourly values for the next hour through the next 7 days.
  - (4) **EIM Entity Scheduling Coordinator Demand Forecast.**
    - (A) **In General.** An EIM Entity Scheduling Coordinator may opt to provide a non-binding Demand Forecast, net of behind-the-meter Generation that is not registered as an EIM Resource, as part of the hourly EIM Base Schedules.
    - (B) **Timing and Scope.** The EIM Entity Scheduling Coordinator must provide any such Demand Forecasts by 10:00 a.m. for the next 7 days.
    - (C) **Updates.** The EIM Entity Scheduling Coordinator must update any such Demand Forecast for each Operating Hour and the following 6 to 10 hours and submit the update to the CAISO no later than 75 minutes prior to the start of that Operating Hour, as part of its hourly EIM Base Schedule submission.
    - (D) **Effect on Bid Requirement.** If the EIM Entity Demand Forecast is less than the CAISO Demand Forecast, then the EIM Entity's EIM Resource Plan must include sufficient Bids to cover the



difference in Demand Forecasts.

- (5) **Posting.** Between 6:00 p.m. of the seventh day prior to the start of the Operating Day and 6:00 p.m. of the day prior to the Operating Day, the CAISO shall post and update hourly Demand Forecasts by Demand Forecast zone.

(e) **EIM Resource Plan.**

- (1) **In General.** By 10:00 a.m. of the day preceding the Operating Day, the EIM Entity Scheduling Coordinators on behalf of non-participating resources and EIM Participating Resource Scheduling Coordinators on behalf of EIM Participating Resources, must submit all applicable components of the EIM Resource Plan as set forth in Section 29.34(e)(4).
- (2) **Scope.** The EIM Resource Plan components must cover a seven day horizon (with hourly detail for each resource) beginning with the Operating Day.
- (3) **Balance.**
  - (A) **Requirement.** The EIM ~~Base-S~~Schedules included in the EIM Resource Plan must balance the Demand Forecast for each EIM Entity Balancing Authority Area.
  - (B) **Insufficient Supply.** An EIM Resource Plan shall be deemed to have insufficient Supply if the sum of EIM Base Schedules from non-participating resources and the sum of the highest quantity offers in the Energy Bid range from EIM Participating Resources, including Interchange with other Balancing Authority Areas, is less than the total Demand Forecast that the EIM Entity Scheduling Coordinator has decided to use for the associated EIM Entity Balancing Authority Area.
  - (C) **Excess Supply.** An EIM Resource Plan shall be deemed to have excessive Supply if the sum of EIM Base Schedules from non-participating resources and the sum of the lowest quantity Bids in the Energy Bid range from EIM Participating Resources is greater than the total Demand Forecast that the EIM Entity Scheduling Coordinator has decided to use for the associated EIM Entity Balancing Authority Area.
- (4) **Contents.** The Resource Plan shall comprise—
  - (A) EIM ~~Base-S~~Schedules;
  - (B) Energy Bids (applicable to EIM Participating Resources only);
  - (C) Reserves capacity of providing meeting the WECC requirements for regulating reserves, in MW-up (applicable to resources only);

Comment [PDN18]: This is non-financial binding and is advisory, so should it be lower case?

- (D) Reserves capacity of providing meeting the WECC requirements for regulating reserves, in MW-down (applicable to resources only);
  - (E) Spinning Reserves in MW;
  - (F) Non-Spinning Reserves in MW; and
  - (G) if the EIM Entity Scheduling Coordinator is not relying on the CAISO's Demand Forecast, a Demand Forecast.
- (5) **Adjustment.** The EIM Entity Scheduling Coordinator may adjust the components of the EIM Resource Plan as necessary following CAISO Bid validation reviews up to 75 minutes before the Operating Hour.
- (f) **Real-Time EIM Base Schedules.**
- (1) **In General.**
    - (A) **Initial Submission.** EIM Entity Scheduling Coordinators, EIM Participating Resource Scheduling Coordinators, ~~and non-participating resources in the EIM Entity Balancing Authority Area that wish to submit real-time hourly EIM Base Schedules~~ must submit ~~balanced such Base S~~schedules consistent with the requirements of the Business Practice Manual for the Energy Imbalance Market and at least 75 minutes before the start of the Operating Hour.
    - (B) **Revisions.** EIM Entity Scheduling Coordinators, EIM Participating Resource Scheduling Coordinators, ~~and non-participating resources in the EIM Entity Balancing Authority Area~~ may revise Real-Time hourly EIM Base Schedules meeting the requirements of the Business Practice Manual for the Energy Imbalance Market at or before 55 minutes before the start of the Operating Hour and EIM Entity Scheduling Coordinators may do so again at or before 40 minutes before the start of the Operating Hour.
  - (2) **EIM Base Schedule for EIM Participating Resources.** The EIM Base Schedule for each EIM Participating Resource must be within the Economic Bid range of the submitted Energy Bids for each Operating Hour for EIM Resources, which the CAISO will make available to the EIM Entity without price information.
  - (3) **EIM Base Schedule for Imports and Exports.** EIM Base Schedules must disaggregate Day-Ahead import/export schedules between the EIM Entity Balancing Authority Area and the CAISO Balancing Authority Area, disaggregate the forward export schedules to other Balancing Authority Areas, and identify the relevant EIM Interties for imports and exports to an EIM Entity Balancing Authority Area from Balancing Authority Areas other than the CAISO Balancing Authority Area.

**Comment [PDN19]:** Non participants cannot submit schedules directly to the CAISO. It will be EIM Entity SC responsibility to submit a schedule with includes non-participants.

**Comment [PDN20]:** The base schedules must be balanced. Correct?

(4) ~~EIM Base Schedule Aggregation. An EIM Entity Scheduling Coordinator may allow non-participating resources, Loads, and other customers to submit EIM Base Schedule information through an interface hosted by the CAISO.~~

**Comment [PDN21]:** Non-participants have no formal relationship to the CAISO so this should not be in the tariff. The change in the schedule from a non-participant must come through the EIM Entity SC or there is a risk of schedules being out of sync. If the CAISO wants to have a tool available for the EIM SC that non-participants can use. This can be in the BPM.

- (g) **Initial EIM Base Load Schedule.** The CAISO will derive an initial EIM Base Load Schedule for each EIM Entity from the CAISO Demand Forecast for the EIM Entity Balancing Authority Area, estimated Transmission Losses, and an assumed Load distribution, pursuant to the methodology set forth in the Business Practice Manual for the Energy Imbalance Market.
- (h) **Energy Bids.** EIM Participating Resource Scheduling Coordinators may submit Energy Bids in accordance with the timelines, processes, and requirements applicable to other resources submitting Energy Bids under Section 34.
- (i) **Interchange Schedules with Other Balancing Authorities.**
- (1) **In General.** EIM Entity Scheduling Coordinators must submit EIM Entity Interchange Schedules with other Balancing Authority Areas at the relevant EIM Interties and must update these EIM Entity Interchange Schedules with any adjustments, when applicable, as part of the hourly EIM Resource Plan revision.
- (2) **Bidding EIM Intertie Transactions.** An EIM Participating Resource Scheduling Coordinator may bid a transaction at an EIM External Intertie into the FMM if both Balancing Authority Areas support 15-minute scheduling at the EIM External Intertie under FERC Order No. 764.
- (j) **CAISO Validation.** The CAISO market systems will validate the initial EIM Resource Plan by 1:00 p.m. on the day before the Operating Day, and within 15 minutes of the submission of EIM Base Schedules or adjustments to EIM Base Schedules, the CAISO will validate the EIM Resource Plan and notify the EIM Entity Scheduling Coordinator--
- (1) if the EIM Resource Plan is not balanced;
- (2) if the EIM Resource Plan provides insufficient Flexible Ramping Constraint capacity to meet requirements determined pursuant to Section 29.34(m); and
- (3) if the CAISO anticipates Congestion based on the submitted EIM Resource Plans.
- (k) **Supply Insufficiency.** If Supply in the EIM Base Schedules is insufficient to meet the Demand Forecast, the CAISO will reduce the Load in the EIM Base Schedule, which will result in the shortfall being settled through the Real-Time Market.
- (l) **Transmission Constraint Relaxation.** If an EIM Entity Scheduling Coordinator's approved EIM Resource Plan does not have sufficient Bids to resolve Congestion, the CAISO will relax the relevant Transmission Constraints

in the Market Clearing and the EIM Entity will become responsible for managing its congested Transmission Constraints through other means, and the CAISO will determine prices for Congestion consistent with Transmission Constraint relaxation parameters established in the Business Practice Manual for the Energy Imbalance Market until the Transmission Constraint is no longer binding in the Real-Time Market.

**Comment [PDN22]:** Same rules for everyone, and these relation parameters are already specific in the Tariff. Consider referencing appropriate tariff section.

(m) **Flexible Ramping Constraint Requirement.**

- (1) **Responsibility.** Each EIM Entity Balancing Authority Area and the CAISO Balancing Authority Area will be responsible for meeting its own portion of the combined Flexible Ramping Constraint capacity requirements for the next hour as determined by Section 29.34(m).
- (2) **Nature.** The Flexible Ramping Constraint capacity requirement is a minimum requirement for each Balancing Authority Area in the EIM-RTM Area and each combination thereof based upon the EIM Transfer limit between Balancing Authority Areas.
- (3) **Determination.** Under the provisions of Section 29.34(m) and the procedures set forth in the Business Practice Manual for the Energy Imbalance Market, the CAISO will determine the Flexible Ramping Constraint capacity requirement using the CAISO Demand Forecast and CAISO Variable Energy Resource forecast for each Balancing Authority Area in the EIM-RTM Area and each combination thereof.

**Comment [PDN23]:** VER resources will be given a credit if they use their own forecast based upon the avoided cost. This implies there will be no avoided cost as they will be using the CAISO VER forecast. This appears inconsistent.

(4) **Sufficiency Determination.**

- (A) **Review.** The CAISO will review the EIM Resource Plan pursuant to the process set forth in the Business Practice Manual for the Energy Imbalance Market and verify that it has sufficient Bids for Ramping capability to meet the EIM Entity Balancing Authority Area Flexible Ramping Constraint capacity requirement, as adjusted by (B) and (C).
- (B) **Pro Rata Reduction and Diversity Limit.** Each EIM Entity Balancing Authority Area Flexible Ramping Constraint capacity requirement shall be reduced by its pro rata share of the diversity benefit in the EIM-RTM Area as may be limited by the available net import EIM Transfer capability into that EIM Entity Balancing Authority Area.
- (C) **Sufficiency of an EIM Entity Balancing Authority Area with a Net Outgoing EIM Transfer.** If an EIM Entity Balancing Authority Area has a net outgoing EIM Transfer (net export with reference to the EIM Base Schedule) before the Operating Hour, then it will have partially fulfilled its Flexible Ramping Constraint capacity requirement for that hour because it can retract that EIM Transfer during the hour as needed and the CAISO will apply a Flexible Ramping Constraint capacity requirement credit in determining the sufficiency of the Flexible Ramping Constraint capacity for that

EIM Entity Balancing Authority Area equal to the net outgoing EIM Transfer before the Operating Hour.

(C) **Sufficiency of an EIM Entity Balancing Authority Area with a Net Ingoing EIM Transfer.** If an EIM Entity Balancing Authority Area has a net incoming EIM Transfer (net import with reference to the EIM Base Schedule) before the Operating Hour; then the Flexible Ramping Constraint capacity for that EIM Entity Balancing Authority Area will be considered sufficient if it meets its own Flexible Ramping Constraint capacity requirement, irrespective of the incoming EIM Transfer that results from RTD Dispatch in the ~~EIM-RTM~~ Area.

(5) **Effect of Insufficiency.** If the CAISO determines that an EIM Entity Balancing Authority Area has insufficient Flexible Ramping Constraint capacity—

- (1) the CAISO will not include the EIM Balancing Authority Area in any Flexible Ramping Constraints for any combination of Balancing Authority Areas;
- (2) the CAISO will formulate only individual constraints for the EIM Entity Balancing Authority Area individual Flexible Ramping Constraint capacity requirements; and
- (3) the CAISO will hold the EIM Transfer limit into the EIM Entity Balancing Authority Area at the value for the last 15-minute interval.

