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March 15, 2012

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

Re: California Independent System Operator Corporation Errata to Compliance Filing Docket Nos. ER11-4100-___ and ER11-3616-___ (Not Consolidated)

Dear Secretary Bose:

On March 14, 2012, the California Independent System Operator Corporation submitted a filing in compliance with: (1) the order issued in Docket No. ER11-4100 on December 15, 2011;¹ and (2) the order issued in Docket No. ER11-3616 on February 16, 2012.² The ISO now submits the instant filing to correct the errors described below.

Page 4 of the transmittal letter for the March 14 compliance filing stated that the changes to the ISO tariff proposed in the compliance filing included the deletion of the sentence in Section 31 of the tariff stating that the ISO may issue schedules for supply from proxy demand resources or reliability demand response resources only where the ISO's conditions of the net benefits test necessary for the issuance of schedules for supply from such resources have been satisfied. Due to an administrative oversight, that proposed change was not reflected in the clean ISO tariff sheets and black-lines attached to the compliance filing, nor in the tariff record submitted for Section 31. Therefore, the

¹ California Independent System Operator Corp., 137 FERC ¶ 61,217 (2011).

² California Independent System Operator Corp., 138 FERC ¶ 61,117 (2012).

ISO now resubmits the compliance filing with that change to Section 31 reflected in the tariff record, clean tariff sheets, and black-lines.³

In addition, the compliance filing was correctly served in both Docket Nos. ER11-4100 and ER11-3616 but was erroneously submitted only in Docket No. ER11-4100. The ISO is submitting and serving the instant filing in both dockets.

The ISO regrets any confusion it may have caused. Please contact the undersigned with any questions regarding this matter.

Respectfully submitted.

Nancy Saracino General Counsel Sidney M. Davies **Assistant General Counsel** John C. Anders Senior Counsel The California Independent System Operator Corporation 250 Outcropping Way Folsom, CA 95630 Tel: (916) 351-4400 Fax: (916) 608-7246 E-mail: sdavies@caiso.com janders@caiso.com

/s/ Sean A. Atkins

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3

The tariff records submitted for the other sections in the compliance filing are correct and are thus not being resubmitted with this errata filing.

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing documents upon all of the parties listed on the official service list for the above-referenced proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Washington, D.C. this 15th day of March, 2012.

<u>/s/ Bradley R. Miliauskas</u> Bradley R. Miliauskas

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The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

Re: California Independent System Operator Corporation Compliance Filing Docket Nos. ER11-4100-___ and ER11-3616-___ (Not Consolidated)

Dear Secretary Bose:

The California Independent System Operator submits this filing in compliance with the following two Commission orders:

- (1) The order issued in Docket No. ER11-4100 on December 15, 2011,¹ which conditionally accepted in part and rejected in part a filing submitted by the ISO to comply with the requirements regarding demand response compensation set forth in Commission Order No. 745 issued in Docket No. RM10-17-000 on March 15, 2011;² and
- (2) The order issued in Docket No. ER11-3616 on February 16, 2012,³ which rejected the tariff changes regarding reliability demand

³ California Independent System Operator Corp., 138 FERC ¶ 61,117 (2012) (February 16 order).

¹ California Independent System Operator Corp., 137 FERC ¶ 61,217 (2011) (December 15 order).

² Demand Response Compensation in Organized Wholesale Energy Markets, Order No. 745, FERC Stats. & Regs ¶ 31,322, order on reh'g, Order No. 745-A, 137 FERC ¶ 61,215 (2011).

response resources contained in the ISO's filing to comply with Order No. 745.⁴

I. Background

In Order No. 745, the Commission established new requirements regarding compensation to be provided for demand response in organized wholesale energy markets overseen by independent system operators and regional transmission organizations (ISOs/RTOs).⁵ Order No. 745 required the ISOs/RTOs to each submit a compliance filing that addresses the following issues: (1) the net benefits test for demand response compensation described in Order No. 745; (2) the measurement and verification of demand response performance; and (3) the allocation of demand response costs.⁶

