



California Independent
System Operator Corporation

December 14, 2011

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

**Re: California Independent System Operator Corporation
Filing to Comply with September 15, 2011 Order
Docket No. ER11-3973-_____**

Dear Secretary Bose:

On June 30, 2011, the California Independent System Operator Corporation (CAISO) submitted revisions to its tariff to comply with the credit reform requirements directed by the Commission in Order No. 741.¹ On September 15, 2011, in the above-referenced docket, the Commission issued an order conditionally accepting the majority of the CAISO's proposed tariff revisions, which became effective October 1, 2011, and directed the CAISO to submit a compliance filing within ninety (90) days from September 15.²

I. INTRODUCTION

A. Background

In Order No. 741, the Commission adopted reforms to strengthen the credit policies used in organized wholesale electric power markets. The Commission has a statutory mandate to ensure that all rates charged for the transmission or sale of electric energy in interstate commerce are just, reasonable, and not unduly discriminatory or preferential.³ Pursuant to that mandate, the Commission directed regional transmission organizations (RTOs)

¹ *Credit Reforms in Organized Wholesale Electric Markets*, Order No. 741, FERC Stats. & Regs. ¶ 31,317 (2010) (Order No. 741), *order on reh'g*, Order No. 741-A, FERC Stats. & Regs. ¶ 31,320, *order denying reh'g*, Order No. 741-B, 135 FERC ¶ 61,242 (2011).

² *California Independent System Operator Corp.*, 136 FERC ¶ 61,194 (2011) (September 15 order).

³ 16 U.S.C. §§ 824d, 824e (2006).

and independent system operators (ISOs) to revise their tariffs to reflect the following reforms: implementation of shortened settlement timeframes, restrictions on the use of unsecured credit; elimination of unsecured credit in all financial transmission rights (FTRs) or equivalent markets;⁴ clarification of legal status to continue the netting and set-off of transactions in the event of bankruptcy; establishment of minimum criteria for market participation; clarification regarding the ability of administrators of organized electricity markets to invoke “material adverse change”⁵ clauses to demand additional collateral from market participants; and adoption of a two-day grace period for “curing” collateral calls.

The CAISO made a compliance filing in this proceeding on June 30, 2011 to address these credit reform issues. In the September 15 order, the Commission accepted the majority of the CAISO’s proposed tariff revisions to address the Order No. 741 reforms referenced above. However, the Commission directed the CAISO to submit a compliance filing within ninety (90) days of September 15 to address an issue raised by Western Area Power Administration (WAPA) regarding elimination of the use of unsecured credit in the CRR market. Specifically, WAPA argued that it and other federal agencies should be permitted to participate in the CAISO’s CRR market upon making a demonstration of financial security. The Commission found that WAPA and other federal agencies could demonstrate financial security by submitting a letter to the CAISO that: (1) attests that the federal agency is lawfully authorized to participate in the CRR market and that any debt it incurs due to its participation in the CRR market is a debt of the United States; (2) identifies its current year appropriations from Congress; and (3) verifies that the amount of its appropriations is sufficient to meet the credit requirements (*i.e.*, equal to or greater than the credit requirements) in Section 12.1 of the tariff.⁶

Also, in Order No. 741, the Commission required RTOs and ISOs to develop minimum participation criteria to ensure that markets are protected from risk posed by under-capitalized participants or those who do not have adequate risk management procedures in place.⁷ In the September 15 order, the Commission found the minimum participation criteria submitted by the CAISO to be consistent with the Commission’s directives and accepted the CAISO’s proposed requirement that each prospective or existing market participant submit an officer-certified statement as part of the certification process on an annual basis. However, the Commission found that such an officer-certified statement

⁴ The CAISO does not employ an FTR market but instead employs its equivalent, a congestion revenue rights (CRR) market.

⁵ The Tariff refers to such circumstances as a “material change in financial condition.”

⁶ September 15 order at PP 26-27.

⁷ Order No. 741 at P 131.

alone, without independent verification, is insufficient to ensure the protection of the markets from risks posed by under-capitalized participants or those who do not have adequate risk management procedures in place.⁸ The Commission concluded that the CAISO must engage in periodic compliance verification to ensure that risk management policies and procedures are implemented and adequate capitalization is maintained.⁹

B. The CAISO's Process for Complying with the September 15 Order

The CAISO conducted a stakeholder process to seek input on its proposed response to the issues raised in the September 15 order. On November 14, 2011, the CAISO issued proposed tariff language to address the concerns raised in the December 15 order, and included a revised Business Practice Manual (BPM) for Credit Management incorporating the officer-certified statement and verification process. On November 21, 2011, the CAISO conducted a stakeholder conference call to review its draft final proposal of its minimum participation requirements. On December 1, 2011, the CAISO issued revised versions of the proposed tariff language and the BPM for Credit Management. Subsequently, on December 6, 2011, the CAISO hosted an additional stakeholder conference call to address enhancements proposed by stakeholders during the previous conference call related to the certification and verification process.¹⁰

