



California Independent
System Operator Corporation

July 16, 2012

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. ER12-_____ - 000**

**Amendments to California ISO FERC Electric Tariff to Enable
Enhancements and Clarify the Congestion Revenue Rights
Processes**

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d, and Part 35 of the Federal Energy Regulatory Commission's (FERC or the Commission) regulations, 18 C.F.R. Part 35, and in compliance with Order No. 714 regarding electronic filing of tariff submittals,¹ the California Independent System Operator Corporation (ISO) hereby submits for filing the attached amendment to its Fifth Replacement FERC Electric Tariff. This amendment is the result of the ISO's ongoing efforts with its stakeholders to refine its Congestion Revenue Rights (CRR) processes. The ISO proposes a set of minor modifications to rules governing the priority nomination process, which is one of the tiers of the CRR allocation process. This change is consistent with a refinement of the rule changes the ISO made to the same provisions last year. In addition, the ISO is proposing clarifications to existing tariff provisions that eliminate uncertainty or ambiguity in the ISO tariff and remove references to unnecessary or obsolete provisions.

The proposed changes were uncontested by stakeholders at the end of the stakeholder process preceding this filing. In addition, the proposed changes provide refinements or clarifications that further facilitate participation in the ISO's CRR release

¹ *Electronic Tariff Filings*, Order No. 714, FERC Stats. & Regs. ¶ 31,276 (2008).

processes. The ISO, therefore, respectfully requests that the Commission issue an order accepting the instant filing no later than September 15, 2012. An order by such date will allow the ISO and market participants sufficient time to evaluate the implications of the Commission's order and conduct the 2013 annual release process consistent with the rule changes resulting from these proposed amendments.

I. BACKGROUND

Congestion revenue rights are instruments made available to ISO market participants to manage their exposure to financial risk associated with transmission usage congestion costs in the day-ahead market. A CRR is defined by four primary elements: (1) a source-sink pair;² (2) a megawatt quantity; (3) a term, which consists of either a season or a month; and (4) a time-of-use, which covers either on-peak or off-peak hours. In the ISO's nodal locational marginal price-based market, CRRs are settled based on the difference in the marginal cost of congestion, which is a component of the locational marginal price, between two pricing nodes cleared in the ISO's day-ahead market. The quantity of CRRs available is based on a model of the ISO's electric system, which is reflected through the CRR Full Network Model (CRR FNM). The ISO conducts an annual release process through which it allocates and auctions seasonal CRRs for the upcoming year, based on the CRRs requested through nominations or bids, subject to a simultaneous feasibility test. The annual release process begins in September of the year before the CRRs will be effective. The simultaneous feasibility test allows the ISO to determine which CRRs are feasible for release in each round of the CRR process, based on the assumptions it makes regarding the state of the system over the applicable time period. In the annual allocation process, the ISO also releases long term CRRs that have a term of ten years. Only 75 percent of the transmission capacity is released through the annual processes. After the ISO has conducted the annual release process, the ISO conducts a monthly release process through which it allocates and auctions off CRRs for the remaining system capacity.

The annual and monthly allocation processes consist of an iterative, multi-tier process in which internal and external load serving entities (LSEs) are entitled to nominate CRRs based on their load-serving obligations. LSEs are entitled to receive the allocated CRRs because load has paid for the embedded costs of the ISO controlled grid. The auctions, in contrast, are open to all registered parties wishing to obtain CRRs, irrespective of their load-serving obligations. CRRs in the auction are cleared and made available at the market clearing CRR prices.

² The "source" being the point of power injection to the transmission network and the "sink" being the point of power withdrawal (*i.e.*, consumption). These designations denote the direction of flow on the network (*e.g.*, from source A to sink B) and the price component of the CRR payment, which is defined as the difference in the congestion component of the locational marginal price between the two locations.