On July 22, 2011, the California ISO submitted a filing to comply with the directives in Order No. 745. In the December 15 order, the Commission conditionally accepted in part and rejected in part the ISO's July 22 compliance filing and directed the ISO to submit a further compliance filing within 90 days, *i.e.*, by March 14, 2012.⁷

In the February 16 order, the Commission rejected tariff changes proposed by the ISO regarding reliability demand response resources, including tariff changes addressing reliability demand response resources that were contained in the July 22 compliance filing. The Commission directed the ISO to submit a compliance filing reflecting the rejection of those latter tariff changes within 60 days, *i.e.*, by April 16, 2012.⁸ Because there is considerable overlap in the tariff provisions that must be modified to comply with these two orders, the ISO has chosen in the instant filing to comply with this directive in the February 16 order prior to the due date for submitting the compliance filing.

⁷ December 15 order at Ordering Paragraphs (A) and (B).

⁸ February 16 order at P 31.

⁴ Capitalized terms not otherwise defined herein have the meanings set forth in the Master Definitions Supplement, Appendix A to the ISO tariff. References herein to section numbers and appendices are references to sections and appendices of the ISO tariff unless otherwise indicated.

⁵ Order No. 745 at P 1.

⁶ *Id.* at PP 6, 81, 102. The order also stated that "[i]n its compliance filing an RTO or ISO may attempt to show, in whole or in part, how its proposed or existing practices are consistent with or superior to the requirements of [Order No. 745]." *Id.* at P 4 n.7.

As explained below, the instant filing complies with the directives in the December 15 order and the February 16 order.

II. Proposed Tariff Revisions on Compliance

A. Net Benefits Test

1. Description of Information to Be Posted on ISO Website

In the December 15 order, the Commission found that the proposed net benefits test set forth in Section 30.6.3.1 of the tariff complies with the direction provided in Order No. 745.⁹ However, the Commission also directed the ISO to modify its tariff to state that the Order No. 745 net benefits test methodology will be posted on the ISO's website, along with documentation supporting the threshold prices in effect for the previous 12 months, and any updated supply curve analysis.¹⁰

In order to comply with this directive, the ISO proposes to modify Section 30.6.3.2 of the tariff to state that the ISO's website will include the information required by the December 15 order. Further, for the purpose of including in Section 30.6.3.2 all of the tariff provisions regarding postings on the ISO website related to the net benefits test, the ISO also proposes to move from Section 30.6.3.1 to Section 30.6.3.2 a sentence accepted by the Commission stating that the ISO will post the threshold prices for each month on the ISO website by the fifteenth day of the immediately preceding month.

2. Details Regarding Net Benefits Test

The December 15 order noted that Section 30.6.3.1 of the tariff, as proposed in the July 22 compliance filing, stated that the ISO's methodology for generating two supply curves each month and determining monthly threshold prices to implement the net benefits test will be set forth in a Business Practice Manual.¹¹ The Commission directed the ISO to include in its further compliance filing a detailed description of the methodology it will use to determine the supply curves and threshold prices.¹²

- ¹¹ *Id.* at P 30.
- ¹² *Id.*

⁹ December 15 order at PP 27-28.

¹⁰ *Id.* at P 29.

To comply with the Commission's directive, the ISO has modified Section 30.6.3.1 to include a detailed description of the methodology it will use to determine the supply curves and threshold prices to implement the net benefits test. The revised provisions in Section 30.6.3.1 include details regarding those determinations contained in an ISO document entitled "Demand Response Net Benefits Test," which was provided for stakeholder review during the ISO stakeholder process to develop the tariff revisions to comply with Order No. 745.¹³ The ISO had planned to include information from this ISO document in the Business Practice Manual.

3. Revisions to Section 30.6.3.2 Contained in the July 22 Compliance Filing

The ISO's July 22 compliance filing included provisions in Section 30.6.3.2 regarding rejection of bids for proxy demand resources and reliability demand response resources below the threshold price when the net benefits test is satisfied, *i.e.*, when the locational marginal price is equal to or greater than the threshold price. The December 15 order rejected those provisions in Section 30.6.3.2 as being beyond the scope of compliance with the requirements of Order No. 745.¹⁴

Pursuant to the Commission's directive, the ISO has deleted the provisions in Section 30.6.3.2 regarding rejection of bids below the threshold price when the net benefits test is satisfied. As explained above,¹⁵ the ISO now proposes to include provisions in Section 30.6.3.2 regarding postings on the ISO website related to the net benefits test. Further, consistent with the Commission's directive, the ISO has deleted the sentence in Section 31 of the tariff stating that the ISO may issue schedules for supply from proxy demand resources or reliability demand response resources only where the ISO's conditions of the net benefits test necessary for the issuance of schedules for supply from such resources have been satisfied.