II. TARIFF REVISIONS TO COMPLY WITH THE SEPTEMBER 15 ORDER

A. Elimination of Unsecured Credit in CRR Markets – Demonstration of Financial Security by Federal Agencies

In the September 15 order, the Commission found that federal agencies could adequately demonstrate financial security by submitting a letter to the CAISO that: (1) attests that the federal agency is lawfully authorized to participate in the CRR market and that any debt it incurs due to its participation in the CRR market is a debt of the United States; (2) identifies its current year appropriations from Congress; and (3) verifies that the amount of its

⁸ September 15 order at P 49.

⁹ *Id.*

¹⁰ Materials related to the CAISO's credit reform stakeholder process are available on the CAISO website at <http://www.caiso.com/informed/Pages/StakeholderProcesses/CreditPolicyStakeholderProcess.aspx>.

appropriations is sufficient to meet the credit requirements (*i.e.*, equal to or greater than the credit requirements) in Section 12.1 of the tariff.¹¹

In accordance with the Commission's directive, the CAISO proposes to add new Section 12.6.2.2 to the tariff to provide that each CRR holder or candidate CRR holder that is a federal agency must provide the CAISO a letter, executed by an officer of the CRR holder or candidate CRR holder that satisfies all of the following requirements: (1) attests that the federal agency is lawfully authorized to participate in the CRR auction and that any debt the federal agency incurs due to its participation in the CRR auction is a debt of the United States; (2) identifies the current year's appropriation for the federal agency from the United States Congress; and (3) verifies that the amount of the current year's appropriations for the federal agency from the United States Congress meets or exceeds the amount required to satisfy the credit requirements set forth in Section 12.1. Section 12.6.2.2 states that the provision of such an executed letter to the CAISO will constitute sufficient financial security for the federal agency to participate in the CRR auction.

B. Minimum Participation Criteria – Officer-Certified Statements and Verification Process

In the September 15 order, the Commission determined that requiring market participants to provide officer-certified statements without periodic independent verification was insufficient to safeguard against risk posed by under-capitalized participants or those who do not have adequate risk management procedures in place.¹² To address the Commission's concerns, the CAISO proposes to revise Section 12.1(ii) of the tariff to require market participants or prospective market participants to annually submit to the CAISO, for its review and verification, risk management policies, procedures, and controls applicable to the CRR trading activities of the prospective or existing market participants, if they have CRR portfolios that meet the applicable risk criterion set forth in the BPM. Further, as referenced in revised Section 12.1(ii), additional documentation would be required depending upon whether the CRR portfolio of the market participant or prospective Market Participant meets certain risk criterion set forth in the BPM.

The proposed tariff language in Section 12.1 also provides that the CAISO at any time may request information and documents from prospective and existing market participants regarding their risk management policies, procedures, and controls, including but not limited to information and documents relating to the liquidity of their financial resources and their settlement procedures

¹¹ September 15 order at PP 26-27.

¹² *Id.* at P 49.

to demonstrate it meets the minimum participation requirements set forth in Section 12.1. Failure to provide the requested information within the time period specified may result in the CAISO taking enforcement actions pursuant to Section 12.5 of the tariff.

Revised Section 12.1 states that the CAISO may review and verify the information provided by the market participant either with or without the assistance of a third party, at the discretion of the CAISO, subject to confidentiality and non-disclosure restrictions, as applicable. For purposes of Section 12, any documentation provided by a prospective or existing market participant in compliance with that section will be treated as confidential and the CAISO will maintain the confidentiality of all such documents.

In addition, the CAISO has made minor clarifying revisions to the organization of Section 12.1(i).

III. COMMUNICATIONS

Communications regarding this filing should be addressed to the following individuals, whose names should be placed on the official service listed established by the Secretary with respect to this submittal:

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Sidney Davies
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IV. EFFECTIVE DATE AND REQUEST FOR WAIVER

The CAISO proposes that the tariff revisions contained in this December 14, 2011 compliance filing be made effective on April 30, 2012.

Because the requested April 30, 2012 effective date is more than one hundred-twenty days after the date this compliance filing was submitted, the CAISO respectfully requests waiver, pursuant to Section 35.11 of the Commission's regulations,¹³ of the notice requirement set forth in Section 35.3 of the Commission's regulations.¹⁴ Good cause exists to grant the requested waiver because the April 30, 2012 effective date will give market participants sufficient time to comply with the tariff requirements set forth in the instant filing.

