

October 6, 2016

The Honorable Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

**Re: California Independent System Operator Corporation  
Docket No. ER17-\_\_\_\_\_-000  
Tariff Revision and Request for Shortened Comment Period**

Dear Secretary Bose:

The California Independent System Operator Corporation (CAISO) respectfully submits for filing an amendment to the CAISO Tariff.<sup>1</sup> The amendment corrects ministerial errors in the CAISO tariff related to the implementation of the flexible ramping product in the CAISO markets. The corrections relate to references to the “Flexible Ramping Constraint” that remain in the CAISO tariff. The flexible ramping product replaces the flexible ramping constraint and the current references to the “Flexible Ramping Constraint” creates ambiguity. To remove any ambiguity, the CAISO respectfully requests an order by October 31, 2016, and an effective date for the tariff revisions in the instant filing of November 1, 2016, to coincide with the implementation of the flexible ramping product. Consistent with that timeframe, the CAISO requests that the Commission establish a shortened comment period in order to facilitate an order by the requested date.

## **I. BACKGROUND**

On June 24, 2016, the CAISO submitted a tariff amendment to implement the flexible ramping product. The flexible ramping product replaces the existing flexible ramping constraint that the CAISO applies in its real-time market, including the Energy Imbalance Market (EIM). It will enhance the CAISO’s ability to manage the ramping capability necessary to meet changes in net demand—both forecasted and unexpected. The CAISO designed the flexible ramping product to provide incentives for resources to make ramping capacity available to the CAISO. The CAISO will implement the flexible

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<sup>1</sup> The CAISO makes this filing pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d, and Sections 35.11 and 35.13 of the Commission’s regulations, 18 C.F.R. §§ 35.11, 35.13.

ramping product in the real-time market, which includes the short-term unit commitment process, the real-time unit commitment process, and the real-time dispatch. The CAISO requested an effective date for the flexible ramping product of October 1, 2016. The Commission approved the flexible ramping product on September 26, 2016.<sup>2</sup> The CAISO has filed a petition for a tariff waiver postponing the effectiveness of the flexible ramping product from October 1, 2016, to November 1, 2016.

## II. PROPOSED AMENDMENT

The proposed amendment corrects two instances in section 29 of the CAISO tariff in which the CAISO neglected to replace the term “Flexible Ramping Constraint” with the term “Flexible Ramping Product.” Specifically, the CAISO corrects section 29.27(b), concerning the transition period for new EIM entities. In section 29.27 (b)(2) the CAISO proposes to replace the references to “Flexible Ramping Constraint” and eliminate the reference to Section 27.10, which no longer is relevant given the removal of the “Flexible Ramping Constraint” description in that section in FERC Docket No. ER16-2023. In section 29.34(j), concerning CAISO validation of EIM resource plans, the CAISO also replaces the reference from “Flexible Ramping Constraint” to “Flexible Ramping Product.”

The amendment also deletes the definitions of Flexible Ramping Constraint and Flexible Ramping Constraint Derived Price because after these proposed amendments to section 29 take effect, those terms will no longer be used in the tariff and no longer are applicable when the Flexible Ramping Product replaces the Flexible Ramping Constraint.

Finally, the amendment corrects a technical error in the initial Flexible Ramping Product tariff amendment filing, Docket No. ER16-2023. The records of tariff sections 11.25.4 and 11.25.5 were not properly uploaded and changed to “Not Used” in the filing program. The tariff sections were marked as struck in Attachment B of the Flexible Ramping Product tariff amendment filing. The Commission has already approved this language being removed from the CAISO tariff,<sup>3</sup> and as such, the CAISO submits the tariff records to reflect this acceptance.