¹³ See <u>http://www.caiso.com/Documents/FinalProposal_Appendix-DemandResponseNetBenefitsTest.pdf</u>, available on the page of the ISO website regarding the demand response stakeholder process (<u>http://www.caiso.com/informed/Pages/StakeholderProcesses/DemandResponseNetBenefitsTest.aspx</u>).

¹⁵ See Section II.A(1) of this transmittal letter.

¹⁴ December 15 order at PP 31-32. The Commission stated that proposed compensation to such resources when the net benefits test is not satisfied would be more appropriately made in a separate filing pursuant to Section 205 of the Federal Power Act. *Id.* at P 32.

B. Cost Allocation

In the December 15 order, the Commission found that the ISO has not demonstrated that its current methodology for allocating demand response costs, including the ISO's use of the default load adjustment,¹⁶ appropriately allocates costs to those that benefit from demand reductions as required by Order No. 745.¹⁷ The Commission did not find that any other component of the ISO's cost allocation methodology fails to satisfy the Order No. 745 requirements.¹⁸ The Commission directed the ISO to file a cost allocation methodology that complies with Order No. 745.¹⁹

To comply with the Commission's directives, the ISO has revised Section 11.5.2.4 of the tariff to state that the default load adjustment will only apply to energy priced below the threshold price set forth in Section 30.6.3.1. As a result, the default load adjustment will not apply to energy priced at or above the threshold price set forth in Section 30.6.3.1.

These revisions to Section 11.5.2.4 satisfy the directives in the December 15 order. In that order, as explained above, the Commission found that the proposed tariff revisions in the July 22 compliance filing regarding rejection of bids below the threshold price when the net benefits test is satisfied are beyond the scope of compliance with the requirements of Order No. 745.²⁰ Specifically, the Commission explained that its "section 206 action [in the Order No. 745

¹⁶ The default load adjustment is set forth in Section 11.5.2.4 of the ISO tariff. The purpose of the default load adjustment is to ensure that demand response providers and load-serving entities are not both compensated in the ISO's market for a single reduction in demand, thereby ensuring the avoidance of a wholesale "double payment" for the demand response reduction. Transmittal letter for July 22 compliance filing at 3.

¹⁷ The ISO has sought rehearing of this aspect of the December 15 order. The ISO submits the compliance changes related to the cost allocation portions of the December 15 order subject to the outcome of that rehearing request.

¹⁸ As the ISO explained in the July 22 compliance filing, payments of locational marginal prices made to proxy demand resources are allocated on a market-wide basis to the load that benefits from the demand response reduction, *i.e.*, to all load day-ahead and to deviations in real-time. The day-ahead energy cost for proxy demand resources is allocated to the buyers of the energy, just like for other supply resources. The real-time imbalance energy cost for proxy demand resources is allocated in two tiers, just like for other imbalance energy. First, the real-time imbalance energy cost is allocated in tier 1 to those that required the service, *i.e.*, those that deviated from their schedules and required backing by the ISO for additional supply. Second, any remaining real-time imbalance energy cost is allocated in tier 2 to the market based on measured demand. Transmittal letter for July 22 compliance filing at 15.

¹⁹ December 15 order at PP 43-46.