V. SERVICE

The CAISO has served copies of this transmittal letter and all attachments upon all parties in the official service list for this proceeding. In addition, the CAISO is posting this transmittal letter and all attachments 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 to comply with the directives in the September 15 order
Attachment B	CAISO tariff revisions show in black-line format

¹³ See 18 C.F.R. § 35.11.

¹⁴ See 18 C.F.R. § 35.3.

VII. CONCLUSION

For the reasons stated above, the Commission should accept the instant filing as complying with the directives in the September 15 order. Please contact the undersigned with any questions.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon the parties listed on the official service lists in the above-referenced proceedings, 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 Folsom, California this 14th day of December, 2011.

/s/ Anna Pascuzzo

Anna Pascuzzo

Attachment A – Clean Tariff
Credit Reforms Compliance Filing
California Independent System Operator Corporation
Fifth Replacement FERC Electric Tariff
December 14, 2011

* * *

12.1 Credit and Minimum Participation Requirements

The creditworthiness and minimum participation requirements in this section apply to the CAISO's acceptance of any transaction in a CAISO Market, to the payment of charges pursuant to the CAISO Tariff (including the Grid Management Charge), and to establish credit limits for participation in any CAISO auction of CRRs and to CRR Holders for the holding of CRRs. Each Market Participant that has a direct financial relationship with the CAISO (including each Scheduling Coordinator, UDC, MSS, CRR Holder, or Candidate CRR Holder) shall secure its financial transactions with the CAISO (including its participation in any auction of CRRs and for the holding of CRRs) by maintaining an Unsecured Credit Limit and/or by posting Financial Security, the level of which constitutes the Market Participant's Financial Security Amount. For each Market Participant, the sum of its Unsecured Credit Limit and its Financial Security Amount shall represent its Aggregate Credit Limit. Each Market Participant shall have the responsibility to maintain an Aggregate Credit Limit that is at least equal to its Estimated Aggregate Liability.

In order to participate in the CAISO Markets, each prospective Market Participant or existing Market Participant with a direct financial relationship with the CAISO must satisfy all of the following minimum participation requirements:

- (i) Provide the CAISO annually, as detailed in the Business Practice Manual, a certified statement executed by an officer of the prospective or existing Market Participant certifying that the prospective or existing Market Participant has met the following criteria and relevant requirements consistent with these criteria set forth in the Business Practice Manual:
 - (a) Has undergone training commensurate and proportional in sophistication, scope, and frequency to the volume of transactions and the nature and extent of the risk taken by the prospective or existing Market Participant, including but not limited to any applicable CAISO training requirements as specified in Sections 4.5.1.1.10.1 and 36.5.2;

- (b) Has and maintains written policies, procedures, and controls approved by the appropriate officer or corporate authority of the prospective or existing Market Participant's governing body which provide an appropriate, comprehensive risk management framework that, at a minimum, clearly identifies and documents the range of risks to which the prospective or existing Market Participant is exposed, including, but not limited to, legal risk, credit risk, liquidity risk, risk of loss of financial security amounts held and invested by the CAISO, investment risk, concentration risk, default risk, operation risk, market risk, and business risk;
 - (c) To the extent the Market Participant engages in the CRR market, the Market Participant must demonstrate that it has policies in place that are consistent with generally accepted industry risk management standards; and
 - (d) Has appropriate personnel resources, operating procedures and technical abilities to promptly and effectively respond to all CAISO communications and directions, including, but not limited to, the CAISO's issuance of invoices and collateral requests to the prospective or existing Market Participant.
- (ii) Provide annually for CAISO review and verification, as detailed in the Business Practice Manual, the risk management policies, procedures, and controls applicable to the CRR trading activities of the prospective or existing Market Participant, if the prospective or existing Market Participant has a CRR portfolio that meets the applicable risk criterion set forth in the Business Practice Manual.
- (iii) Satisfy the following capitalization requirements:
 - (a) Pursuant to Sections 12.1 and 12.1.1, the prospective or existing Market Participant or its guarantor must have at least \$1 million in Tangible Net Worth or \$10 million in total assets, or post Financial Security using one or more of the forms specified in Section 12.2 (a) through (e) in the amounts set forth below. In the event the prospective or existing Market Participant must post Financial Security, that financial security will not be added to Market Participant's Aggregate Credit Limit and, therefore, cannot be used to meet Market

Participant's minimum credit requirements to participate in a Congestion Revenue Rights auction or to offset any market obligations as reflected in Market Participant's Estimated Aggregate Liability. However, all Financial Security in any form may be used to satisfy any financial obligation of the Market Participant.