In the allocation process, LSEs are entitled to nominate CRRs based on the amount of load that is certified to be eligible based on the location of the LSEs' loads. The entitlements are perpetuated from year-to-year through the tiered allocation process. The first tier of this CRR allocation process is the priority nomination process. Through this process, holders of allocated CRRs from the prior year are given priority rights to re-nominate some – *but not all* – of those CRRs for the succeeding year. The quantity of CRRs a LSE receives in the priority nomination process extends beyond the specific year in question because only those CRRs awarded in the priority nomination process can be nominated in the subsequent long term allocation tier.

In June of last year, the ISO proposed, and the Commission subsequently accepted, a group of CRR enhancements based on ISO and stakeholder experience.³ The major change involved incorporating an anticipated level of unscheduled outages in the CRR FNM used for the annual CRR release process. Since that filing, as part of the ISO's efforts to continuously refine and enhance its CRR market rules, the ISO and market participants identified a number of additional minor clarifications and refinements that further enhance the performance of the CRR processes and better meet market participant need.

II. DISCUSSION OF FILING

With an additional year of experience, the ISO has identified five incremental CRR tariff amendments. These amendments will:

1. Clarify the amount of CRRs that a CRR holder is eligible to nominate in the priority nomination process and long term tier of the allocation.
2. Clarify how the amount of CRRs that a CRR holder is eligible to nominate in tier two and tier three of the allocation is adjusted to account for load migration CRRs.
3. Create more flexibility for the amount of advance notice CRR holders must provide to the ISO for a transaction to become effective on the secondary registration system.
4. Harmonize the credit requirements that recipients of load migration CRRs must meet with the ISO's generally applicable credit requirements and clarify what happens in the event that those credit requirements are not met.

³ The ISO filed its proposal on June 23, 2011 in Docket No. ER11-3873-000. The Commission accepted the ISO's proposal on August 22, 2011. *Cal. Indep. Sys. Operator Corp.*, 136 FERC ¶ 61,120 (2011).

5. Remove obsolete references in the provisions governing the allocation of merchant transmission CRRs.

At this stage, the ISO's CRR process is mature and has been functioning at a high level. The above set of amendments represent incremental enhancements to that process and will help maintain that high level of performance by providing greater certainty for the ISO's market participants and provide a more administrable CRR process for the ISO and CRR holders alike.

A. Clarifying the Priority Nomination Process – §§ 36.8.2.1 & 36.8.3.5.1

1. Long Term CRRs in the Priority Nomination Process

Section 36.8.3.5.1 describes how the priority nomination process operates, including how many CRRs a LSE is entitled to request in that process (*i.e.*, the priority nomination process upper bound). As part of the June 2011 CRR filing, and based on stakeholder feedback, the ISO amended section 36.8.3.5.1 with the intent of clarifying language that otherwise could have been read to significantly reduce CRR holders' eligibility for priority nomination process. Prior to the 2011 amendments, section 36.8.3.5.1 allowed nominations in the priority nomination process:

up to the lesser of: (1) two-thirds of its Seasonal CRR Eligible Quantity, minus the quantity of **previously allocated Long Term CRRs** for each season, time of use period and CRR Sink for that year; or, (2) the total quantity of Seasonal CRRs allocated to that LSE in the previous annual CRR Allocation, minus the quantity of **previously allocated Long Term CRRs** for each season, time of use period and CRR Sink, and minus any reduction for net loss of Load or plus any increase for net gain of Load through retail Load Migration as described in Section 36.8.5.1. (*emphasis added*).

As explained in the June 2011 filing, a stakeholder raised a concern that the phrase "minus the quantity of previously allocated Long Term CRRs" could be interpreted to refer to all previously allocated long term CRRs meeting the defined criteria. The stakeholder explained its concern that this interpretation would count the impact of all effective long term CRRs in both criteria for determining the priority nomination process upper bound, whereas the stakeholder believed that one of the criteria should be limited to considering only the long term CRRs awarded in the immediately preceding annual process.⁴ Because the priority nomination process upper

⁴ Because long term CRRs are awarded for ten-year periods, the total CRRs effective in a specific year could have been awarded as long term CRRs from several years. As an example, assume a CRR holder is awarded 100 MW of long term CRRs in each of the 2013, 2014, and 2015 annual processes. When the 2016 annual process begins, that CRR holder will start with a total of 300 MW of long term

bound is set at the lower of the two criteria, including all currently effective long term CRRs in both criteria would tend to reduce LSEs' ability to secure CRRs through the priority nomination process.