²⁰ See Section II.A(3) of this transmittal letter (citing December 15 order at P 32).

proceeding] did not extend to situations where the LMP [locational marginal price] is not greater than or equal to the threshold price, and as a result, compensation of demand response resources in those situations is beyond the scope of this compliance proceeding."²¹ Further, the Commission explained in Order No. 745-A that "if LMP is less than the threshold price, [Order No. 745] does not apply to determine the payment to a demand response resource, and any payment will be governed by the existing RTO or ISO tariff."²² Therefore, any proposal by the ISO to eliminate application of the default load adjustment under the existing ISO tariff to energy priced below the threshold price (*i.e.,* to the compensation of demand response resources in circumstances not addressed by Order Nos. 745 and 745-A) would also go beyond the scope of the instant proceeding and require a separate filing under Section 205 of the Federal Power Act to modify preexisting tariff language previously accepted by the Commission.²³

The Commission did, however, direct the ISO to eliminate application of the default load adjustment to energy priced *at or above* the threshold price. In this regard, the Commission stated that "CAISO's argument that costs are allocated to the load that benefits from the price reductions, which it characterizes as all load in the day-ahead market and deviations from day-ahead schedules in the real-time market, ignores the effects of the default load adjustment."²⁴ The Commission also stated:

[T]he default load adjustment settlement process requires the load serving entity to pay for load that it does not ultimately serve. By doing so, the default load adjustment effectively allocates the cost of demand response to the host load serving entity even though the benefits of demand response may extend beyond the host load serving entity. . . . CAISO has not demonstrated that the benefits of demand response are limited to the host load serving entity and thus has not demonstrated that its proposed methodology is in compliance with the requirements of Order No. 745.²⁵

²⁵ *Id.* at PP 44, 46 (citation omitted).

²¹ December 15 order at P 32.

²² Order No. 745-A at P 131.

²³ December 15 order at P 32. At this time the ISO does not propose changes under Section 205 of the Federal Power Act to the compensation paid to demand response resource bids below the threshold price determined by the net benefits test.

²⁴ December 15 order at P 43.

Pursuant to the revisions to Section 11.5.2.4 in this compliance filing, the default load adjustment cannot affect the allocation of costs for demand response resources that are dispatched when the LMP is at or above the threshold price set forth in Section 30.6.3.1. Further, the revisions to Section 11.5.2.4 mean that the default load adjustment cannot result in the allocation of costs at or above the threshold price to the host load serving entity. As a result, with the revisions to Section 11.5.2.4 in this compliance filing, the provisions in the ISO tariff for allocating demand response costs satisfy the requirements of Order No. 745 as explained in the December 15 order. Pursuant to those tariff provisions, the ISO allocates demand response costs on a market-wide basis. The Commission has also accepted market-wide allocation of demand response costs for ISO New England.²⁶

C. Elimination of Tariff Provisions Regarding Reliability Demand Response Resources

In the February 16 order, the Commission directed the ISO to file to remove the tariff revisions concerning reliability demand response resources that were included in the ISO's July 22 compliance filing.²⁷

To comply with the Commission's directive, the ISO has deleted all of the tariff revisions contained in the July 22 compliance filing that concerned reliability demand response resources. Specifically, the ISO has deleted Section 30.6.2 (entitled "Bidding and Scheduling of RDRRs [reliability demand response resources]") in its entirety, and has revised Sections 30.6.3, 30.6.3.1, and 31 to remove the references therein the reliability demand response resources.

D. Effective Date

In the December 15 order, the Commission directed the ISO to make the tariff revisions submitted in this proceeding effective as of the date of the order, *i.e.*, December 15, 2011.²⁸

To comply with the Commission's directive, the ISO proposes to make the tariff modifications contained in this compliance filing effective as of December 15, 2011. However, in order implement this effective date the ISO necessarily must perform a market resettlement back to December 15, 2011 to ensure that all demand response reduction costs incurred between December 15 and the date the ISO is able to implement changes to its settlement software in order to

²⁶ *ISO New England Inc.*, 138 FERC ¶ 61,042, at P 42 (2012).

²⁷ February 16 order at P 31.

²⁸ December 15 order at P 58.

allocate costs consistent with the direction provided in the December 15 order. The ISO has initiated this process and anticipates that the changes will be implemented in its Fall 2012 software release scheduled in the fourth quarter of this year. Conducting a market resettlement before these changes are implemented would be inefficient since future resettlements would be required.