(6) **Combinations of Constraints.** The CAISO shall determine the Flexible Ramping Constraint capacity requirement for all possible combinations of sufficient Balancing Authority Areas in the ~~EIM-RTM~~ Area, including requirements for individual Balancing Authority Areas in each combination, by reducing the total Flexible Ramping Constraint capacity requirement for each group of Balancing Authority Areas by the total amount of EIM Internal Intertie import capability to that group from each Balancing Authority Area outside the group. Cost allocation for the Flexible Ramping Constraint will be based on the initial requirement prior to adjusting for EIM Internal Intertie import capability.

Comment [PDN24]: This is needed to be clear on how the cost allocation will be done.

(n) **Contingency Reserves.**

(1) **Schedules.**

(A) **EIM Entity Responsibility.** Each EIM Entity is responsible for its contingency reserves, or share of such contingency reserves under the terms of a reserve sharing group agreement, and it and the reserve sharing group are responsible for deploying contingency reserves, including regulating reserves, in conformance with NERC and WECC requirements.

- (B) **EIM Entity Scheduling Coordinator Responsibility.** The EIM Entity Scheduling Coordinator shall—
- (i) include any Energy deployed from reserves in the hourly EIM Base Schedules, if time permits, in which case they will be settled in the Real-Time Market as bilateral (self-scheduled) transactions;
  - (ii) otherwise include the Energy deployed from reserves as EIM Manual Dispatches, if time does not permit;
  - (iii) immediately inform the CAISO of events requiring Dispatch of contingency operating reserve and resource EIM Base Schedule adjustments in response to contingencies;
  - (iv) if a resource's actual response differs from the resource EIM Base Schedule adjustment, provide a resource EIM Base Schedule update showing the actual resources dispatched during the event by no later than 1:00 a.m. seven days after the Operating Day in which the event occurred; and
  - (v) inform the CAISO of the amount of resource capacity that is reserved for contingency reserve responsibility by either submitting an Energy Bid for such capacity or reducing the maximum operating limit of the resource.
- (C) **CAISO Actions.**
- (i) **Prior to Update.** Until the CAISO receives resource operating limit updates, the CAISO will continue to send Dispatch Instructions based upon pre-event operating limits.
  - (ii) **After Update.** After EIM Base Schedule updates are received and EIM Dispatches reflect the updated Self-Schedules and operating limits, the CAISO shall account for the Dispatches in the Net Scheduled Interchange values that it provides to EIM Entity Scheduling Coordinators.
- (2) **Updates to Data for Reserve Sharing Event.**
- (A) **Responsibilities.** Immediately following a reserve sharing event impacting the EIM Entity Balancing Authority Area—
- (i) the EIM Entity must submit information regarding the assistance provided, including impacts to Balancing Authority Area Load schedules for each participant involved in the reserve sharing event; and

**Comment [PDN25]:** This term is not in the definitions.

(ii) the EIM Entity Scheduling Coordinator must submit to the CAISO EIM Manual Dispatch instructions for resources in the EIM Entity Balancing Authority Area deployed in response to the reserve sharing event, pursuant to the reserve sharing group's criteria.

(B) **Offsets.** Until 1:00 a.m. seven days following the reserve sharing event, the EIM Entity may offset the Load schedules created by the reserve sharing event by entering resource to Load schedules, reflecting generation resources actually utilized to assist in the event.

(q) **Variable Energy Resource Production Forecast.** The CAISO shall treat Variable Energy Resources in accordance with Section 34.

**29.35 Market Validation And Price Correction.** Market validation and price correction for the EIM shall be governed by Section 35, except that the CAISO may correct Real-Time Market prices within 10 Business Days ~~in the EIM Area~~ for a period not to exceed 90 days after ~~the an~~ EIM Entity Implementation Date.

**Comment [PDN26]:** Not needed as RTM is all areas

**Comment [PDN27]:** This is make clear this not just a one-time exception but occurs after each new EIM Entity joins.

**29.36 [Not Used]**

**29.37 Rules Of Conduct.** **EIM Entities,** EIM Entity Scheduling Coordinators and EIM Participating Resource Scheduling Coordinators shall be subject to the provisions of Section 37, except for Section 37.2, ~~including the provision of information required from non-EIM participants within the respective EIM Entity.~~

**Comment [PDN28]:** This is to be clear that EIM Entities and their SC must provide information regarding non-participants.

**29.38 Market Monitoring.** The CAISO Department of Market Monitoring shall provide market monitoring services for the participation of EIM Market Participants in the Real-Time Market, including—

- (a) monitoring markets administered by the CAISO for actual or potential ineffective market rules, market abuses, market power, violations of FERC or CAISO Market rules prohibiting provision of false information, or market manipulation;
- (b) coordinating with CAISO business units that review and monitor the performance and quality of the CAISO Markets;
- (c) providing recommendations about potential market design flaws or ineffective market rules to the CAISO and FERC; and
- (d) referring a matter to FERC if the Department of Market Monitoring determines there is sufficient credible evidence that a violation of FERC or CAISO Market rules has occurred.

**29.39 EIM Market Power Mitigation.**

- (a) **EIM Market Power Mitigation Procedure.** The CAISO shall apply the Real-Time Local Market Power Mitigation procedure in Section 39.7 to the EIM, except as provided in Section 29.39.

- (b) **Dynamic Competitive Path Assessment.** The CAISO shall conduct the dynamic competitive path assessment to determine for each EIM Entity Balancing Authority Area whether a path is competitive or non-competitive, consistent with Section 39.7.2, except that—
- (1) EIM Participating Resource Scheduling Coordinators shall submit information required by the CAISO to perform dynamic competitive path assessment;
  - (2) the dynamic competitive path assessment shall not exclude EIM Participating Resources from the test used to determine the competitiveness of Transmission Constraints on the basis that they may be net buyers of Energy in the Real-Time Market; and
  - (3) the CAISO may establish different Reference Buses for each Balancing Authority Area, which need not be within the Balancing Authority Area, for calculating the LMP Decomposition which is used to trigger Bid mitigation, based on the topology of each Balancing Authority Area and consideration of the bus at which the Marginal Cost of Congestion component of Locational Marginal Prices is least influenced by market power.
- (c) **Locational Marginal Price Decomposition.** The CAISO shall perform the Locational Marginal Price decomposition for each EIM Entity Balancing Authority Area using the results of the dynamic competitive path assessment and the Congestion pricing results of the pre-market run to determine which resources may have local market power due to Congestion on a non-competitive Transmission Constraint, consistent with Section 34.2.3 and 39.7, except that—
- (1) the CAISO will not mitigate resource Bids for scheduling limit constraints with Balancing Authority Areas that do not participate in the ~~EIM~~Real-Time Market;
  - (2) the Locational Marginal Price decomposition shall only be triggered if the resource is effective at relieving an uncompetitive constraint within the same Balancing Authority Area in which the resource is located except as described in Section 29.39(c)(4);
  - (3) EIM Resources shall be mitigated to relieve congestion on uncompetitive constraints within the same Balancing Authority Area in which the EIM Resources are located except as described in Section 29.39(c)(4); and
  - (4) EIM Transfer constraints into an EIM Entity Balancing Authority Area on an EIM Internal Intertie shall be included in the Market Power Mitigation procedures if the CAISO determines that EIM Entity Balancing Authority Area market power exists based on a structural competitiveness assessment of an individual or group of EIM Balancing Authority Areas in the ~~EIM-RTM~~ Area, provided such authority has been granted by the CAISO Governing Board based on the assessment of structural competitiveness.



- (d) **Default Energy Bids.** The CAISO shall use the methods and standards set forth in Section 39.7 to determine Default Energy Bids for EIM Participating Resources.

29.40 [Not Used]

29.41 [Not Used]

29.42 [Not Used]

29.43 [Not Used]

29.44 [Not Used]



### 3. New EIM Defined Terms

#### - Energy Imbalance Market (EIM)

The rules and procedures in Section 29 governing the CAISO's operation of the Real-Time Market in Balancing Authority Areas outside of the CAISO Balancing Authority Area and the participation of EIM Market Participants in the Real-Time Market.

#### - ~~EIM Real-Time Market~~ Area

The combined CAISO Balancing Authority Area and all EIM Entity Balancing Authority Areas.

**Comment [PDN29]:** This definition is confusing as there is no 'EIM Market'. A better definition should be RTM area. This allows EIM area to be just the combination of EIM Entities. This will lead to less confusion.

#### - ~~EIM Area~~

~~The combined area of participating EIM Entity Balancing Authority Area.~~

#### - ~~EIM-RTM~~ Area Measured Demand

The metered CAISO Demand and metered EIM Demand plus Real-Time Interchange Export Schedules, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management and EIM Transfers out of an EIM Entity Balancing Authority Area.

#### - EIM Base Schedule

A forward Energy Schedule submitted by an EIM Entity Scheduling Coordinator that provides hourly-level Demand Forecasts for EIM Demand, hourly-level schedules for resources, and hourly-level scheduled Interchanges that do not take into account Dispatches from the Real-Time Market and other information, all of which is used by the CAISO as the baseline to measure deviations for purposes of Settlement of transactions of EIM Market Participants in the Real-Time Market.

#### - EIM Base Load Schedule

A forward Energy Schedule prepared by the CAISO that provides hourly-level Demand Forecasts for EIM Demand that is used by the CAISO as the baseline to measure deviations for purposes of Settlement of transactions of EIM Market Participants in the Real-Time Market.

#### -EIM Bid Adder

A Bid component ~~that provides exclusively to~~ EIM Participating Resources ~~an opportunity to recover costs of compliance with California Air Resources Board greenhouse gas regulations which allows them to demand a higher price for transactions deemed to flow to the CAISO BA than prices charged to non-CAISO BA buyers.~~

**Comment [PDN30]:** Could also use our definition of EIM Area buyers.

#### -EIM Demand

Energy delivered to Load internal to an EIM Balancing Authority Area.

#### - EIM Entity

A Balancing Authority that represents one or more EIM Transmission Service Providers and that enters into an EIM Entity Agreement with the CAISO to enable the operation of the Real-Time Market in its Balancing Authority Area.

#### - EIM Entity Agreement

An agreement between an EIM Entity and the CAISO, a pro forma version of which is set forth in Appendix B.

**- EIM Entity Scheduling Coordinator**

The EIM Entity, or a third party designated by the EIM Entity, that is certified by the CAISO and that enters into an EIM Entity Scheduling Coordinator Agreement under which it is a Scheduling Coordinator and a Market Participant and is responsible for meeting the requirements specified in Section 29 on behalf of the EIM Entity.

**- EIM Entity Scheduling Coordinator Agreement**

An agreement between an EIM Entity Scheduling Coordinator and the CAISO, a pro forma version of which is set forth in Appendix B.

**- EIM Intertie**

An EIM External Intertie or EIM Internal Intertie.

**- EIM Market-Participants**

An EIM Entity, EIM Entity Scheduling Coordinator, EIM Participating Resource, or EIM Participating Resource Scheduling Coordinator.

**- EIM Resource**

A resource that (1) can deliver Energy, Curtailable Demand, Demand Response Services, or similar services; (2) is a Generating Unit, a Load of a Participating Load, or a Demand Response Resource or other CAISO qualified resource; and (3) is located within an EIM Entity Balancing Authority Area, and that is listed in and subject to an EIM Participating Resource Agreement.

**-EIM Participating Resource**

An owner of, operator of, or seller of Energy from an EIM Resource that elects to participate in the Real-Time Market and enters into the EIM Participating Resource Agreement under which it is responsible for meeting the requirements specified in Section 29.

**- EIM Participating Resource Agreement**

An agreement between an EIM Participating Resource and the CAISO, a pro forma version of which is set forth in Appendix B.

**- EIM Participating Resource Scheduling Coordinator**

The EIM Participating Resource, or a third party designated by the EIM Participating Resource, that is certified by the CAISO and enters into an EIM Participating Resource Scheduling Coordinator Agreement under which it is a Scheduling Coordinator and Market Participant and is responsible for meeting the requirements specified in Section 29 on behalf of the resource.

**- EIM Participating Resource Scheduling Coordinator Agreement**

An agreement between the EIM Participating Resource Scheduling Coordinator and the CAISO, a pro forma version of which is set forth in Appendix B.

**- EIM Resource Plan**

The combination of EIM Base Schedules for Demand, Generation, and Interchange, the ancillary services plans of the EIM Entity, and the Bid ranges of EIM Participating Resources, as specified in more detail in Section 29.34(e)(4).

**- EIM Transfer**

The transfer of Energy in Real-Time between an EIM Entity Balancing Authority Area and the CAISO Balancing Authority Area, or between EIM Entity Balancing Authority Areas, using transmission capacity made available to the Real-Time Market through the EIM. The EIM Transfer is not a Real-Time Interchange Export Schedule or a Real-Time Interchange Import Schedule.