The ISO clarified in the stakeholder process preceding the June 2011 filing that it did not intend for both criteria in section 36.8.3.5.1 to be adjusted downward to account for all long term CRRs in effect for the upcoming year because doing so would restrict eligibility in the priority nomination process too much and impact LSEs' ability to hedge their exposure to congestion costs. Through the June 2011 filing, the ISO tried to clarify that only one of the criteria should be adjusted downward for all long term CRRs effective for the upcoming year and that one criteria should be adjusted downward only by the long term CRRs that were awarded in the immediately preceding annual process. As a result of the June 2011 filing, the relevant portion of section 36.8.3.5.1 was amended to allow nominations in the priority nomination process:

up to the lesser of: (1) two-thirds of its Seasonal CRR Eligible Quantity, minus the quantity of ~~previously-allocated~~ Long Term CRRs allocated in the immediately preceding Seasonal CRR Allocation for each season, time of use period and CRR Sink for that year; or, (2) the total quantity of Seasonal CRRs allocated to that LSE in the previous annual CRR Allocation, minus the quantity of previously allocated Long Term CRRs for each season, time of use period and CRR Sink, and minus any reduction for net loss of Load or plus any increase for net gain of Load through retail Load Migration as described in Section 36.8.5.1. (*strikeouts and insertions shown*)

Unfortunately, there was some level of miscommunication during the stakeholder process leading to the June 2011 filing. As mentioned, the phrase "minus the quantity of previously allocated Long Term CRRs" appeared twice in the prior version of section 36.8.3.5.1. The ISO altered that phrase as it appeared in the first criterion, while leaving the second criterion unchanged. Throughout the stakeholder process, the ISO was clear that this was its intent.⁵ When the ISO ran the 2012 allocation process starting in

CRRs in effect but only 100 MW of those CRRs were awarded in the immediately preceding annual process.

⁵ This point was made clear starting with the Straw Proposal, published on April 15, 2011. Available at <http://www.caiso.com/Documents/StrawProposal-CongestionRevenueRights2011Enhancements.pdf>. When the ISO posted for stakeholder review the first of its three drafts of the proposed tariff amendments the ISO inadvertently amended both criteria in section 36.8.3.5.1. See <http://www.caiso.com/Documents/DraftTariffLanguage-CongestionRevenueRights2011EnhancementsJun22011.doc>. This produced the following response from Silicon Valley Power: "the CAISO gave an impression that it would make the tariff language change to the criterion (1) only and not to both criteria. What is the reasoning behind the current approach to have the additional language in both criteria?" See <http://www.caiso.com/Documents/SVPCommentson2011CongestionRevenueRightsEnhancementsDraftT>

September 2011, it did so based on the tariff language that was approved through the June 2011 filing. Upon reviewing the quantity of CRRs they were able to nominate in the priority nomination process, several LSEs raised concerns with the ISO that they were eligible to receive fewer CRRs from the priority nomination process than they would have anticipated.⁶ As it turned out, criterion 1 already tended to be less restrictive than criterion 2, yet the tariff changes made it even less restrictive.⁷ Because the priority nomination process upper bound is based on whichever criterion is smaller, the amendments made to section 36.8.3.5.1 in the June 2011 filing did not generate the intended result, which was to enhance the ability of LSEs to nominate CRRs in the priority nomination process, and in turn, the long term tier.