## III. EFFECTIVE DATE

Pursuant to Section 35.11 of the Commission’s regulations,<sup>4</sup> the CAISO requests that the Commission waive its notice requirements for the proposed amendment, accept it for filing, and permit it to become effective on November 1, 2016. Good cause exists for granting this tariff amendment. The amendment will eliminate technical errors

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<sup>2</sup> *Cal. Indep. Sys. Operator Corp.*, 156 FERC ¶ 61,226 (2016).

<sup>3</sup> *Id.*

<sup>4</sup> 18 C.F.R. § 35.11.

pertaining to the flexible ramping product and the EIM prior to the implementation of the flexible ramping product.

#### **IV. COMMUNICATIONS**

Pursuant to 18 C.F.R. § 203(b)(3), the CAISO requests that all correspondence, pleadings and other communications concerning this filing be served upon the following individuals:

Kenneth G. Jaffe  
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#### **V. SERVICE**

The CAISO has served this filing upon the California Public Utilities Commission, the California Energy Commission, and all parties with effective scheduling coordinator service agreements under the CAISO Tariff. In addition, the CAISO has posted a copy of the filing on the CAISO website.

#### **VI. ATTACHMENTS**

The following documents, in addition to this transmittal letter, support the instant filing:

- |              |   |
|--------------|---|
| Attachment A | Revised CAISO Tariff sheets that incorporate the proposed changes described above |
| Attachment B | The proposed changes to the CAISO Tariff shown in red-line format                 |

## VII. CONCLUSION

For all the foregoing reasons, the Commission should establish a shortened comment period on the instant filing, issue an order on the filing by October 31, 2016, and accept the proposed amendment to become effective on November 1, 2016.

Respectfully submitted,

/s/ Anna A. McKenna

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**Attachment A – Clean Tariff Records**  
**Removal of Flexible Ramping Constraint**  
**California Independent System Operator Corporation**

11.25.4 [Not Used]

\* \* \* \*

11.25.5 [Not Used]

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**29.27 CAISO Markets And Processes.**

(a) **In General.** Except as provided in subsection (b) of this section, the provisions of Section 27 that are applicable to the Real-Time Market shall apply to EIM Market Participants.

(b) **Transition Period for New EIM Entities.**

(1) **Transmission Constraint Relaxation.** For a period of six months following the Implementation Date of a new EIM Entity, the provisions of Section 27.4.3.2 and the second sentence of Section 27.4.3.4 shall not apply to constraints that are within Balancing Authority Areas of the new EIM Entity or affect EIM Transfers between the Balancing Authority Areas of the new EIM Entity and any other EIM Entity that is subject to this subsection (b). For those intervals that experience infeasibilities described in those provisions, the CAISO shall instead determine prices consistent with the provisions of Sections 27, 34, and Appendix C, that would apply in the absence of Section 27.4.3.2 and the second sentence of Section 27.4.3.4.

(2) **Flexible Ramping Product.** For a period of six months following the EIM Entity Implementation Date of a new EIM Entity, when the transmission and/or power balance constraints as specified in Sections 27.4.3.2 and 27.4.3.4, respectively, are relaxed, the CAISO shall set the Flexible Ramping Product parameter for pricing purposes, for the new EIM Entity Balancing Authority Area, at an amount between and including \$0 and \$0.01.

(3) **Extension of Transition Period Pricing.** Any extensions of the initial six-month

transition period, as approved by the Federal Energy Regulatory Commission, are specified below. Sixty days prior to the expiration of the transition period, the CAISO will post on the CAISO website an assessment of whether an extension of the transition period, for up to an additional six months, is needed for the applicable EIM Entity. The CAISO will post an update to such assessment prior to the expiration of the transition period should there be any changes to its posted conclusions.

(a) [reserved]

- (4) **Reports.** During the term of the transition period, the CAISO will submit monthly reports with the Commission on the infeasibilities observed in the applicable EIM Entity Balancing Authority Area, the nature of the issues causing the infeasibility and remedies adopted to address the issues identified.

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#### 29.34 EIM Operations

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- (j) **CAISO Validation.** The CAISO Markets 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 Product 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.