- (b) \$500,000 for a prospective or existing Market Participant with fewer than six (6) months of CAISO Market activity; \$100,000 for an existing Market Participant with six (6) months or more of CAISO Market activity and whose highest Estimated Aggregate Liability for the preceding six (6) months is less than or equal to \$100,000; or \$500,000 for an existing Market Participant with six (6) months or more of market activity and whose highest Estimated Aggregate Liability for the preceding six (6) months is greater than \$100,000.
- (c) The CAISO will review whether the prospective or existing Market Participant continues to satisfy the capitalization requirements set forth in Section 12.1(iii)(a). The CAISO will conduct such a review every six (6) months, when new financial statements are posted for the prospective or existing Market Participant, or when an increase in CAISO Market activity causes the Market Participant's Estimate Agreement Liability to exceed \$100,000.

The CAISO, at its discretion, may at any time request any information from the prospective or existing Market Participant that the CAISO believes is needed to review and verify the Market Participant's continued satisfaction of the minimum participation requirements set forth in this Section 12.1. The Market Participant shall respond to the CAISO's request for such information within the time period specified in the request, which shall be consistent with the time periods set forth in the Business Practice Manual. Failure to provide the requested information within the specified time period may result in the CAISO taking enforcement actions pursuant to Section 12.5. The CAISO may review and verify the information either with or without the assistance of a third party, at the CAISO's discretion, subject to confidentiality and non-disclosure restrictions, as applicable. For purposes of Section 12, any documentation provided by a prospective or existing Market Participant in compliance with this Section shall be treated as confidential and the CAISO shall maintain the confidentiality of all such documents.

Each prospective Market Participant that does not satisfy all of the minimum participation requirements set forth in this Section 12.1 will be prohibited from participating in the CAISO Markets. Each prospective Market Participant taking part in the Scheduling Coordinator certification process pursuant to Section 4.5.1 or the Candidate CRR Holder application process pursuant to Section 4.10.1 that does not satisfy all of the minimum participation requirements set forth in this Section 12.1 will be ineligible to become a Market Participant or CRR Holder. Each existing Market Participant that does not satisfy all of the minimum participation requirements set forth in this Section 12.1 will be out of compliance with the CAISO Tariff. Any failure of a Market Participant to satisfy the minimum participation requirements set forth in this Section 12.1 that is not cured within thirty (30) days of CAISO notification that a failure occurred will subject the Market Participant to CAISO enforcement actions as set forth in Section 12.5.

* * *

12.6.2 Credit Requirements For CRR Auctions

12.6.2.1 Credit Requirements Applicable to an Entity Other than a Federal Agency

To establish available credit for participating in any CRR Auction, each CRR Holder or Candidate CRR Holder that is not a federal agency must satisfy the credit requirements set forth in Section 12.1 and provide Financial Security using one or more of the forms identified in Section 12.2 (a) through (e) to secure the right to participate in the CAISO's CRR Auctions as set forth below. In order to participate in an annual CRR Auction, the CRR Holder or Candidate CRR Holder must have Financial Security using one or more of the forms identified in Section 12.2 (a) through (e) in an amount that is the greater of \$500,000 or the sum of the maximum credit exposures of all of the CRR Holder's or Candidate CRR Holder's bids for CRRs submitted in the annual CRR Auction. In order to participate in a monthly CRR Auction, the CRR Holder or Candidate CRR Holder must have Financial Security using one or more of the forms identified in Section 12.2 (a) through (e) in an amount that is the greater of \$100,000 or the sum of the maximum credit exposures of all of the CRR Holder's or Candidate CRR Holder's bids for CRRs submitted in the monthly CRR Auction. The maximum credit exposure of a positively valued CRR bid is the maximum value of the CRR Holder's or Candidate CRR Holder's bid quantity (MW) multiplied by the sum of the bid price corresponding to the bid quantity and the Credit Margin of the CRR within the range

of the minimum and maximum bid quantities submitted by the CRR Holder or Candidate CRR Holder. The maximum credit exposure of a negatively valued CRR bid is the maximum bid quantity (MW) submitted by the CRR Holder or Candidate CRR Holder multiplied by the Credit Margin of the CRR.

12.6.2.2 Credit Requirements Applicable to a Federal Agency

To establish available credit for participating in any CRR Auction, each CRR Holder or Candidate CRR Holder that is a federal agency must provide to the CAISO a letter, executed by an officer of the CRR Holder or Candidate CRR Holder, that satisfies all of the following requirements: (1) attests that the federal agency is lawfully authorized to participate in the CRR Auction and that any debt the federal agency incurs due to its participation in the CRR Auction is a debt of the United States; (2) identifies the current year's appropriations for the federal agency from the United States Congress; and (3) verifies that the amount of the current year's appropriations for the federal agency from the United States Congress meets or exceeds the amount required to satisfy the credit requirements set forth in Section 12.1. The provision of such an executed letter to the CAISO shall constitute sufficient Financial Security for the federal agency to participate in the CRR Auction.