**- EIM Transmission Service Provider**

An EIM Entity or third party that owns transmission or has transmission service rights that makes transmission service available for use in the Real-Time Market through an EIM Entity.

**- EIM Transmission Service Registry**

A data base maintained by the CAISO and containing information about transmission capacity available for use in the Real-Time Market through the EIM.

**- EIM External Intertie**

A point of interconnection between an EIM Entity Balancing Authority Area and an interconnected Balancing Authority Area other than a Balancing Authority Area in the ~~EIM~~RTM Area.

**-EIM Entity Implementation Date**

The first Trading Day for an EIM Entity in the Real-Time Market.

**- EIM Internal Intertie**

A point of interconnection between an EIM Entity Balancing Authority Area and another Balancing Authority Area in the ~~EIM~~RTM Area.

**- EIM Manual Dispatch**

A Dispatch by an EIM Entity to an EIM Participating Resource or a non-participating resource in its Balancing Authority Area, outside of Market Clearing of the Real-Time Market.

**-EIM Interchange**

The net amount of scheduled transfers into and out of a Balancing Authority Area in the ~~EIM~~RTM Area in a given interval.



#### 4. Changes to Existing ISO Tariff Provisions

##### 11.5.4 Imbalance Energy Pricing; Non-Zero Offset Amount Allocation

###### 11.5.4.1 Real-Time Balancing Authority Area Neutrality Amount

- (a) **Financial Value of EIM Transfers.** For each Settlement Interval The CAISO will calculate the Real-Time Market financial value of EIM Transfers as the product of the MWh, either positive or negative, and the Locational Marginal Price of the pricing node at the corresponding EIM Internal Intertie.
- (b) **Initial Calculation.** The CAISO will calculate ~~the EIM Entity~~ Balancing Authority Area Real-Time Market neutrality amount to be recovered on a 5-minute basis for each Balancing Authority Area in the EIMRTM Area as the sum of the financial value of EIM Transfers and the Settlement amounts for FMM Instructed Imbalance Energy and RTD Instructed Imbalance Energy, Uninstructed Imbalance Energy, and Unaccounted For Energy, and for the CAISO, Real-Time Virtual Bid Settlement, less the Balancing Authority Area Real-Time Congestion Offset determined under Section 11.5.4.1.1, and for the CAISO, plus the Real-Time Ancillary Services Congestion Revenues and Virtual Awards settlements in the Real-Time Market in accordance with Section 11.3, less Real-Time Congestion Offset and less the Real-Time Marginal Cost of Losses Offset.
- (c) **Adjustment.** The CAISO will adjust the initial calculation of the EIM Entity Balancing Authority Area Real-Time Market neutrality amount by—
- (1) dividing the sum of net EIM Transfers out of an EIM Entity Balancing Authority Area by the sum of the absolute value of Uninstructed Imbalance Energy due to Demand, the absolute value of Uninstructed Imbalance Energy due to Supply, the absolute value of Unaccounted For Energy, and the net EIM Transfer out of the Balancing Authority Area;
  - (2) summing the amounts for all EIM Entity Balancing Authority Areas that had EIM Transfers out in the Dispatch Interval; and
  - (3) distributing that sum to the initially determined amounts for each EIM Entity Balancing Authority Area that had EIM Transfers in during the Dispatch Interval based on its pro rata share of the EIM Transfers during the Dispatch Interval.
- (4) [Need an additional section on how the CAISO BAA share is allocated to their participants, SCE, PG&E, etc.]
- (d) **Residual Neutrality Amounts.** Any residual neutrality amount shall be allocated to EIMRTM Market Participants based upon EIMRTM Area Measured Demand.

**Comment [PDN31]:** Missing a step between sub-section c and d – it might be more clear to separate the two Real-Time Imbalance Energy Neutrality Allocations into two different sections: one for each EIM BAA (after applying EIM Transfers and Adjustment) and one for the entire EIM Area for any residual neutrality amount.

###### 11.5.4.1.1 Real-Time Congestion Offset.

- (a) **Real-Time Congestion Offset.** For each Settlement Period of the RTM, the

CAISO shall calculate the Real-Time Congestion Offset as—

- (1) the sum for each EIM Entity Balancing Authority Area of the product of the contribution of that EIM Entity Balancing Authority Area's Transmission Constraints to the marginal congestion component of the Locational Marginal Price at each resource location in the EIM Area and the imbalance energy, including Virtual Bids, at that resource location;
  - (ii) provided EIM Internal Interties other than with the CAISO Balancing Authority Area shall be shared based on the number of EIM Balancing Authority Areas that share the EIM Internal Intertie as provided in the Business Practice Manual for the Energy Imbalance Market; and
- (2) minus any Virtual Bid adjustment.

**Comment [PDN32]:** Not sure if this is just the EIM Entity area or the entire RTM footprint? I think it is just the EIM Entity areas.

(b) **Virtual Bid Adjustment.**

- (1) **Individual Constraint Calculation.** For each Transmission Constraint in an EIM Entity Balancing Authority Area, the CAISO will calculate a Virtual Bid adjustment as the product of that Transmission Constraint's FMM Shadow Price and the lesser of (1) the Flow Impact of Virtual Bids and (2) the Flow Impacts of all Day-Ahead Scheduled Energy and EIM Base Schedules less the Flow Impacts of FMM Schedules, but not less than zero.
- (2) **EIM Entity Balancing Authority Area Calculation.** Each EIM Entity Balancing Authority Area's Virtual Bid adjustment shall be the sum of the individual Transmission Constraint calculation for all Transmission Constraints within that EIM Entity Balancing Authority Area.

(c) **Allocation.** The CAISO will allocate—

- (1) the Real-Time Congestion Offset for each EIM Entity Balancing Authority Area to EIM Entity Scheduling Coordinators;
- (2) the Real-time Congestion Offset for the CAISO Balancing Authority Area in accordance with Section 11.5.4.2; and
- (3) the Virtual Bid adjustment from each individual constraint calculation to each Scheduling Coordinator who submitted Virtual Bids based on that Scheduling Coordinator's Virtual Schedule's pro rata share of the gross positive congestion revenues received by all Virtual Schedules from that Transmission Constraint.

**Comment [PDN33]:** What about EIM Transfer Adjustment?

### 11.8.6.3 Determination of Total Positive CAISO Markets Uplifts

#### 11.8.6.3.1 Total Positive IFM Uplift

Any positive Net IFM Bid Cost Uplifts are reduced by scaling them with the uplift ratio in Section 11.8.6.3.1(iii) to determine the Total IFM Uplift (for a Settlement Interval) as follows:



- (i) The Total IFM Uplift is the Net IFM Bid Cost Uplift for all Settlement Intervals in the IFM Market.
- (ii) The Total Positive IFM Uplift is determined as the sum of the positive IFM Bid Cost Uplift for all Settlement Intervals in the IFM Market.
- (iii) The uplift ratio is equal to the Total IFM Uplift divided by the Total Positive IFM Uplift.

#### **11.8.6.3.2 Total Positive RUC and RTM Uplift**

Any negative RUC and Real-Time Market Bid Cost Uplifts are set to \$0 and any positive Net RUC Bid Cost Uplifts and Real-Time Market Bid Cost Uplifts are further reduced by the uplift ratio in Section 11.8.6.3.2(iii) to determine the Total RUC and RTM Uplift as follows;

- (i) The Total RUC and RTM Uplift is determined as the sum of the Net RUC Bid Cost Uplift and the Net Real-Time Market Bid Cost Uplift for all Settlement Intervals in the RUC and Real-Time Market, including EIM Transfer adjustments determined in accordance with Section 11.8.6.7.
- (ii) The Total Positive RUC and RTM Uplift is determined as the sum of the positive RUC Bid Cost Uplift and positive Real-Time Market Bid Cost Uplift, for all Settlement Intervals in the RUC and Real-Time Market.
- (iii) The uplift ratio is equal to the Total RUC and RTM Uplift divided by the Total Positive RUC and RTM Uplift.

#### **11.8.6.6 Allocation of Net RTM Bid Cost Uplift**

The hourly Net RTM Bid Cost Uplift is computed for the Trading Hour as the product of the RTM uplift ratio in Section 11.8.6.3 and the sum over all of the Settlement Intervals of the Trading Hour of any positive Net RTM Bid Cost Uplift after the sequential netting in Section 11.8.6.2, plus the sum of the Trading Intervals of the Trading Hour of any EIM Transfer adjustment calculated under Section 11.8.6.7. The hourly RTM Bid Cost Uplift is allocated to Scheduling Coordinators, including Scheduling Coordinators for MSS Operators that have elected (a) not to follow their Load, and (b) gross Settlement, in proportion to their Measured Demand plus any FMM reductions not associated with valid and balanced ETCs, TORs or Converted Rights Self-Schedules in the Day-Ahead Market for the Trading Hour. For Scheduling Coordinators for MSS Operators that have elected (a) not to follow their Load, and (b) net Settlement, the hourly RTM Bid Cost Uplift is allocated in proportion to their MSS Aggregation Net Measured Demand plus any FMM reductions not associated with valid and balanced ETCs, TORs or Converted Rights Self-Schedules in the Day-Ahead Market. For Scheduling Coordinators of MSS Operators that have elected to follow their Load, the RTM Bid Cost Uplift shall be allocated in proportion to their MSS Net Negative Uninstructed Deviation plus any FMM reductions not associated with valid and balanced ETCs, TORs or Converted Rights Self-Schedules in the Day-Ahead Market. Accordingly, each Scheduling Coordinator shall be charged an amount equal to its Measured Demand plus any FMM reductions not associated with valid and balanced ETCs, TORs or Converted Rights Self-Schedules in the Day-Ahead Market times the RTM Bid Cost Uplift rate, where the RTM Bid Cost Uplift rate is computed as the Net RTM Bid Cost Uplift amount divided by the sum of Measured Demand plus any FMM reductions not associated with valid and balanced ETCs, TORs or Converted Rights Self-Schedules in the Day-Ahead Market across all Scheduling Coordinators for the Trading Hour. Any real-time reductions after HASP results are published to HASP Block Intertie Schedules in response to Dispatch Instructions or real-time scheduling curtailments are not allocated any Net RTM Bid Cost Uplift.

**11.8.6.7 EIM Transfer Adjustment.** The CAISO shall calculate the EIM Transfer adjustment by—

- (a) dividing the sum of net EIM Transfers out of an EIM Entity Balancing Authority Area by the sum of the absolute value of Uninstructed Imbalance Energy due to Load, the absolute value of Uninstructed Imbalance Energy due to Supply, the absolute value of Unaccounted For Energy, and the net EIM Transfer out of the Balancing Authority Area;
- (b) summing the amounts for all EIM Entity Balancing Authority Areas that had EIM Transfers out in the Dispatch Interval; and
- (c) distributing that sum to the initially determined amounts for each EIM Entity Balancing Authority during the Dispatch Interval based on its pro rata share of the EIM Transfers during the Dispatch Interval.

## **11.25 Flexible Ramping Constraint Compensation**

### **11.25.1 Compensation**

All resources identified as resolving the Flexible Ramping Constraint in the applicable RTUC interval are awarded Flexible Ramping Constraint capacity and will be compensated for such capacity for each RTUC interval, whether or not the Flexible Ramping Constraint is binding, limited by the quantity of Flexible Ramping Constraint requirements set by the CAISO operators as follows: The Scheduling Coordinator is paid the product of the (1) upward MW of capacity identified to satisfy the constraint(s) in the groupings and individual EIMRTM Area Balancing Authority Areas in which it participates to relieve the constraint(s), multiplied by 0.25 hours, and (2) Flexible Ramping Constraint Derived Price calculated for each applicable fifteen-minute FMM interval as described further in this Section 11.25.1. Payment to resources will be rescinded as set forth in Section 11.25.2. For each applicable fifteen-minute FMM interval, the Flexible Ramping Constraint Derived Price is equal to the lesser of: 1) \$800/MWh; or 2) the greater of: (a) zero (0), or (b) the Real-Time ASMP for Spinning Reserves for the applicable fifteen-minute FMM interval; or (c) the total Flexible Ramping Constraint Shadow Price, which is determined as the sum of the Flexible Ramping Constraint Shadow Prices for the groupings and individual EIMRTM Area Balancing Authority Areas in which the resource is deemed to have contributed to the constraint, minus seventy-five (75) percent of the maximum of (i) zero (0), or (ii) the Real-Time System Marginal Energy Cost, calculated as the simple average of the System Marginal Energy Cost for each of the three five-minute RTD intervals in the applicable fifteen-minute FMM interval. The Flexible Ramping Constraint Shadow Price represents the reduction of the total Energy and Ancillary Services procurement cost associated with a marginal change of that constraint for the applicable groupings and individual EIMRTM Area Balancing Authority Areas in which the constraint is enforced, which is equal to zero (0) if the Flexible Ramping Constraint is not binding. All costs associated with payments made pursuant to this Section 11.25 are allocated to all Scheduling Coordinators pursuant to the requirements set forth in Section 11.25.3.