The ISO previously explained that altering its systems, rules, and market tools (*e.g.*, to make any changes to the default load adjustment) would require at least a year to implement.²⁹ The proposal above exceeds this expectation by implementing the software changes in less than one year from the effective date of the Commission's order. This time is necessary for the ISO and its vendors to test and implement the modifications to its market software necessary to put the cost allocation methodology described above into effect. This will have no detrimental effect on ISO market participants. The market participants will be made financially whole with regard to demand response reductions pursuant to the market resettlement discussed above.

III. Materials Provided in this Compliance Filing

In addition to this transmittal letter, this compliance filing includes the following attachments:

Attachment A	Clean ISO tariff sheets reflecting the revisions described in Section II of this transmittal letter
Attachment B	Proposed tariff revisions in black-line format

IV. Conclusion

The ISO requests that the Commission accept this filing as complying with the directives to revise the ISO tariff contained in the Commission's December 15 and February 16 orders. Please contact the undersigned with any questions regarding this matter.

²⁹ ISO supplemental comments on Notice of Proposed Rulemaking for Order No. 745, Docket No. RM10-17-000, at 14 (Oct. 13, 2010).

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing documents upon all of the parties listed on the official service list for the above-referenced proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Washington, D.C. this 14th day of March, 2012.

<u>/s/ Bradley R. Miliauskas</u> Bradley R. Miliauskas California Independent System Operator Corporation Fifth Replacement FERC Electric Tariff Attachment A - Clean Tariff Errata to Order 745 and RDRR Compliance Filing

11.5.2.4 Adjustment to Metered Load to Settle UIE

For the purpose of settling Uninstructed Imbalance Energy of a Scheduling Coordinator representing a Load Serving Entity, the amount of PDR Energy Measurement delivered by a Proxy Demand Resource that is also served by that Load Serving Entity and that is paid a Market Clearing Price below the threshold Market Clearing Price set forth in Section 30.6.3.1 will be added to the metered load quantity of the Load Serving Entity's Scheduling Coordinator's Load Resource ID with which the Proxy Demand Resource is associated.

* * *

30.6.2 [NOT USED]

30.6.3 Net Benefits Test for Scheduling of PDRs

The CAISO will apply a net benefits test to determine whether Bids for Proxy Demand Resources qualify as a Schedule as set forth in Section 31.

30.6.3.1 Supply Curve Used in Applying the Net Benefits Test

The CAISO will generate one (1) on-peak supply curve and one (1) off-peak supply curve for each month that depicts the system-wide aggregated power supplies at different offer prices in the CAISO Markets within that month. The CAISO will generate these two supply curves for each month, using the following sequential methodology:

- (i) The CAISO will collect supply curve data for the month that is twelve (12) months prior to the month for which the CAISO is generating the supply curves (the reference month), using all mitigated Bids in the Real-Time Market from any Generating Unit that is either committed or uncommitted and excluding Import Bids and Export Bids.
- (ii) The CAISO will adjust the supply curve data to reflect differences in resource availability and fuel prices between the target month and the reference month. Significant changes in resource availability will be determined using the averages of the hourly supply curves over the entire reference month, with the supply quantities being averaged for every price level. Significant changes in fuel prices will be determined using the simple average of the Pacific Gas and Electric Company citygate price and the Southern California Edison Company citygate price, or, if those prices are unavailable, using the Henry Hub price.

For every supply quantity, the corresponding price will be scaled using a scaling factor defined as the forward gas price for the Trading Month divided by the historical average gas price for the reference month. These adjustments will result in two representative supply curves for the target month, one (1) on-peak and one (1) off-peak.

(iii) The CAISO will smooth the representative supply curves to twice differentiable using an exponential form function and applying a price window that is likely to contain the threshold Market Clearing Price. The price window may need to be adjusted in the process until the smoothed supply curves fit the representative supply curves closely.