\* \* \* \*

- [Not Used]

\* \* \* \*

- [Not Used]

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**Attachment B – Marked Tariff Records**  
**Removal of Flexible Ramping Constraint**  
**California Independent System Operator Corporation**

**11.25.4 ~~[Not Used] Apportionment of Flexible Ramping Constraint Costs~~**

- ~~(a) The CAISO will determine the Flexible Ramping Constraint costs for each constraint as the product of:
  - ~~(1) the resource specific total Flexible Ramping Constraint costs, calculated as the total compensation in Section 11.25.2(b), net of rescission of payments, and~~
  - ~~(2) the ratio of each Flexible Ramping Constraint Shadow Price to the sum of the Flexible Ramping Constraint Shadow Prices for the groupings and individual Balancing Authority Areas in the EIM Area in which the resource is deemed to have contributed to the constraint.~~~~
- ~~(b) For each constraint and each Balancing Authority Area in the EIM 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 the ratio of the Balancing Authority Area's requirement to its contribution to the individual constraint or group of constraints to which that Balancing Authority Area contributes.~~
- ~~(c) The CAISO will determine each Balancing Authority Area's apportionment of Flexible Ramping Constraint costs as the sum for that Balancing Authority Area of the amounts determined in Section 11.25.4(b).~~

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**11.25.5 ~~[Not Used] Allocation of Flexible Ramping Constraint Costs~~**

- ~~(a) For the CAISO Balancing Authority Area, the CAISO will allocate total Flexible Ramping Constraint costs described in Sections 11.25.5.1 and 11.25.5.2.~~
- ~~(b) The CAISO will allocate total Flexible Ramping Constraint costs for each EIM Entity Balancing Authority Area to the applicable EIM Entity Scheduling Coordinator.~~

**11.25.5.1 ~~Allocation to Measured Demand~~**

~~Seventy five (75) percent of the total Flexible Ramping Constraint costs apportioned to the CAISO Balancing Authority Area and netted as described in Section 11.25.4, 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.~~

#### ~~11.25.5.2 Allocation to Supply Deviations~~

~~Twenty-five (25) percent of the total Flexible Ramping Constraint costs apportioned to the CAISO Balancing Authority Area and netted as described in Section 11.25.4, 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 CAISO 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 based on 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 UIE deviations, which are determined as specified 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.~~

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- (2) **Flexible Ramping ~~Product Constraint~~.** For a period of six months following the EIM Entity Implementation Date of a new EIM Entity, when the transmission and/or power balance constraints as specified in Sections 27.4.3.2 and 27.4.3.4, respectively, are relaxed, the CAISO shall set the Flexible Ramping ~~Product Constraint~~ parameter ~~specified in Section 27.10,~~ for pricing purposes, for the new EIM Entity Balancing Authority Area, at an amount between and including \$0 and \$0.01.
- (3) **Extension of Transition Period Pricing.** Any extensions of the initial six-month transition period, as approved by the Federal Energy Regulatory Commission, are specified below. Sixty days prior to the expiration of the transition period, the CAISO will post on the CAISO website an assessment of whether an extension of the transition period, for up to an additional six months, is needed for the applicable EIM Entity. The CAISO will post an update to such assessment prior to the expiration of the transition period should there be any changes to its posted conclusions.

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#### ~~- [Not Used] Flexible Ramping Constraint~~

~~A constraint that may be enforced in the optimization of a given CAISO Market run to ensure that the unit commitment or Dispatch of resources for intervals beyond the applicable commitment or Dispatch period provide for the availability of required capacity for Dispatch in subsequent Real-Time Dispatch intervals as further described in Section 27.10.~~

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**- [Not Used] Flexible Ramping Constraint Derived Price**

The price at which resources identified as relieving the Flexible Ramping Constraint in Section 27.10 are compensated as described in Section 11.25.

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