12.6.2.3 Failure to Satisfy Credit Requirements

A CRR Holder or Candidate CRR Holder that fails to satisfy the credit requirements set forth in Section 12.6.2.1 or Section 12.6.2.2, as applicable, shall not be permitted to participate in the relevant CRR Auction, or shall have bids the entire CRR bid portfolio, consisting of one or more CRR bids, exceeding its available Financial Security as defined in this section for participation in the CRR Auction, in accordance with the above formula, rejected by the CAISO on a last-in, first-out basis. The CAISO will retain the CRR Auction proceeds for negatively valued CRRs and will apply them to credit requirements of the applicable CRR Holder.

* * *

12.6.3 Credit Requirements For The Holding Of CRRs

12.6.3.1 Credit Requirements Generally

- (a) Each CRR Holder that is not a federal agency, whether it obtains CRRs through a CRR Allocation or a CRR Auction, must maintain Financial Security utilizing one or more of the forms specified in Section 12.2 (a) through (e) that meets or exceeds the credit requirement of the CRR portfolio determined as described in this Section 12.6.3. Each CRR Holder that is a federal agency, whether it obtains CRRs through a CRR Allocation or a CRR Auction, must provide to the CAISO a letter, executed by an officer of the CRR Holder, that satisfies all of the following requirements: (1) attests that the federal agency is lawfully authorized to obtain the CRRs and that any debt the federal agency incurs due to holding the CRRs is a debt of the United States; (2) identifies the current year's appropriations for the federal agency from the United States Congress; and (3) verifies that the amount of the current year's appropriations for the federal agency from the United States Congress meets or exceeds the credit requirement for the CRR portfolio determined as described in this Section 12.6.3. The provision of such an executed letter to the CAISO shall constitute sufficient Financial Security for the federal agency to hold the CRRs.
- (b) Each CRR Holder shall be required to ensure that its Financial Security is sufficient to satisfy the credit requirements described in this Section 12.6.3. Except as provided in this paragraph, CRRs are evaluated on a portfolio basis as follows. If a CRR Holder owns more than one (1) CRR, such CRR Holder shall be subject to an overall credit requirement that is equal to the sum of the individual credit requirements applicable to each of the CRRs held by such CRR Holder, which is calculated after the MW associated with any Offsetting CRRs are netted out. If this sum is positive, the amount will be added to the CRR Holder's Estimated Aggregate Liability. However, if the sum is negative, the CRR Holder's Estimated Aggregate Liability shall not be reduced. If a CRR Holder holds one (1) or more CRRs obtained through a CRR Allocation and also holds one (1) or more CRRs obtained through a CRR Auction, the individual

credit requirements applicable to any of the CRRs obtained through a CRR Allocation may not be netted against the individual credit requirements applicable to any of the CRRs obtained through a CRR Auction in determining such CRR Holder's Estimated Aggregate Liability.

- (c) The CAISO shall reevaluate the credit requirements for holding CRRs, and shall adjust the credit requirements accordingly, not less than monthly. The CAISO may adjust the credit requirements for holding CRRs with terms of one (1) year or less at the CAISO's discretion to account for changes in the monthly auction prices for CRRs and changes in the Historical Expected Values for CRRs, or more frequently than monthly if necessary if the CAISO finds that actual or anticipated market conditions indicate that CRR credit requirements may be inadequate to cover the financial risk of the CRRs. The CAISO may also adjust the credit requirements for holding Long Term CRRs annually to reflect the changes in auction prices of one-year CRRs in annual auctions and changes in the Historical Expected Values for CRRs, and to reflect updates to Credit Margins based on actual Locational Marginal Price data derived from market operations. Whenever the CAISO requests additional Financial Security from a Market Participant as a result of a change in CRR value that is not related to an adjustment due to the monthly CRR Auction Price or an adjustment related to Historical Expected Value, the CAISO will provide a written explanation of the reason for that request. Any additional Financial Security must be in one or more of the forms specified in Section 12.2 (a) through (e).
- (d) In cases where the ownership of a CRR is to be transferred through the Secondary Registration System, the CAISO shall evaluate and adjust the credit requirements for both the current owner of the CRR and the prospective owner of the CRR as appropriate prior to the transfer. If additional Financial Security is required from either the current or prospective owner, the transfer will not be

completed until such Financial Security has been provided to and accepted by the CAISO. CRRs transferred through the Secondary Registration System will be treated like auctioned CRRs for the purpose of calculating the credit requirements for holding the CRRs, regardless of whether the CRRs were originally allocated or purchased at auction or acquired through the Secondary Registration System. CRRs assigned to Load-gaining or Load-losing Load Serving Entities as a result of Load Migration will be treated like allocated CRRs for the purpose of calculating the credit requirements for holding the CRRs. Any additional Financial Security must be in one or more of the forms specified in Section 12.2 (a) through (e).