### **11.25.2 Rescission of Payment for Non-Performance**

Payments to Scheduling Coordinators are rescinded for the quantity of MWs of undelivered Flexible Ramping Constraint capacity determined as the 15-minute sum of the Settlement Interval amounts calculated as the minimum of: 1) the Flexible Ramping Constraint capacity identified as having contributed to the relief of the Flexible Ramping Constraint, or 2) the

maximum of (a) zero (0), or (b) the difference between (i) the absolute value of -the negative UIE and (ii) the upward MWs identified as Undelivered Ancillary Services Capacity as required in Section 11.10.9.3. The rescinded amounts will be based on the product of the: 1) MWs quantities to be rescinded determined as described in this Section 11.25.2; and 2) the Flexible Ramping Constraint Derived Price as described in Section 11.25.1.

### 11.25.3 Allocation of Costs

The CAISO allocates the total Flexible Ramping Constraint costs incurred as described in Section 11.25.1, net of the rescission of payments as described in Section 11.25.2 as follows:

~~The CAISO determines the Balancing Authority Area specific allocation amounts by multiplying 1) the resource specific total Flexible Ramping Constraint costs net of rescission of payments, by 2) the ratio of the Flexible Ramping Constraint Shadow Price to the total Flexible Ramping Constraint Shadow Price, determined as described in Section 11.25.1. For each EIM Area Balancing Authority Area the CAISO will determine the Flexible Ramping Constraint costs attributable to that Balancing Authority Area for which the applicable constraint(s) were binding in the applicable interval, based on ratio of the Balancing Authority Area's requirement to its contribution to the grouping or individual constraints to which that that Balancing Authority Area contributes. The CAISO will sum these amounts at the Balancing Authority Area level to determine the individual Balancing Authority Area Flexible Ramping Constraint costs.~~

~~For the CAISO Balancing Authority Area, The CAISO divides the total Flexible Ramping Constraint costs incurred in two portions and allocates each portion as described in 11.25.3.1 and 11.25.3.2. The total Flexible Ramping Constraint costs for each EIM Entity Balancing Authority Area are assigned to the EIM Entity Scheduling Coordinator as specified in Section 29.11(m).~~

Market Participants will pay for the Flexible Ramping Constraint necessary to meet the requirements within their Balancing Authority. To the extent Flexible Ramping Constraint is purchased within one Balancing Authority to fulfill the requirements of a different Balancing Authority(ies), the cost will be allocated prorated to each Balancing Authority based on the amount of Flexible Ramping Constraint purchased to meet each Balancing Authority's requirement. Each Balancing Authority's Flexible Ramping Constraint requirement will not be reduced by EIM Internal Intertie adjustment used in Section 29.34(m)(6).

**Comment [PDN34]:** This is extremely difficult to understand the principle of the allocation. Perhaps the principle should be stated in simpler terms. The details can be included in the business practice manual. The other option is to include the principle and the calculation.

#### 11.25.3.1 Allocation to Measured Demand

Seventy five (75) percent of the total Flexible Ramping Constraint costs netted as described above in the Section 11.25.3, are allocated to Scheduling Coordinators based on their Measured Demand for each applicable Trading Hour. Each Scheduling Coordinator is assessed a portion of seventy-five (75) percent share of the total costs equal to the Scheduling Coordinator's Measured Demand for the applicable Trading Hour divided by total market Measured Demand for the applicable Trading Hour.

#### 11.25.3.2 Allocation to Supply Deviations

Twenty-five (25) percent of the total Flexible Ramping Constraint costs netted as described above in this section 11.25.3, are allocated to Scheduling Coordinators based on their gross negative supply deviations as follows, using a two-step process.

First on a daily basis, the CAISO determines a daily rate equal to twenty-five (25) percent of the total daily Flexible Ramping Constraint costs divided by total daily gross supply negative deviations for the applicable Trading Day. Each Scheduling Coordinator is assessed its share of

these daily costs based on its daily gross negative deviations calculated by resource as described below. Second, at the end of each Trading Month, the ISO reverses the daily amounts assessed to Scheduling Coordinators and calculates a monthly rate equal to twenty-five (25) percent of the total monthly Flexible Ramping Constraint costs divided by the total monthly gross supply negative deviations. Each Scheduling Coordinator is assessed its share of these monthly costs per its monthly gross negative deviations calculated by resource as described below. The gross supply negative deviations are determined by resource based on the sum of: (1) the resource's total negative Settlement Interval Tier 1 UIE and Tier 2 UIE deviations, which are determined as defined in Section 11.5.2, and (2) any negative import Operational Adjustments. Gross supply negative deviations determined for this purpose are not netted across Settlement Intervals. The CAISO will provide the ability for Scheduling Coordinators to see daily or monthly Flexible Ramping Constraint cost allocation by resource for their resources in their regularly released settlement statements.



## 5. Changes to Existing ISO Defined Terms

### - Bid Cost Recovery (BCR) Eligible Resources

Those resources eligible to participate in the Bid Cost Recovery as specified in Section 11.8, which include Generating Units, System Units, System Resources, Participating Loads, and Proxy Demand Resources and, for purposes of the Real-Time Market in the [EIMRTM](#) Area, [EIM Participating](#) Resources. A System Resource that has a Schedule that results from Bids submitted in violation of Section 30.5.5 shall not be a Bid Cost Recovery Eligible Resource for any Settlement Interval that occurs during the time period covered by the Schedule that results from Bids submitted in violation of Section 30.5.5.

### -CAISO Metered Entity

- (a) any one of the following entities that is directly connected to the CAISO Controlled Grid:
  - i. a Generator other than a Generator that sells all of its Energy (excluding any Station Power that is netted pursuant to Section 10.1.3) and Ancillary Services to the Utility Distribution Company or Small Utility Distribution Company in whose Service Area it is located;
  - ii. an MSS Operator; or
  - iii. a Utility Distribution Company or Small Utility Distribution Company; 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 Balancing Authority Areas;
  - iii. a Participating Load;
  - iv. a Participating Intermittent Resource;
  - v. an EIM Participating Resource that has elected not to be a Scheduling Coordinator Metered Entity; or
  - vi. a utility that requests that Unaccounted for Energy 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.

### - Connected Entity

A Participating TO or any party that owns or operates facilities that are electrically interconnected with the CAISO Controlled Grid or, for the purposes of the scheduling and operation of the Real-Time Market, electrically connected with the transmission system of an EIM Transmission Service Provider.

### Curtable Demand

Demand from a Participating Load or Aggregated Participating Load that can be curtailed at the direction of the CAISO in the Real-Time Dispatch of the CAISO Controlled Grid or in the [EIMReal-Time Market](#) Area.

### -Demand

The instantaneous amount of Energy that is delivered to Loads and Scheduling Points by Generation, transmission or distribution facilities. It is the product of voltage and the in-phase component of alternating current measured in units of watts or standard multiples thereof, e.g., 1,000W=1kW, 1,000kW=1MW, etc.

**- End-Use Customer Or End-User**

A consumer of electric power who consumes such power to satisfy a Load directly connected to the CAISO Controlled Grid, a Distribution System, or the transmission system of an EIM Transmission Service Provider and who does not resell the power.

**- FMM Instructed Imbalance Energy (FMM IIE)**

The portion of Imbalance Energy resulting from Day-Ahead Schedules or EIM Base Schedules and FMM Schedules determined pursuant to Section 11.5.1.

**- Generating Unit**

An individual electric generator and its associated plant and apparatus whose electrical output is capable of being separately identified and metered or a Physical Scheduling Plant that, in either case, is: (a) located within the CAISO Balancing Authority Area (which includes a Pseudo-Tie of a generating unit to the CAISO Balancing Authority Area) or, for the purposes of scheduling and operating the Real-Time Market, an EIM Entity Balancing Authority Area; (b) connected to the CAISO Controlled Grid, either directly or via interconnected transmission, or distribution facilities or via a Pseudo-Tie; and (c) capable of producing and delivering net Energy (Energy in excess of a generating station's internal power requirements).

**- Interchange**

Imports and exports between the CAISO Balancing Authority Area and other Balancing Authority Areas and, for the Real-Time Market only, between and EIM Entity Balancing Authority Area and other Balancing Authority Areas.

**- Interchange Schedule**

A final agreed-upon schedule of Energy to be transferred between the CAISO Balancing Authority Area and another Balancing Authority Area and, for the Real-Time Market only, between and EIM Entity Balancing Authority Area and other Balancing Authority Area.

**Market Participant**

An entity, including a Scheduling Coordinator, who (1) participates in the CAISO Markets through the buying, selling, transmission, or distribution of Energy, capacity, or Ancillary Services into, out of, or through the CAISO Controlled Grid; (2) is a CRR Holder or Candidate CRR Holder; (3) is a Convergence Bidding Entity; or (4) is an EIM Market Participant.

**- Measured Demand**

The metered CAISO Demand plus Real-Time Interchange Export Schedules, excluding that portion of Demand of Non-Generator Resources dispatched as Regulation through Regulation Energy Management and EIM Transfers out of the CAISO Balancing Authority Area.

**- Node**

A point in the Full Network Model representing a physical location within the CAISO Balancing Authority Area, the CAISO Controlled Grid, or the **EIMRTM** Area that includes the Load and Generating Unit busses in the CAISO Balancing Authority Area (which includes a Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area) and **EIM Area** and at the Intertie busses between the CAISO Balancing Authority Area and EIM Entity Balancing Authority Areas and interconnected Balancing Authority Areas.

**Comment [PDN35]:** Not sure which area this is intended to describe?

**- Point(s) Of Delivery (POD) Or Withdrawal**

Point(s) within the CAISO Balancing Authority Area or, in the Real-Time Market ~~only, the EIM~~ Area where Energy and Ancillary Services are made available to a receiving party under this CAISO Tariff.

**- Point(s) Of Receipt (POR) Or Injection**

Point(s) within the CAISO Balancing Authority Area or, in the Real-Time Market ~~only, the EIM~~ Area where Energy and Ancillary Services are made available by a delivering party under this CAISO Tariff.

**- Real-Time Congestion Offset**

~~Real-time Congestion Offset is defined as T~~he amount calculated under Section 11.5.4.1 for the purposes of determining the non-zero offset amount allocation.

**-Reference Bus**

The Location(s) in the ~~EIM-RTM~~ Area relative to which mathematical quantities relating to powerflow solution will be calculated.

**- RTD Imbalance Energy**

The deviation of Supply or Demand from the FMM Schedule, positive or negative, as measured by metered Generation, metered Load, or Real-Time Interchange Schedules or, in the case of EIM non-participating resources, EIM Base Schedules. RTD Imbalance Energy is composed of RTD Instructed Imbalance Energy and Uninstructed Imbalance Energy.

**- Real-Time Unit Commitment (RTUC)**

An application of the RTM that runs every 15 minutes and commits Fast Start Units and Medium Start Units using the SCUC to adjust from Day-Ahead Schedules, EIM Base Schedules, and HASP Advisory Schedules.

**-Scheduling Coordinator**

An entity certified by the CAISO for the purposes of undertaking the functions specified in Section 4.5.3, including any entity designated as an EIM Entity Scheduling Coordinator or an EIM Participating Resource Scheduling Coordinator for the purposes of undertaking the functions specified in Section 29.

**- Scheduling Coordinator Metered Entity**

A Generator, Eligible Customer, End-User, or Proxy Demand Resource that is not a CAISO Metered Entity, an EIM Entity, or an EIM Participating Resource that elects to be a Scheduling Coordinator Metered Entity.

**- Settlement**

Process of financial settlement for products and services purchased and sold undertaken by the CAISO under Section 11 as supplemented by Section 29. Each Settlement will involve a price and a quantity.