Using the smoothed supply curves, the CAISO will determine a candidate threshold Market Clearing Price for the on-peak and a threshold Market Clearing Price for the off-peak corresponding to the point on each supply curve beyond which (i) the product of the amount of supplied Power (prior to the dispatch of Proxy Demand Resources) and the reduction in Market Clearing Price that results from the dispatch of Proxy Demand Resources exceeds (ii) the product of the Market Clearing Price (prior to the dispatch of Proxy Demand Resources) and the reduction in the amount of supplied Power that results from the dispatch of Proxy Demand Resources) and the reduction in the amount of supplied Power that results from the dispatch of Proxy Demand Resources. If the candidate threshold Market Clearing Price is outside the corresponding price window being used, the price window needs to be adjusted and this process will be repeated until the price window contains the candidate threshold Market Clearing Price and thus makes it the final threshold Market Clearing Price. If multiple candidate threshold Market Clearing Prices exist, the candidate threshold Market Clearing Price that is concave on the supply curve (a supply function of price) will be the final threshold Market Clearing Price.

30.6.3.2 Information Posted on CAISO Website

The net benefits test will be posted on the CAISO website, along with supporting documentation and the threshold Market Clearing Prices that were in effect in the previous twelve (12) months, and any updated supply curve analysis. The CAISO will post the threshold Market Clearing Prices determined for each month on the CAISO Website by the fifteenth (15th) day of the immediately preceding month.

* * *

31 Day-Ahead Market

The DAM consists of the following functions performed in sequence: the MPM-RRD, IFM, and RUC. Scheduling Coordinators may submit Bids for Energy, Ancillary Services and RUC Capacity for an applicable Trading Day. The CAISO shall issue Schedules for all Supply and Demand, including Participating Load and Proxy Demand Resources, pursuant to their Bids as provided in this Section 31. California Independent System Operator Corporation Fifth Replacement FERC Electric Tariff Attachment B - Marked Tariff Errata to Order 745 and RDRR Compliance Filing

11.5.2.4 Adjustment to Metered Load to Settle UIE

For the purpose of settling Uninstructed Imbalance Energy of a Scheduling Coordinator representing a Load Serving Entity, the amount of PDR Energy Measurement delivered by a Proxy Demand Resource that is also served by that Load Serving Entity and that is paid a Market Clearing Price below the threshold Market Clearing Price set forth in Section 30.6.3.1 will be added to the metered load quantity of the Load Serving Entity's Scheduling Coordinator's Load Resource ID with which the Proxy Demand Resource is associated.

* * *

30.6.2 Bidding and Scheduling of RDRRs [NOT USED]

Unless otherwise specified in the CAISO Tariff and applicable Business Practice Manuals, and subject to Section 30.6.3, the CAISO will treat Bids for Energy on behalf of Reliability Demand Response Resources like Bids for Energy on behalf of other types of supply resources. A Scheduling Coordinator for a Demand Response Provider representing a Reliability Demand Response Resource may submit Energy Bids for the Reliability Demand Response Resource only in the Day-Ahead Market and in the Real-Time Market, but may not submit Energy Self-Schedules for the Reliability Demand Response Resource, may not Self-Provide Ancillary Services from the Reliability Demand Response Resource, and may not submit RUC Availability Bids or Ancillary Service Bids for the Reliability Demand Response Resource. The Demand Response Provider's Demand Response Services for Reliability Demand Response Resources will be bid separately and independently from the LSE's underlying Demand Bid.

30.6.3 Net Benefits Test for Scheduling of PDRs or RDRRs

The CAISO will apply a net benefits test to determine whether Bids for Proxy Demand Resources or

Reliability Demand Response Resources qualify as a Schedule as set forth in Section 31.

30.6.3.1 Supply Curve Used in Applying the Net Benefits Test

The CAISO will generate <u>one (1) on-peak</u>necessary supply <u>curve and one (1) off-peak supply</u> <u>curve</u>curves for each month that <u>depicts</u> the <u>system-wide aggregated power supplies at different</u> <u>offer prices</u>Market Clearing Prices for specified amounts of supplied Power in the CAISO Markets within that month. <u>The</u> <u>Consistent with a methodology set forth in the Business Practice Manual, the</u> CAISO will generate <u>these</u> two supply curves for each month, <u>using the following sequential methodology:</u> one for on-peak and one for off-peak, by: (i) <u>The CAISO will collect selecting representative</u> supply curve data for the month that is twelve (12) months prior to the month for which the CAISO is generating the supply curves <u>(the reference month)</u>, using all <u>mitigated</u> Bids <u>ininte</u> the Real-Time Market from any Generating Unit <u>that is either committed or</u> <u>uncommitted and excluding Import Bids and Export Bids</u>.