* * *

Attachment B – Marked Tariff
Credit Reforms Compliance Filing
California Independent System Operator Corporation
Fifth Replacement FERC Electric Tariff
December 14, 2011

12.1 Credit and Minimum Participation Requirements

The creditworthiness and minimum participation requirements in this section apply to the CAISO's acceptance of any transaction in a CAISO Market, to the payment of charges pursuant to the CAISO Tariff (including the Grid Management Charge), and to establish credit limits for participation in any CAISO auction of CRRs and to CRR Holders for the holding of CRRs. Each Market Participant that has a direct financial relationship with the CAISO (including each Scheduling Coordinator, UDC, MSS, CRR Holder, or Candidate CRR Holder) shall secure its financial transactions with the CAISO (including its participation in any auction of CRRs and for the holding of CRRs) by maintaining an Unsecured Credit Limit and/or by posting Financial Security, the level of which constitutes the Market Participant's Financial Security Amount. For each Market Participant, the sum of its Unsecured Credit Limit and its Financial Security Amount shall represent its Aggregate Credit Limit. Each Market Participant shall have the responsibility to maintain an Aggregate Credit Limit that is at least equal to its Estimated Aggregate Liability.

(†) In order to participate in the CAISO Markets, each prospective Market Participant or existing Market Participant with a direct financial relationship with the CAISO must satisfy all of the following minimum participation requirements:

(i) Provide the CAISO annually~~Annually provide, as detailed~~specified in the applicable Business Practice Manual, the CAISO with a certified statement executed by an officer of the prospective or existing Market Participant certifying that the prospective or existing Market Participant has met the following criteria and relevant requirements consistent with these criteria set forth in the Business Practice Manual:-

(a) Has undergone training commensurate and proportional in sophistication, scope, and frequency to the volume of transactions and the nature and extent of the risk taken by the prospective or existing Market Participant, including but not limited to any applicable CAISO training requirements as specified in Sections 4.5.1.1.10.1 and 36.5.2;

~~(a)~~(b) _____ Has and maintains written policies, procedures, and controls approved by the appropriate officer or corporate authority of the prospective or existing Market Participant's governing body which provide an appropriate, comprehensive risk management framework that, at a minimum, clearly identifies and documents the range of risks to which the prospective or existing Market Participant is exposed, including, but not limited to, legal risk, credit risk, liquidity risk, risk of loss of financial security amounts held and invested by the CAISO, investment risk, concentration risk, default risk, operation risk, market risk, and business risk;

(c) To the extent the Market Participant engages in the CRR market, the Market Participant must demonstrate that it has policies in place that are consistent with generally accepted industry risk management standards; and

~~(b)~~(d) _____ Has appropriate personnel resources, operating procedures and technical abilities to promptly and effectively respond to all CAISO communications and directions, including, but not limited to, the CAISO's issuance of invoices and collateral requests to the prospective or existing Market Participant; ~~and~~

~~(e)~~ ~~Has satisfied any applicable CAISO training requirements as specified in Sections 4.5.1.2.10.1 and 36.5.2.~~

(ii) _____ Provide annually for CAISO review and verification, as detailed in the Business Practice Manual, the risk management policies, procedures, and controls applicable to the CRR trading activities of the prospective or existing Market Participant, if the prospective or existing Market Participant has a CRR portfolio that meets the applicable risk criterion set forth in the Business Practice Manual.

~~(e)~~ (iii) _____ Satisfy the following capitalization requirements:

(a) _____ Pursuant to Sections 12.1 and 12.1.1, the prospective or existing Market Participant or its guarantor must have at least \$1 million in Tangible Net Worth or \$10 million in total assets, or post ~~a form of~~ Financial Security using one or more

of the forms specified in Section 12.2 (a) through (e) in the amounts set forth below. In the event the prospective or existing Market Participant must post Financial Security, that ~~financial security~~ ~~Financial Security~~ will not be added to Market Participant's Aggregate Credit Limit and, therefore, cannot be used to meet Market Participant's minimum credit requirements to participate in a Congestion Revenue Rights auction or to offset any market obligations as reflected in Market Participant's Estimated ~~Aggregate~~ ~~Aggregated~~ Liability. However, all Financial Security in any form may be used to satisfy any financial obligation of the Market Participant.

• ~~(b)~~ \$500,000 for a prospective or existing Market Participant with fewer than six (6) months of CAISO Market activity; \$100,000 for an existing Market Participant with six (6) months or more of CAISO Market activity and whose highest Estimated Aggregate Liability for the preceding six (6) months is less than or equal to \$100,000; or \$500,000 for an existing Market Participant with six (6) months or more of market activity and whose highest Estimated Aggregate Liability for the preceding six (6) months is greater than \$100,000.