**-System Resource**

A group of resources, single resource, or a portion of a resource located outside of the CAISO Balancing Authority Area, or an allocated portion of a Balancing Authority Area's portfolio of



generating resources that are either a static Interchange Schedule or directly responsive to that Balancing Authority Area's Automatic Generation Control (AGC) capable of providing Energy and/or Ancillary Services to the CAISO Balancing Authority Area or, for the purposes of scheduling and operating the Real-Time Market ~~in the EIM Area,~~ an EIM Entity Balancing Authority Area, provided that if the System Resource is providing Regulation to the CAISO it is directly responsive to AGC.

**- Transmission Losses**

Energy that is lost as a natural part of the process of transmitting Energy from Generation to a Point Of Delivery Or Withdrawal.

**Comment [PDN36]:** Does this mean EIM Entity resources providing regulation services to the CAISO? I thought the EIM Entity maintains this function?



**6. Pro Forma EIM Service Agreements**

**EIM Entity Agreement [separate attachment]**

**EIM Entity Scheduling Coordinator Agreement [separate attachment]**

**EIM Participating Resource Agreement [separate attachment]**

**EIM Participating Resource Scheduling Coordinator Agreement [separate attachment]**

**Appendix B. \_\_**

**EIM Entity Agreement (EIMEA)**

**THIS ENERGY IMBALANCE MARKET ENTITY AGREEMENT (“AGREEMENT”)** is established this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_ and is accepted by and between:

**[Full legal name]** (“EIM Entity”), having its registered and principal executive office at [address],

and

**California Independent System Operator Corporation** (“CAISO”), a California nonprofit public benefit corporation having a principal executive office located at such place in the State of California as the CAISO Governing Board may from time to time designate.

The EIM Entity and the CAISO are hereinafter referred to as the “Parties”.

**Whereas:**

- A.** The Parties named above operate Balancing Authority Areas.
- B.** The EIM Entity provides transmission service in accordance with an open access transmission tariff (“OATT”), including balancing Energy services.
- C.** The CAISO operates the Real-Time Market pursuant to the CAISO Tariff.
- D.** There [are/are not] third party transmission service providers within the EIM Entity Balancing Authority Area that intend to enable EIM services on their transmission systems.
- E.** The Parties are entering into this Agreement to enable the EIM Entity to participate in the CAISO’s Real-Time Market and to provide EIM services within the EIM Entity Balancing Authority Area, including Real-Time transfers of Energy among the CAISO Balancing Authority Area and other EIM Entity Balancing Authority Areas.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

**ARTICLE I**

**DEFINITIONS AND INTERPRETATION**

- 1.1 Master Definitions Supplement.** All terms and expressions used in this Agreement shall have the same meaning as those contained in the Master Definitions Supplement to the CAISO Tariff.
- 1.2 Rules of Interpretation.** The following rules of interpretation and conventions

shall apply to this Agreement:

- (a) if there is any inconsistency between this Agreement and the CAISO Tariff, the CAISO Tariff will prevail to the extent of the inconsistency;
- (b) the singular shall include the plural and vice versa;
- (c) the masculine shall include the feminine and neutral and vice versa;
- (d) "includes" or "including" shall mean "including without limitation";
- (e) references to a Section, Article or Schedule shall mean a Section, Article or a Schedule of this Agreement, as the case may be, unless the context otherwise requires;
- (f) a reference to a given agreement or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made;
- (g) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
- (h) unless the context otherwise requires, any reference to a "person" includes any individual, partnership, firm, company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having separate legal personality;
- (i) unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;
- (j) any reference to a day, week, month or year is to a calendar day, week, month or year;
- (k) unless the context requires otherwise, "or" is used in the conjunctive sense; and
- (l) the captions and headings in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement.

## ARTICLE II

### RESPONSIBILITIES OF EIM ENTITY AND CAISO

- 2.1 Scope of Responsibilities.** The Parties are individually responsible for the efficient use and reliable operation of their Balancing Authority Areas consistent with the Reliability Standards established by the Western Electricity Coordinating Council ("WECC") and the North American Electric Reliability Corporation ("NERC"), and in accordance with their respective tariffs on file with the Federal Energy Regulatory Commission ("FERC"). Nothing in this Agreement is intended

to change, supersede, or alter either Party's obligations to abide by NERC and WECC reliability standards or to provide open and non-discriminatory transmission access in accordance with the terms of their respective FERC tariffs.

- 2.2 Tariff Provisions.** The CAISO shall provide open access to the Real-Time Market in accordance with the terms of the CAISO Tariff. The EIM Entity shall have in effect provisions in its OATT to enable operation of the Real-Time Market in its Balancing Authority Area in accordance with the CAISO Tariff.
- 2.3 EIM Entity Scheduling Coordinator.** The EIM Entity shall be represented by an EIM Entity Scheduling Coordinator, which may be the EIM Entity or another entity certified by the CAISO to perform the functions of an EIM Entity Scheduling Coordinator.
- 2.4 EIM Transmission Service and Resource Registry Information.** The EIM Entity shall populate and update a registry established by the CAISO for EIM purposes with the static network topology information of its Balancing Authority Area, non-participating resources, and loads in accordance with the CAISO Tariff and Business Practice Manual for the Energy Imbalance Market. The EIM Entity is responsible for the accuracy and completeness of this information.
- 2.5 EIM Transmission Availability.** The EIM Entity shall make available for use in the Real-Time Market transmission capacity on its system that is not otherwise encumbered, reserved, scheduled, or being used by its transmission customers or by others and shall make arrangements with third party transmission service providers within its Balancing Authority Area that intend to enable EIM services on their transmission systems to provide such transmission capacity on their systems for use in the Real-Time Market. The EIM Entity shall provide the CAISO with real time information regarding the availability of transmission capacity for use in the EIM as provided in the CAISO Tariff and Business Practice Manual for the Energy Imbalance Market.

### ARTICLE III

#### TERM AND TERMINATION

- 3.1 Effective Date.** This Agreement shall be effective as of the later of the date it is executed by the Parties or the date it is accepted for filing and made effective by FERC and shall remain in full force and effect until terminated pursuant to Section 3.2 of this Agreement.
- 3.2 Termination**
  - 3.2.1 Termination by CAISO.** The CAISO may terminate this Agreement by giving written notice of termination in the event that the EIM Entity commits any material default under this Agreement or Section 29 of the CAISO Tariff that, if capable of being remedied, is not remedied within thirty (30) days after the CAISO has given the EIM Entity written notice of the default, unless the default is excused by reason of Uncontrollable Forces in accordance with Article IX of this Agreement.

With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if (1) the filing of the notice of termination is made after the preconditions for termination have been met, and the CAISO files the notice of termination within sixty (60) days after issuance of the notice of default; or (2) the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination or thirty (30) days after the date of the CAISO's notice of default, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders.

**3.2.2 Termination by EIM Entity.** In the event that the EIM Entity no longer wishes to enable EIM services within its Balancing Authority Area pursuant to the CAISO Tariff, it may terminate this Agreement on giving the CAISO not less than one-hundred and eighty (180) days written notice. With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if (1) the request to file a notice of termination is made after the preconditions for termination have been met, and the CAISO files the notice of termination within thirty (120) days of receipt of such request; or (2) the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination or upon the next production date of the Full-Network Model release following the one-hundred and eighty (180) days after the CAISO's receipt of the EIM Entity's notice of termination, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders.

**3.3 No Termination Charge.** The CAISO shall not levy an exit fee or other charge associated with CAISO systems, procedures, or other changes required by the termination of the EIM Entity's participation in the EIM as of the effective date of such notice, provided that EIM Entity obligations incurred under this Agreement prior to the effective date of such notice shall survive termination until satisfied.

#### **ARTICLE IV**

##### **CAISO TARIFF**

**4.1 Agreement Subject to CAISO Tariff.** This Agreement shall be subject to Section 29 of the CAISO Tariff, which shall be deemed to be incorporated herein. The EIM Entity shall abide by, and shall perform, all of the obligations of EIM Entities under the CAISO Tariff.

#### **ARTICLE V**

## **COSTS**

- 5.1 **Operating and Maintenance Costs.** The EIM Entity shall be responsible for all its costs incurred in connection with meeting its obligations under this Agreement.

## **ARTICLE VI**

### **DISPUTE RESOLUTION**

- 6.1 **Dispute Resolution.** The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. In the event any dispute is not settled, the Parties shall adhere to the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff, which is incorporated by reference, except that any reference in Section 13 of the CAISO Tariff to Market Participants shall be read as a reference to the EIM Entity and references to the CAISO Tariff shall be read as references to this Agreement.

## **ARTICLE VII**

### **REPRESENTATIONS AND WARRANTIES**

- 7.1 **Representation and Warranties.** Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.
- 7.2 **Necessary Approvals.** The EIM Entity represents that all necessary rights, leases, approvals, permits, licenses, easements, access to operate in compliance with this Agreement have been or will be obtained by the EIM Entity prior to the effective date of this Agreement, including any arrangement with third party Balancing Authorities.

## **ARTICLE VIII**

### **LIABILITY**

- 8.1 **Liability.** The provisions of Section 14 of the CAISO Tariff will apply to liability arising under this Agreement, except that all references in Section 14 of the CAISO Tariff to Market Participants shall be read as references to the EIM Entity and references to the CAISO Tariff shall be read as references to this Agreement.

## **ARTICLE IX**

### **UNCONTROLLABLE FORCES**

- 9.1 **Uncontrollable Forces Tariff Provisions.** Section 14.1 of the CAISO Tariff shall be incorporated by reference into this Agreement except that all references in Section 14.1 of the CAISO Tariff to Market Participants shall be read as a reference to the EIM Entity and references to the CAISO Tariff shall be read as references to this Agreement.



## ARTICLE X

### MISCELLANEOUS

- 10.1 Assignments.** Either Party may assign or transfer any or all of its rights or obligations under this Agreement with the other Party's prior written consent in accordance with Section 22.2 of the CAISO Tariff and no Party may assign or transfer any or all of its rights or obligations under this Agreement without such consent. Such consent shall not be unreasonably withheld. Any such transfer or assignment shall be conditioned upon the successor in interest accepting the rights or obligations under this Agreement as if said successor in interest were an original Party to this Agreement.
- 10.2 Notices.** Any notice, demand or request which may be given to or made upon either Party regarding this Agreement shall be made in accordance with Section 22.4 of the CAISO Tariff, provided that all references in Section 22.4 of the CAISO Tariff to Market Participants shall be read as a reference to the EIM Entity and references to the CAISO Tariff shall be read as references to this Agreement, and unless otherwise stated or agreed shall be made to the representative of the other Party indicated in Schedule 1. A Party must update the information in Schedule 1 of this Agreement as information changes. Such changes shall not constitute an amendment to this Agreement.
- 10.3 Waivers.** Any waiver at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- 10.4 Governing Law and Forum.** This Agreement shall be deemed to be a contract made under, and for all purposes shall be governed by and construed in accordance with, the laws of the State of California, except its conflict of law provisions. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Agreement to which the CAISO ADR Procedures do not apply shall be brought in any of the following forums, as appropriate: any court of the State of California, any federal court of the United States of America located in the State of California, or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.
- 10.5 Consistency with Federal Laws and Regulations.** This Agreement shall incorporate by reference Section 22.9 of the CAISO Tariff as if the references to the CAISO Tariff were referring to this Agreement.
- 10.6 Merger.** This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereof and supersedes all prior agreements, whether written or oral, with respect to such subject matter.
- 10.7 Severability.** If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to

any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.

- 10.8 Amendments.** This Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. Nothing contained herein shall be construed as affecting in any way the right of the CAISO to unilaterally make application to FERC for a change in the rates, terms and conditions of this Agreement under Section 205 of the FPA and pursuant to FERC's rules and regulations promulgated thereunder, and the EIM Entity shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the FPA and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the FPA and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 10.9 Counterparts.** This Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date hereinabove written.