- ÷(ii) The CAISO will adjust adjusting the representative-supply curve data to reflect differences in resource availability and fuel prices between the target month and the reference month. Significantsignificant changes in resource availability will be determined using the averages of the hourly supply curves over the entire reference month, with the supply quantities being averaged for every price level. Significant changes in fuel prices will be determined using the simple average of the Pacific Gas and Electric Company citygate price and the Southern California Edison Company citygate price, or, if those prices are unavailable, using the Henry Hub price. For every supply quantity, the corresponding price will be scaled using a scaling factor defined as the forward gas price for the Trading Month divided by the historical average gas price for the reference month. These adjustments will result in two representative supply curves for the target month, one (1) on-peak and one (1) off-peak.
- (iii) The CAISO will smooth and fuel prices that have occurred since the representative supply curves to twice differentiable curve data were generated; and (iii) smoothing the supply curves using an exponential form function and applying a price window that is likely to contain the threshold Market Clearing Price. The price window may need to be adjusted in the process until the smoothed supply curves fit the representative supply curves closely.

<u>Using the smoothed supply curves</u>based on historical data. After the CAISO generates the supply curves for a month, the CAISO will determine a <u>candidate</u> threshold Market Clearing Price for the on-peak and a threshold Market Clearing Price for the off-peak corresponding to the point on each supply curve beyond which (i) the product of the amount of supplied Power (prior to the dispatch of Proxy Demand Resources and Reliability Demand Response Resources) and the reduction in Market Clearing Price that results from the dispatch of Proxy Demand Resources and Reliability Demand Response Resources exceeds (ii) the product of the Market Clearing Price (prior to the dispatch of Proxy Demand Resources and Reliability Demand Response Resources) and the reduction in the amount of supplied Power that results from the dispatch of Proxy Demand Resources. If the candidate threshold Market Clearing Price is outside the corresponding price window being used, the price window needs to be adjusted and this process will be repeated until the price window contains the candidate threshold Market Clearing Price and thus makes it the final threshold Market Clearing Price. If multiple candidate threshold Market Clearing Prices exist, the candidate threshold Market Clearing Price and Reliability Demand Response Resources. The CAISO will post the threshold Market Clearing Prices for each month on the CAISO Website by the fifteenth day of the immediately preceding month.

30.6.3.2 Information Posted on CAISO Website Rejection of Bids for PDRs or RDRRs Below Threshold Price

The net benefits test will be posted on the CAISO website, along with supporting documentation and the threshold Market Clearing Prices that were in effect in the previous twelve (12) months, and any updated supply curve analysis. The CAISO will post the threshold Market Clearing Prices determined for each month on the CAISO Website by the fifteenth (15th) day of the immediately preceding month. Each Bid for a Proxy Demand Resource or Reliability Demand Response Resource must be equal to or greater than the threshold Market Clearing Price for the applicable month and applicable time of use in order to be eligible for inclusion in a Day-Ahead Schedule in accordance with Section 31 or to be issued a Dispatch Instruction in the Real-Time Market in accordance with Section 34. The CAISO will reject any Bid for a Proxy Demand Resource or Reliability Demand Response Resource that is less than the threshold Market Clearing Price for the applicable time of use.

* * *

31 Day-Ahead Market

The DAM consists of the following functions performed in sequence: the MPM-RRD, IFM, and RUC. Scheduling Coordinators may submit Bids for Energy, Ancillary Services and RUC Capacity for an applicable Trading Day. The CAISO shall issue Schedules for all Supply and Demand, including Participating Load, Reliability Demand Response Resources, and Proxy Demand Resources, pursuant to their Bids as provided in this Section 31. The CAISO may issue Schedules for Supply from Reliability Demand Response Resources or Proxy Demand Resources only where the CAISO's conditions of the net benefits test set forth in Section 30.6.3 necessary for the issuance of Schedules for Supply from the Reliability Demand Response Resources or Proxy Demand Resources have been satisfied.