~~(c)~~ ~~(b)~~ — The CAISO will review whether the prospective or existing Market Participant continues to satisfy the capitalization requirements set forth in Section 12.1 ~~(iii#)~~ (a). The CAISO will conduct such a review every six (6) months, when new financial statements are posted for the prospective or existing Market Participant, or when an increase in CAISO Market activity causes the Market Participant's Estimate Agreement Liability to exceed \$100,000.

The CAISO, at its discretion, may at any time request any information from the prospective or existing Market Participant that the CAISO believes is needed to review and verify the Market Participant's continued satisfaction of the minimum participation requirements set forth in this Section 12.1. The Market Participant shall respond to the CAISO's request for such information within the time period specified in the request, which shall be consistent with the time periods set forth in the Business Practice Manual. Failure to provide the requested information within the specified time period may result in the

CAISO taking enforcement actions pursuant to Section 12.5. The CAISO may review and verify the information either with or without the assistance of a third party, at the CAISO's discretion, subject to confidentiality and non-disclosure restrictions, as applicable. For purposes of Section 12, any documentation provided by a prospective or existing Market Participant in compliance with this Section shall be treated as confidential and the CAISO shall maintain the confidentiality of all such documents.

Each prospective Market Participant that does not satisfy all of the minimum participation requirements set forth in this Section 12.1 will be prohibited from participating in the CAISO Markets. Each prospective Market Participant taking part in the Scheduling Coordinator certification process pursuant to Section 4.5.1 or the Candidate CRR Holder application process pursuant to Section 4.10.1 that does not satisfy all of the minimum participation requirements set forth in this Section 12.1 will be ineligible to become a Market Participant or CRR Holder. Each existing Market Participant that does not satisfy all of the minimum participation requirements set forth in this Section 12.1 will be out of compliance with the CAISO Tariff. Any failure of a Market Participant to satisfy the minimum participation requirements set forth in this Section 12.1 that is not cured within thirty (30) days of CAISO notification that a failure occurred will subject the Market Participant to CAISO enforcement actions as set forth in Section 12.5.

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12.6.2 Credit Requirements For CRR Auctions

12.6.2.1 Credit Requirements Applicable to an Entity Other than a Federal Agency

To establish available credit for participating in any CRR Auction, each CRR Holder or Candidate CRR Holder that is not a federal agency must satisfy the credit requirements set forth in Section 12.1 and provide Financial Security using one or more of the forms identified in Section 12.2 (a) through (e) to secure the right to participate in the ~~CAISO's~~ CRR Auctions as set forth below. In order to participate in an annual CRR Auction, the CRR Holder or Candidate CRR Holder must have Financial Security using one or more of the forms identified in Section 12.2 (a) through (e) in an amount that is the greater of \$500,000 or the sum of the maximum credit exposures of all of the CRR Holder's or Candidate CRR Holder's bids for CRRs submitted in the annual CRR Auction. In order to participate in a monthly

CRR Auction, the CRR Holder or Candidate CRR Holder must have Financial Security using one or more of the forms identified in Section 12.2 (a) through (e) in an amount that is the greater of \$100,000 or the sum of the maximum credit exposures of all of the CRR Holder's or Candidate CRR Holder's bids for CRRs submitted in the monthly CRR Auction. The maximum credit exposure of a positively valued CRR bid is the maximum value of the CRR Holder's or Candidate CRR Holder's bid quantity (MW) multiplied by the sum of the bid price corresponding to the bid quantity and the Credit Margin of the CRR within the range of the minimum and maximum bid quantities submitted by the CRR Holder or Candidate CRR Holder. The maximum credit exposure of a negatively valued CRR bid is the maximum bid quantity (MW) submitted by the CRR Holder or Candidate CRR Holder multiplied by the Credit Margin of the CRR.

12.6.2.2 Credit Requirements Applicable to a Federal Agency

To establish available credit for participating in any CRR Auction, each CRR Holder or Candidate CRR Holder that is a federal agency must provide to the CAISO a letter, executed by an officer of the CRR Holder or Candidate CRR Holder, that satisfies all of the following requirements: (1) attests that the federal agency is lawfully authorized to participate in the CRR Auction and that any debt the federal agency incurs due to its participation in the CRR Auction is a debt of the United States; (2) identifies the current year's appropriations for the federal agency from the United States Congress; and (3) verifies that the amount of the current year's appropriations for the federal agency from the United States Congress meets or exceeds the amount required to satisfy the credit requirements set forth in Section 12.1. The provision of such an executed letter to the CAISO shall constitute sufficient Financial Security for the federal agency to participate in the CRR Auction.