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

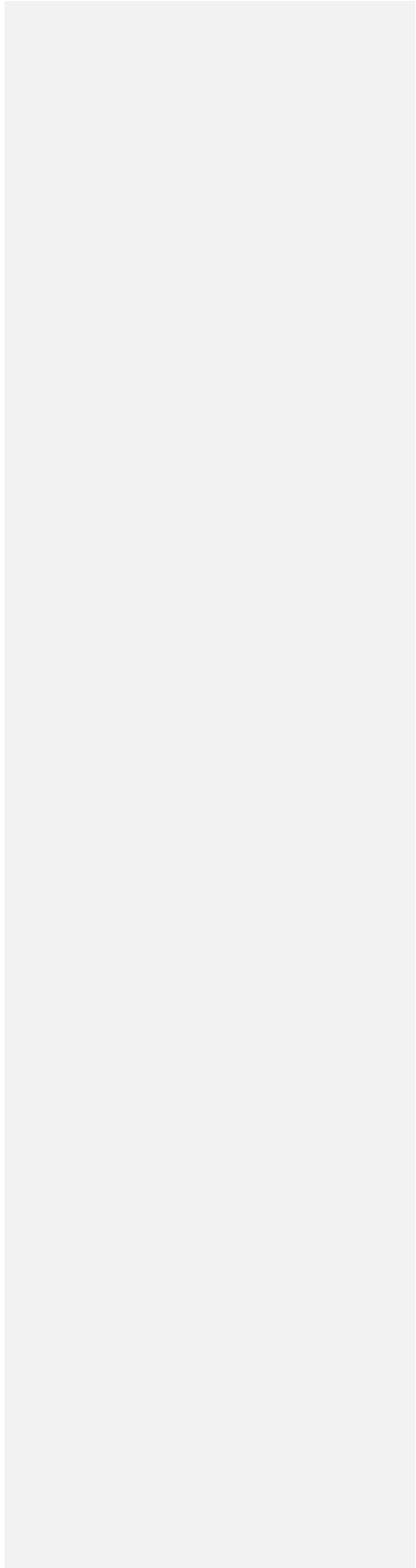
**[NAME OF EIM ENTITY]**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**SCHEDULE 1**

**NOTICES**

**[Section 10.2]**

**EIM Entity**

Name of Primary

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax No: \_\_\_\_\_

Name of Alternative

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax No: \_\_\_\_\_

**CAISO**

Name of Primary

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax No: \_\_\_\_\_

Name of Alternative

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

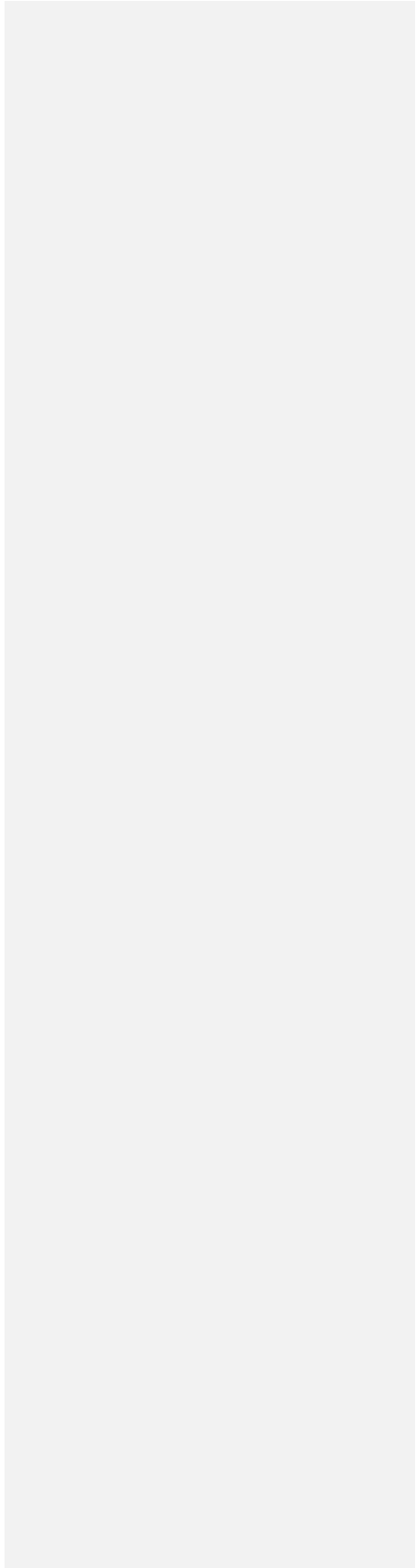
Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax No: \_\_\_\_\_



**Appendix B. \_\_**

**EIM Entity Scheduling Coordinator Agreement (EIMESCA)**

**THIS AGREEMENT** is made this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ and is entered into, by and between:

- (1) **[Full legal name]** having a registered or principal executive office at **[address]** (the "EIM Entity Scheduling Coordinator")

and

- (2) **CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**, a California nonprofit public benefit corporation having a principal executive office located at such place in the State of California as the CAISO Governing Board may from time to time designate (the "CAISO").

The EIM Entity Scheduling Coordinator and the CAISO are hereinafter referred to as the "Parties".

Whereas:

- A. The EIM Entity Scheduling Coordinator has applied for certification or has been certified by the CAISO under the certification procedure referred to in Section 29 of the CAISO Tariff.
- B. The EIM Entity Scheduling Coordinator wishes to represent an EIM Entity under the terms and conditions set forth in Section 29 of the CAISO Tariff.

**NOW IT IS HEREBY AGREED as follows:**

**1. Definitions and Interpretation.**

**1.1 Master Definitions Supplement.** Terms and expressions used in this Agreement shall have the same meanings as those contained in the Master Definitions Supplement to the CAISO Tariff.

**1.2 Rules of Interpretation.** The following rules of interpretation and conventions shall apply to this Agreement:

- (a) if there is any inconsistency between this Agreement and the CAISO Tariff, the CAISO Tariff will prevail to the extent of the inconsistency;
- (b) the singular shall include the plural and vice versa;
- (c) the masculine shall include the feminine and neutral and vice versa;
- (d) "includes" or "including" shall mean "including without limitation";

- (e) references to a Section, Article or Schedule shall mean a Section, Article or a Schedule of this Agreement, as the case may be, unless the context otherwise requires;
- (f) a reference to a given agreement or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made;
- (g) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
- (h) unless the context otherwise requires, any reference to a “person” includes any individual, partnership, firm, company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having separate legal personality;
- (i) unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;
- (j) unless the context otherwise requires, “or” is used in the conjunctive sense;
- (k) any reference to a day, week, month or year is to a calendar day, week, month or year; and
- (l) the captions and headings in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement.

## **2. Covenant of the EIM Entity Scheduling Coordinator.**

### **2.1 The EIM Entity Scheduling Coordinator agrees that:**

- 2.1.1** CAISO Tariff Section 29 governs all aspects of EIM information submission, including the financial and technical criteria for EIM Entity Scheduling Coordinator EIM Base Schedule submissions, Settlement, information reporting requirements, and confidentiality restrictions;
- 2.1.2** It will abide by and will perform all of the obligations under Section 29 of the CAISO Tariff placed on EIM Entity Scheduling Coordinators in respect of all matters set forth therein, including ongoing obligations in respect of scheduling, Settlement, system security policy and procedures to be developed by the CAISO from time to time, billing and payments, confidentiality and dispute resolution;
- 2.1.3** It shall ensure that each EIM Entity that it represents enters into an EIM Entity Agreement in accordance with Section 29 of the CAISO Tariff;
- 2.1.4** It shall have the primary responsibility to the CAISO, as principal, for all EIM Entity Scheduling Coordinator payment obligations under Section 29

of the CAISO Tariff; and

**2.1.5** Its status as an EIM Entity Scheduling Coordinator is at all times subject to Section 29 of the CAISO Tariff.

**3. Term and Termination.**

**3.1** This Agreement shall commence on the later of (a) \_\_\_\_\_ or (b) the date the EIM Entity Scheduling Coordinator is certified by the CAISO as an EIM Entity Scheduling Coordinator.

**3.2** This Agreement may be terminated in accordance with the provisions of Section 4.5.4.4 and 4.5.4.5 of the CAISO Tariff; provided, however, that any outstanding financial right or obligation or any other right or obligation under the CAISO Tariff of the EIM Entity Scheduling Coordinator that may have arisen under this Agreement, and any provision of this Agreement necessary to give effect to such right or obligation, shall survive such termination until satisfied. The CAISO shall timely file any notice of termination with FERC, if this Agreement has been filed with FERC, or must otherwise comply with the requirements of FERC rules regarding termination.

**4. Settlement Account.**

**4.1** The EIM Entity Scheduling Coordinator shall maintain at all times an account with a bank capable of Fedwire transfer and, at its option, may also maintain an account capable of ACH transfers, to which credits or debits that arise under Section 29 of the CAISO Tariff shall be made in accordance with the billing and Settlement provisions of Section 11 of the CAISO Tariff. Such account shall be the account as notified by the EIM Entity Scheduling Coordinator to the CAISO from time to time by giving at least 20 days written notice before the new account becomes operational, together with all information necessary for the CAISO's processing of a change in that account.

**5. Agreement to be bound by CAISO Tariff.**

**5.1** Section 29 of the CAISO Tariff is incorporated herein and made a part hereof. In the event of a conflict between the terms and conditions of this Agreement and any other terms and conditions set forth in the CAISO Tariff that may apply to EIM Entity Scheduling Coordinators, the terms and conditions of the CAISO Tariff shall prevail.

**6. Electronic Contracting.**

**6.1** All submitted information, applications, schedules, Bids, confirmations, changes to information on file with the CAISO and other communications conducted via electronic transfer (e.g. direct computer link, FTP file transfer, bulletin board, e-mail, facsimile or any other means established by the CAISO) shall have the same legal rights, responsibilities, obligations and other implications as set forth in the terms and conditions of Section 29 of the CAISO Tariff as if executed in written format.



**7. Penalties and Sanctions.**

7.1 The EIM Entity Scheduling Coordinator shall be subject to all penalties made applicable to EIM Entity Scheduling Coordinators set forth in Section 29 of the CAISO Tariff.

**8. Costs.**

8.1 The EIM Entity Scheduling Coordinator shall be responsible for all its costs incurred for the purpose of meeting its obligations under this Agreement.

**9. Dispute Resolution.**

9.1 The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. In the event any dispute is not settled, the Parties shall adhere to the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff, which is incorporated by reference, except that any reference in Section 13 of the CAISO Tariff to Market Participants shall be read as a reference to the EIM Entity Scheduling Coordinator and references to the CAISO Tariff shall be read as references to this Agreement.

**10. Representation and Warranties.**

10.1 Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.

**11. Liability.**

11.1 The provisions of Section 14 of the CAISO Tariff will apply to liability arising under this Agreement, except that all references in Section 14 of the CAISO Tariff to Market Participants shall be read as references to the EIM Entity Scheduling Coordinator and references to the CAISO Tariff shall be read as references to this Agreement.

**12. Uncontrollable Forces.**

12.1 Section 14.1 of the CAISO Tariff shall be incorporated by reference into this Agreement except that all references in Section 14.1 of the CAISO Tariff to Market Participants shall be read as a reference to the EIM Entity Scheduling Coordinator and references to the CAISO Tariff shall be read as references to this Agreement.

**13. Miscellaneous.**

13.1 **Assignments.** Either Party may assign or transfer any or all of its rights and/or obligations under this Agreement with the other Party's prior written consent in accordance with Section 22.2 of the CAISO Tariff and no Party may assign or transfer any or all of its rights or obligations under this Agreement without such

consent. Such consent shall not be unreasonably withheld. Any such transfer or assignment shall be conditioned upon the successor in interest accepting the rights and/or obligations under this Agreement as if said successor in interest was an original Party to this Agreement.

- 13.2 Notices.** Any notice, demand or request which may be given to or made upon either Party regarding this Agreement shall be made in accordance with Section 22.4 of the CAISO Tariff, provided that all references in Section 22.4 of the CAISO Tariff to Market Participants shall be read as a reference to the EIM Entity Scheduling Coordinator and references to the CAISO Tariff shall be read as references to this Agreement, and unless otherwise stated or agreed shall be made to the representative of the other Party indicated in Schedule 1. A Party must update the information in Schedule 1 of this Agreement as information changes. Such changes shall not constitute an amendment to this Agreement.
- 13.3 Waivers.** Any waiver at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- 13.4 Governing Law and Forum.** This Agreement shall be deemed to be a contract made under, and for all purposes shall be governed by and construed in accordance with, the laws of the State of California, except its conflict of law provisions. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Agreement to which the CAISO ADR Procedures do not apply, shall be brought in any of the following forums, as appropriate: any court of the State of California, any federal court of the United States of America located in the State of California, or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.
- 13.5 Consistency with Federal Laws and Regulations.** This Agreement shall incorporate by reference Section 22.9 of the CAISO Tariff as if the references to the CAISO Tariff were referring to this Agreement.
- 13.6 Merger.** This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereof and supersedes all prior agreements, whether written or oral, with respect to such subject matter.
- 13.7 Severability.** If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental

agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.