12.6.2.3 Failure to Satisfy Credit Requirements

–A CRR Holder or Candidate CRR Holder that fails to satisfy the credit requirements set forth in Section 12.6.2.1 or Section 12.6.2.2, as applicable,~~this requirement~~ shall not be permitted to participate in the relevant CRR Auction, or shall have bids the entire CRR bid portfolio, consisting of one or more CRR bids, exceeding its available Financial Security as defined in this section for participation in the CRR Auction, in accordance with the above formula, rejected by the CAISO on a last-in, first-out basis. The

CAISO will retain the CRR Auction proceeds for negatively valued CRRs and will apply them to credit requirements of the applicable CRR Holder.

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12.6.3 Credit Requirements For The Holding Of CRRs

12.6.3.1 Credit Requirements Generally

- (a) Each CRR Holder that is not a federal agency, whether it obtains CRRs through a CRR Allocation or a CRR Auction, must maintain Financial Security utilizing one or more of the forms specified in Section 12.2 (a) through (e) that meets or exceeds the credit requirement of the CRR portfolio determined as described in this Section 12.6.3. Each CRR Holder that is a federal agency, whether it obtains CRRs through a CRR Allocation or a CRR Auction, must provide to the CAISO a letter, executed by an officer of the CRR Holder, that satisfies all of the following requirements: (1) attests that the federal agency is lawfully authorized to obtain the CRRs and that any debt the federal agency incurs due to holding the CRRs is a debt of the United States; (2) identifies the current year's appropriations for the federal agency from the United States Congress; and (3) verifies that the amount of the current year's appropriations for the federal agency from the United States Congress meets or exceeds the credit requirement for the CRR portfolio determined as described in this Section 12.6.3. The provision of such an executed letter to the CAISO shall constitute sufficient Financial Security for the federal agency to hold the CRRs.
- (b) Each CRR Holder shall be required to ensure that its Financial Security is sufficient to satisfy the credit requirements described in this Section 12.6.3. Except as provided in this paragraph, CRRs are evaluated on a portfolio basis as follows. If a CRR Holder owns more than one (1) CRR, such CRR Holder shall be subject to an overall credit requirement that is equal to the sum of the individual credit requirements applicable to each of the CRRs held by such CRR

Holder , which is calculated after the MW associated with any Offsetting CRRs are netted out. If this sum is positive, the amount will be added to the CRR Holder's Estimated Aggregate Liability. However, if the sum is negative, the CRR Holder's Estimated Aggregate Liability shall not be reduced. If a CRR Holder holds one (1) or more CRRs obtained through a CRR Allocation and also holds one (1) or more CRRs obtained through a CRR Auction, the individual credit requirements applicable to any of the CRRs obtained through a CRR Allocation may not be netted against the individual credit requirements applicable to any of the CRRs obtained through a CRR Auction in determining such CRR Holder's Estimated Aggregate Liability.

- (c) The CAISO shall reevaluate the credit requirements for holding CRRs, and shall adjust the credit requirements accordingly, not less than monthly. The CAISO may adjust the credit requirements for holding CRRs with terms of one (1) year or less at the CAISO's discretion to account for changes in the monthly auction prices for CRRs and changes in the Historical Expected Values for CRRs, or more frequently than monthly if necessary if the CAISO finds that actual or anticipated market conditions indicate that CRR credit requirements may be inadequate to cover the financial risk of the CRRs. The CAISO may also adjust the credit requirements for holding Long Term CRRs annually to reflect the changes in auction prices of one-year CRRs in annual auctions and changes in the Historical Expected Values for CRRs, and to reflect updates to Credit Margins based on actual Locational Marginal Price data derived from market operations. Whenever the CAISO requests additional Financial Security from a Market Participant as a result of a change in CRR value that is not related to an adjustment due to the monthly CRR Auction Price or an adjustment related to Historical Expected Value, the CAISO will provide a written explanation of the reason for that request. Any additional Financial Security must be in one or more of the forms specified in Section 12.2 (a) through (e).

(d) In cases where the ownership of a CRR is to be transferred through either the Secondary Registration System or through Load Migration, the CAISO shall evaluate and adjust the credit requirements for both the current owner of the CRR and the prospective owner of the CRR as appropriate prior to the transfer. If additional Financial Security is required from either the current or prospective owner, the transfer will not be completed until such Financial Security has been provided to and accepted by the CAISO. CRRs transferred through the Secondary Registration System will be treated like auctioned CRRs for the purpose of calculating the credit requirements for holding the CRRs, regardless of whether the CRRs were originally allocated or purchased at auction or acquired through the Secondary Registration System. CRRs assigned to Load-gaining or Load-losing Load Serving Entities as a result of Load Migration will be treated like allocated CRRs for the purpose of calculating the credit requirements for holding the CRRs. Any additional Financial Security must be in one or more of the forms specified in Section 12.2 (a) through (e).

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