- 13.8 Amendments.** This Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. Nothing contained herein shall be construed as affecting in any way the right of the CAISO to unilaterally make application to FERC for a change in the rates, terms and conditions of this Agreement under Section 205 of the FPA and pursuant to FERC's rules and regulations promulgated thereunder, and the EIM Entity Scheduling Coordinator shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the FPA and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the FPA and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 13.9 Counterparts.** This Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective authorized officials.

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

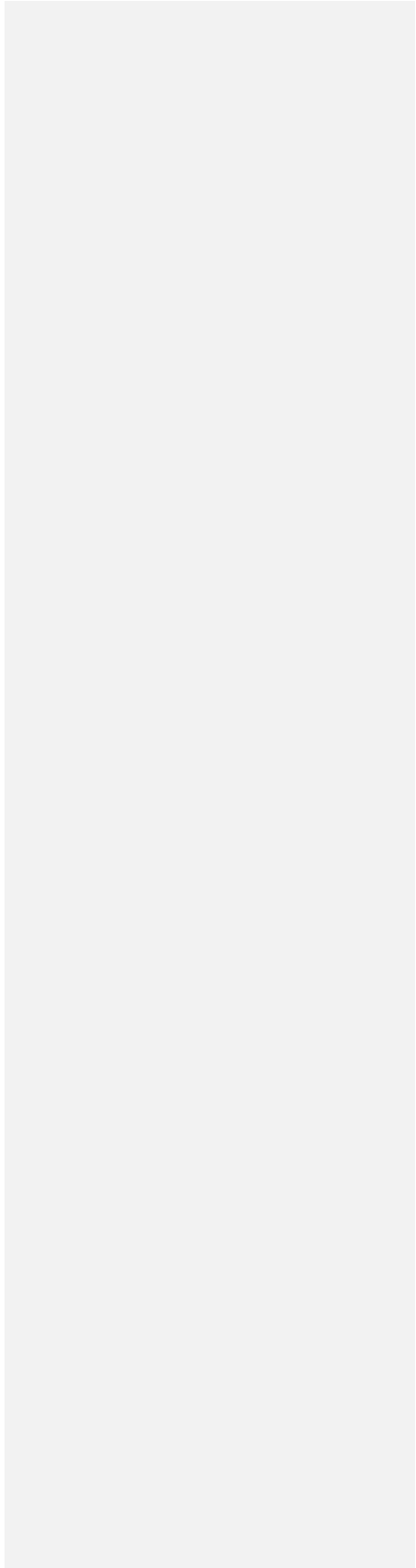
**[Name of EIM Entity Scheduling Coordinator]**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**SCHEDULE 1**

**NOTICES**

**[Section 13.2]**

**EIM Entity Scheduling Coordinator**

Name of Primary

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax No: \_\_\_\_\_

Name of Alternative

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax No: \_\_\_\_\_

**CAISO**

Name of Primary

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Name of Alternative

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

**Appendix B.\_\_\_\_**

**EIM Participating Resource Agreement (EIMPRA)**

**THIS ENERGY IMBALANCE MARKET PARTICIPATING RESOURCE AGREEMENT (“AGREEMENT”)** is established this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_ and is accepted by and between:

**[Full legal name]** (“EIM Participating Resource”), having its registered and principal executive office at [address],

and

**California Independent System Operator Corporation** (“CAISO”), a California nonprofit public benefit corporation having a principal executive office located at such place in the State of California as the CAISO Governing Board may from time to time designate.

The EIM Participating Resource and the CAISO are hereinafter referred to as the “Parties”.

**Whereas:**

- A.** The CAISO operates a Real-Time Market for Energy pursuant to the CAISO Tariff.
- B.** The EIM Participating Resource receives balancing Energy service from an EIM Entity in accordance with the EIM Entity’s open access transmission tariff or from another transmission service provider within the EIM Entity Balancing Authority Area.
- C.** The Parties wish to enter into this Agreement to establish the terms and conditions for participation in the CAISO’s Real-Time Market by the EIM Participating Resource in accordance with Section 29 of the CAISO Tariff.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

**ARTICLE I**

**DEFINITIONS AND INTERPRETATION**

- 1.1 Master Definitions Supplement.** All terms and expressions used in this Agreement shall have the same meaning as those contained in the Master Definitions Supplement to the CAISO Tariff.
- 1.2 Rules of Interpretation.** The following rules of interpretation and conventions shall apply to this Agreement:
  - (a) if there is any inconsistency between this Agreement and the CAISO

- Tariff, the CAISO Tariff will prevail to the extent of the inconsistency;
- (b) the singular shall include the plural and vice versa;
  - (c) the masculine shall include the feminine and neutral and vice versa;
  - (d) “includes” or “including” shall mean “including without limitation”;
  - (e) references to a Section, Article or Schedule shall mean a Section, Article or a Schedule of this Agreement, as the case may be, unless the context otherwise requires;
  - (f) a reference to a given agreement or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made;
  - (g) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
  - (h) unless the context otherwise requires, any reference to a “person” includes any individual, partnership, firm, company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having separate legal personality;
  - (i) unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;
  - (j) unless the context otherwise requires, “or” is used in the conjunctive sense;
  - (k) any reference to a day, week, month or year is to a calendar day, week, month or year; and
  - (l) the captions and headings in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement.

## ARTICLE II

### RESPONSIBILITIES OF EIM PARTICIPATING RESOURCE

- 2.1 EIM Participating Resource Scheduling Coordinator.** The EIM Participating Resource shall be represented by an EIM Participating Resource Scheduling Coordinator, which may be the EIM Participating Resource or another entity certified by the ISO to perform the functions of an EIM Participating Resource Scheduling Coordinator.
- 2.2 EIM Participating Resources.** The EIM Participating Resource has identified on Schedule 1 all EIM Resources that it owns, operates, has a contractual entitlement to, or that otherwise will be included in the Master File.



- 2.2.1 Technical Characteristics.** The EIM Participating Resource has provided to the CAISO in Schedule 1 the required information regarding the operating characteristics of each EIM Resource listed in Schedule 1, in addition to any further level of detail that may be required by Section 29 of the CAISO Tariff.
- 2.2.2 Notification of Changes.** Sixty (60) days prior to changing any technical information in Schedule 1, the EIM Participating Resource shall notify the CAISO of the proposed changes. The CAISO shall post on the CAISO Website a schedule showing, for at least one year in advance, (i) the proposed dates on which the CAISO's Master File will be updated, which dates shall occur at least every three months; (ii) the dates on which the information contained in the revised Master File will become effective; and (iii) the deadlines by which changed technical information must be submitted to the CAISO in order to be tested and included in the next scheduled update of the CAISO's Master File. Unless the EIM Resource fails to test at the values in the proposed change(s), the change will become effective upon the effective date for the next scheduled update of the Master File, provided the EIM Participating Resource submits the changed information by the applicable deadline and is tested by the deadline. Subject to such notification this Agreement shall not apply to any EIM Resource identified in Schedule 1 which the EIM Participating Resource no longer owns or no longer has contractual entitlement to.

### ARTICLE III

#### TERM AND TERMINATION

- 3.1 Effective Date.** This Agreement shall be effective as of the later of the date it is executed by the Parties or the date it is accepted for filing and made effective by FERC, if such FERC filing is required, and shall remain in full force and effect until terminated pursuant to Section 3.2 of this Agreement.
- 3.2 Termination**
- 3.2.1 Termination by CAISO.** Subject to Section 5.2, the CAISO may terminate this Agreement by giving written notice of termination in the event that the EIM Participating Resource commits any material default under this Agreement and/or the CAISO Tariff which, if capable of being remedied, is not remedied within thirty (30) days after the CAISO has given, to the EIM Participating Resource, written notice of the default, unless excused by reason of Uncontrollable Forces in accordance with Article X of this Agreement. With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC, if this Agreement was filed with FERC, or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if: (1) the filing of the notice of termination is made after the preconditions for termination have been met, and the CAISO files the notice of termination within sixty (60) days after issuance of the notice of default; or (2) the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination, if filed with FERC, or thirty (30) days after the date of the CAISO's notice of default, if terminated in accordance with the requirements of

FERC Order No. 2001 and related FERC orders.

**3.2.2 Termination by EIM Participating Resource.** In the event that the EIM Participating Resource no longer wishes to submit Bids and transmit Energy over the CAISO Controlled Grid, it may terminate this Agreement, on giving the CAISO not less than ninety (90) days written notice, provided, however, that in accordance with Section 3.3, the EIM Participating Resource may modify Schedule 1 to remove EIM Resources which it no longer owns or no longer has contractual entitlement to and such modification shall be effective upon receipt by the CAISO. With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC, if this Agreement has been filed with FERC, or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and the CAISO files the notice of termination within thirty (30) days of receipt of such request; or (2) the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination, if such notice is required to be filed with FERC, or upon ninety (90) days after the CAISO's receipt of the EIM Entity's notice of termination, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders.

#### ARTICLE IV

##### CAISO TARIFF

- 4.1 Agreement Subject to CAISO Tariff.** This Agreement shall be subject to Section 29 of the CAISO Tariff, which shall be deemed to be incorporated herein. The EIM Participating Resource shall abide by, and shall perform all of the obligations under the CAISO Tariff placed on EIM Participating Resources in respect of all matters set forth therein.
- 4.1.1 Additional EIM Participating Resource Requirements.** The EIM Participating Resource shall comply with all CAISO Tariff requirements associated with resource registration and the measurement and verification of the associated services to be provided for EIM Resources other than Generating Units or CAISO qualified resources delivering Energy.

#### ARTICLE V

##### PENALTIES AND SANCTIONS

- 5.1 Penalties.** If the EIM Participating Resource fails to comply with any provisions of this Agreement, the CAISO shall be entitled to impose penalties and sanctions on the EIM Entity. No penalties or sanctions may be imposed under this Agreement unless a CAISO Tariff provision providing for such penalties or sanctions has first been filed with and made effective by FERC. Nothing in the Agreement, with the exception of the provisions relating to the CAISO ADR Procedures, shall be construed as waiving the rights of the EIM Participating

Resource to oppose or protest any penalty proposed by the CAISO to the FERC or the specific imposition by the CAISO of any FERC-approved penalty on the EIM Entity.

- 5.2 Corrective Measures.** If the EIM Participating Resource fails to meet or maintain the requirements set forth in this Agreement or Section 29 the CAISO Tariff, the CAISO shall be permitted to take any of the measures, contained or referenced in Section 29 of the CAISO Tariff, which the CAISO deems to be necessary to correct the situation.

## ARTICLE VI

### COSTS

- 6.1 Operating and Maintenance Costs.** The EIM Participating Resource shall be responsible for all its costs incurred in connection with meeting its obligations under this Agreement.

## ARTICLE VII

### DISPUTE RESOLUTION

- 7.1 Dispute Resolution.** The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. In the event any dispute is not settled, the Parties shall adhere to the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff, which is incorporated by reference, except that any reference in Section 13 of the CAISO Tariff to Market Participants shall be read as a reference to the EIM Participating Resource and references to the CAISO Tariff shall be read as references to this Agreement.

## ARTICLE VIII

### REPRESENTATIONS AND WARRANTIES

- 8.1 Representation and Warranties.** Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.
- 8.2 Necessary Approvals.** The EIM Participating Resource represents that all necessary rights, leases, approvals, permits, licenses, easements, access to operate in compliance with this Agreement have been or will be obtained by the EIM Participating Resource prior to the effective date of this Agreement, including any arrangement with third party Balancing Authorities.

## ARTICLE IX

### LIABILITY

- 9.1 **Liability.** The provisions of Section 14 of the CAISO Tariff will apply to liability arising under this Agreement, except that all references in Section 14 of the CAISO Tariff to Market Participants shall be read as references to the EIM Participating Resource and references to the CAISO Tariff shall be read as references to this Agreement.

## ARTICLE X

### UNCONTROLLABLE FORCES

- 10.1 **Uncontrollable Forces Tariff Provisions.** Section 14.1 of the CAISO Tariff shall be incorporated by reference into this Agreement except that all references in Section 14.1 of the CAISO Tariff to Market Participants shall be read as a reference to the EIM Participating Resource and references to the CAISO Tariff shall be read as references to this Agreement.

## ARTICLE XI

### MISCELLANEOUS

- 11.1 **Assignments.** Either Party may assign or transfer any or all of its rights or obligations under this Agreement with the other Party's prior written consent in accordance with Section 22.2 of the CAISO Tariff and no Party may assign or transfer any or all of its rights or obligations under this Agreement without such consent. Such consent shall not be unreasonably withheld. Any such transfer or assignment shall be conditioned upon the successor in interest accepting the rights and/or obligations under this Agreement as if said successor in interest were an original Party to this Agreement.
- 11.2 **Notices.** Any notice, demand or request which may be given to or made upon either Party regarding this Agreement shall be made in accordance with Section 22.4 of the CAISO Tariff, provided that all references in Section 22.4 of the CAISO Tariff to Market Participants shall be read as a reference to the EIM Participating Resource and references to the CAISO Tariff shall be read as references to this Agreement, and unless otherwise stated or agreed shall be made to the representative of the other Party indicated in Schedule 2. A Party must update the information in Schedule 2 of this Agreement as information changes. Such changes shall not constitute an amendment to this Agreement.
- 11.3 **Waivers.** Any waiver at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.

- 11.4 Governing Law and Forum.** This Agreement shall be deemed to be a contract made under, and for all purposes shall be governed by and construed in accordance with, the laws of the State of California, except its conflict of law provisions. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Agreement to which the CAISO ADR Procedures do not apply shall be brought in any of the following forums, as appropriate: any court of the State of California, any federal court of the United States of America located in the State of California, or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.
- 11.5 Consistency with Federal Laws and Regulations.** This Agreement shall incorporate by reference Section 22.9 of the CAISO Tariff as if the references to the CAISO Tariff were referring to this Agreement.
- 11.6 Merger.** This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereof and supersedes all prior agreements, whether written or oral, with respect to such subject matter.
- 11.7 Severability.** If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.
- 11.8 Amendments.** This Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. Nothing contained herein shall be construed as affecting in any way the right of the CAISO to unilaterally make application to FERC for a change in the rates, terms and conditions of this Agreement under Section 205 of the FPA and pursuant to FERC's rules and regulations promulgated thereunder, and the EIM Participating Resource shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the FPA and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the FPA and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 11.9 Counterparts.** This Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date hereinabove written.

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[NAME OF EIM PARTICIPATING RESOURCE]**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**SCHEDULE 1**

**EIM Resources**

**[Section 2.4]**

**SCHEDULE 2**

**NOTICES**

**[Section 11.2]**

**EIM Participating Resource**

Name of Primary

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax No: \_\_\_\_\_

Name of Alternative

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax No: \_\_\_\_\_



**CAISO**

Name of Primary

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax No: \_\_\_\_\_

Name of Alternative

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax No: \_\_\_\_\_

**Appendix B. \_\_**

**EIM Participating Resource Scheduling Coordinator Agreement (EIMPRSCA)**

**THIS AGREEMENT** is made this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ and is entered into, by and between:

- (1) **[Full legal name]** having a registered or principal executive office at **[address]** (the "EIM Participating Resource Scheduling Coordinator")

and

- (2) **CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**, a California nonprofit public benefit corporation having a principal executive office located at such place in the State of California as the CAISO Governing Board may from time to time designate (the "CAISO").

The EIM Participating Resource Scheduling Coordinator and the CAISO are hereinafter referred to as the "Parties".

Whereas:

- A. The EIM Participating Resource Scheduling Coordinator has applied for or has been certified by the CAISO under the certification procedure referred to in Section 29 of the CAISO Tariff.
- B. The EIM Participating Resource Scheduling Coordinator wishes to represent EIM Participating Resources under the terms and conditions set forth in Section 29 of the CAISO Tariff.

**NOW IT IS HEREBY AGREED as follows:**

**1. Definitions and Interpretation.**

**1.1 Master Definitions Supplement.** Terms and expressions used in this Agreement shall have the same meanings as those contained in the Master Definitions Supplement to the CAISO Tariff.

**1.2 Rules of Interpretation.** The following rules of interpretation and conventions shall apply to this Agreement:

- (a) if there is any inconsistency between this Agreement and the CAISO Tariff, the CAISO Tariff will prevail to the extent of the inconsistency;
- (b) the singular shall include the plural and vice versa;
- (c) the masculine shall include the feminine and neutral and vice versa;
- (d) "includes" or "including" shall mean "including without limitation";

- (e) references to a Section, Article or Schedule shall mean a Section, Article or a Schedule of this Agreement, as the case may be, unless the context otherwise requires;
- (f) a reference to a given agreement or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made;
- (g) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
- (h) unless the context otherwise requires, any reference to a "person" includes any individual, partnership, firm, company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having separate legal personality;
- (i) unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;
- (j) unless the context otherwise requires, "or" is used in the conjunctive sense;
- (k) any reference to a day, week, month or year is to a calendar day, week, month or year; and
- (l) the captions and headings in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement.

**2. Covenant of the EIM Participating Resource Scheduling Coordinator.**

**2.1 The EIM Participating Resource Scheduling Coordinator agrees that:**

- 2.1.1** CAISO Tariff Section 29 governs all aspects of bidding and scheduling of Energy in the Real-Time Market, including (without limitation), the financial and technical criteria applicable to EIM Participating Resource Scheduling Coordinators, and other bidding, Settlement, information reporting requirements, and confidentiality restrictions applicable to EIM Participating Resource Scheduling Coordinators;
- 2.1.2** It shall abide by, and shall perform all of the obligations under Section 29 of the CAISO Tariff placed on EIM Participating Resource Scheduling Coordinators in respect of all matters set forth therein, including, without limitation, ongoing obligations in respect of scheduling, Settlement, system security policy and procedures to be developed by the CAISO from time to time, billing and payments, confidentiality, and dispute resolution;
- 2.1.3** It shall ensure that each EIM Participating Resource for which it submits Bids enters into an EIM Participating Resource Agreement in accordance

with Section 29 of the CAISO Tariff;

**2.1.4** It shall have the primary responsibility to the CAISO, as principal, for all EIM Participating Resource Scheduling Coordinator payment obligations pursuant to Section 29 of the CAISO Tariff; and

**2.1.5** Its status as an EIM Participating Resource Scheduling Coordinator is at all times subject to Section 29 of the CAISO Tariff.

**3. Term and Termination.**

**3.1** This Agreement shall commence on the later of (a) \_\_\_\_\_ or (b) the date the EIM Participating Resource Scheduling Coordinator is certified by the CAISO as an EIM Participating Resource Scheduling Coordinator.

**3.2** This Agreement may be terminated in accordance with the provisions of Section 4.5.4.4 and 4.5.4.5 of the CAISO Tariff; provided, however, that any outstanding financial right or obligation or any other right or obligation under the CAISO Tariff of the EIM Participating Resource Scheduling Coordinator that may have arisen under this Agreement, and any provision of this Agreement necessary to give effect to such right or obligation, shall survive such termination until satisfied. The CAISO shall timely file any notice of termination with FERC, if this Agreement has been filed with FERC, or must otherwise comply with the requirements of FERC rules regarding termination.

**4. Settlement Account.**

**4.1** The EIM Participating Resource Scheduling Coordinator shall maintain at all times an account with a bank capable of Fedwire transfer and, at its option, may also maintain an account capable of ACH transfers, to which credits or debits that arise under Section 29 of the CAISO Tariff shall be made in accordance with the billing and Settlement provisions of Section 11 of the CAISO Tariff. Such account shall be the account as notified by the EIM Participating Resource Scheduling Coordinator to the CAISO from time to time by giving at least 20 days written notice before the new account becomes operational, together with all information necessary for the CAISO's processing of a change in that account.

**5. Agreement to be bound by CAISO Tariff.**

**5.1** CAISO Tariff Section 29 is incorporated herein and made a part hereof. In the event of a conflict between the terms and conditions of this Agreement and any other terms and conditions set forth in the CAISO Tariff, the terms and conditions of the CAISO Tariff shall prevail.

**6. Electronic Contracting.**

**6.1** All submitted information, applications, schedules, Bids, confirmations, changes to information on file with the CAISO and other communications conducted via electronic transfer (e.g. direct computer link, FTP file transfer, bulletin board, e-mail, facsimile or any other means established by the CAISO) shall have the same legal rights, responsibilities, obligations and other implications as set forth

in the terms and conditions of Section 29 of the CAISO Tariff as if executed in written format.

**7. Penalties and Sanctions.**

**7.1** The EIM Participating Resource Scheduling Coordinator shall be subject to all penalties made applicable to EIM Participating Resource Scheduling Coordinators set forth in Section 29 of the CAISO Tariff.

**8. Costs.**

**8.1** The EIM Participating Resource Scheduling Coordinator shall be responsible for all its costs incurred for the purpose of meeting its obligations under this Agreement.

**9. Dispute Resolution.**

**9.1** The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. In the event any dispute is not settled, the Parties shall adhere to the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff, which is incorporated by reference, except that any reference in Section 13 of the CAISO Tariff to Market Participants shall be read as a reference to the EIM Participating Resource Scheduling Coordinator and references to the CAISO Tariff shall be read as references to this Agreement.

**10. Representation and Warranties.**

**10.1** Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.

**11. Liability.**

**11.1** The provisions of Section 14 of the CAISO Tariff will apply to liability arising under this Agreement, except that all references in Section 14 of the CAISO Tariff to Market Participants shall be read as references to the EIM Participating Resource Scheduling Coordinator and references to the CAISO Tariff shall be read as references to this Agreement.

**12. Uncontrollable Forces.**

**12.1** Section 14.1 of the CAISO Tariff shall be incorporated by reference into this Agreement except that all references in Section 14.1 of the CAISO Tariff to Market Participants shall be read as a reference to the EIM Participating Resource Scheduling Coordinator and references to the CAISO Tariff shall be read as references to this Agreement.

**13. Miscellaneous.**

**13.1 Assignments.** Either Party may assign or transfer any or all of its rights and/or obligations under this Agreement with the other Party's prior written consent in

accordance with Section 22.2 of the CAISO Tariff and no Party may assign or transfer any or all of its rights or obligations under this Agreement without such consent. Such consent shall not be unreasonably withheld. Any such transfer or assignment shall be conditioned upon the successor in interest accepting the rights and/or obligations under this Agreement as if said successor in interest was an original Party to this Agreement.

- 13.2 Notices.** Any notice, demand or request which may be given to or made upon either Party regarding this Agreement shall be made in accordance with Section 22.4 of the CAISO Tariff, provided that all references in Section 22.4 of the CAISO Tariff to Market Participants shall be read as a reference to the EIM Participating Resource Scheduling Coordinator and references to the CAISO Tariff shall be read as references to this Agreement, and unless otherwise stated or agreed shall be made to the representative of the other Party indicated in Schedule 1. A Party must update the information in Schedule 1 of this Agreement as information changes. Such changes shall not constitute an amendment to this Agreement.
- 13.3 Waivers.** Any waiver at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- 13.4 Governing Law and Forum.** This Agreement shall be deemed to be a contract made under, and for all purposes shall be governed by and construed in accordance with, the laws of the State of California, except its conflict of law provisions. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Agreement to which the CAISO ADR Procedures do not apply, shall be brought in any of the following forums, as appropriate: any court of the State of California, any federal court of the United States of America located in the State of California, or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.
- 13.5 Consistency with Federal Laws and Regulations.** This Agreement shall incorporate by reference Section 22.9 of the CAISO Tariff as if the references to the CAISO Tariff were referring to this Agreement.
- 13.6 Merger.** This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereof and supersedes all prior agreements, whether written or oral, with respect to such subject matter.
- 13.7 Severability.** If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their

application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.

- 13.8 Amendments.** This Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. Nothing contained herein shall be construed as affecting in any way the right of the CAISO to unilaterally make application to FERC for a change in the rates, terms and conditions of this Agreement under Section 205 of the FPA and pursuant to FERC's rules and regulations promulgated thereunder, and the EIM Participating Resource Scheduling Coordinator shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the FPA and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the FPA and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 13.9 Counterparts.** This Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective authorized officials.

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[Name of EIM Participating Resource Scheduling Coordinator]**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**SCHEDULE 1**

**NOTICES**

**[Section 13.2]**

**EIM Participating Resource Scheduling Coordinator**

Name of Primary

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax No: \_\_\_\_\_

Name of Alternative

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax No: \_\_\_\_\_

**CAISO**

Name of Primary

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

Name of Alternative

Representative: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

City/State/Zip Code: \_\_\_\_\_

Email address: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_