Because it was not the intent of the ISO or stakeholders to reduce the amount that LSEs could carry over as long term CRRs, the ISO agreed to make the clarifying change in this filing. This proposed clarification was considered in the stakeholder process described below. No party opposed this change, and a number of participants expressly supported the proposed tariff modification. Accordingly, the ISO now proposes to modify Section 36.8.3.5.1 so that it is unambiguous that the accounting of the long term CRRs from the immediately preceding year is only applied to the second criterion. This change will satisfy concerns raised by market participants with regards to the 2012 CRR release and is consistent with the policy intent that market participants should be able to receive up to 50% of their adjusted load metric as long term CRRs.⁸

2. Load Migration Adjustments in the Priority Nomination Process

Through the ISO stakeholder process, the ISO identified another potential area of confusion regarding the load migration provision in section 36.8.3.5.1. The ISO adopted specific rules to account for the movement of load between LSEs in the release of CRRs through the allocation process. These rules are based on LSEs' verifiable load. Section 36.8.3.5.1 contains language that describes how the load migration in between years is accounted for in the annual release of CRRs. In that section, the phrase "minus any reduction for net loss of Load or plus any increase for net gain of Load through retail Load Migration as described in Section 36.8.5.1," was meant to modify both criteria. In accounting for the load migration for prior years, the overall eligible

[ariffLanguage.pdf](#). This response demonstrates that at least some stakeholders understood that the ISO intended to only amend the first criterion in section 36.8.3.5.1.

⁶ While participants expressed a concern with the rule as it applied last year, the ISO explained, and participants did not dispute, that the ISO applied the procedure consistent with the tariff rules in place at the time. However, to address participants' concerns, the ISO agreed to seek a modification of this rule going forward as it is doing in this filing.

⁷ Depending on a LSE's particular circumstances, criterion 1 could have been the more restrictive criterion.

⁸ Section 36.8.3.5.2.1 establishes the policy that LSEs should be able to hold up to 50% of their adjusted load metric in long term CRRs. As discussed above, only CRRs received in the priority nomination process can in turn be nominated as long term CRRs. By unduly restricting the CRRs received in the priority nomination process, the current language makes it quite difficult for LSEs to reach their maximum eligibility in the long term tier.

quantity in the priority nomination process should be adjusted, irrespective of whether criterion 1 or criterion 2 is smaller to define the upper bound load for which the load serving entity is eligible to nominate in the priority nomination process. The ISO believes that the current tariff language could be clarified to eliminate any ambiguity. The ISO accordingly proposes to add specific language to ensure that the load migration accounting is explicitly applied to both criteria.

In addition, the existing language, while precisely stating the substance of the mathematical calculations, is somewhat difficult to comprehend. More specifically, it states that the ISO is supposed to subtract a reduction of a net loss. Therefore, the ISO proposes to modify this section slightly to state that the reduction will be for the “net MW amount of load migration CRRs valid for each season, time of use period and CRR sink for that year.” This amendment maintains the substance of the existing language but clarifies the application of these calculations in the tariff.

The ISO also proposes a second load migration-related clarification for the second criterion. The starting point of the second criterion is meant to be all CRRs that the LSE received in the prior year’s allocation. The logical extension of this concept is to also include CRRs that were allocated to other LSEs in the prior year’s allocation that subsequently were transferred to the LSE in question, and to subtract out CRRs that were lost due to load migration. Including such load migration CRRs more accurately establishes the baseline of what CRRs the LSE held as a result of the prior year’s allocation. The ISO has always included such load migration CRRs in its calculation of the second criterion. The basis of doing so is section 36.8.5, which states the general principle that “Load Migration will be reflected in appropriate adjustments to each affected LSE’s . . . PNP Eligible Quantities in the next annual CRR Allocation.” The ISO proposes to add the following phrase in the second criterion to provide a more concrete application of this principle: “plus the net quantity of load migration CRRs associated with the immediately preceding Seasonal CRR Allocations for the corresponding season, time of use, and CRR sink location.”

The ISO also proposes to clarify a load migration-related provision in section 36.8.2.1 that interacts with section 36.8.3.5.1. Section 36.8.2.1 defines the Seasonal CRR Eligible Quantity, which is the starting point of the calculation in the first criterion in section 36.8.3.5.1. The seasonal eligible quantity contains an adjustment to account for one aspect of the load migration process. As noted above, section 36.8.3.5.1 contains some adjustments to account for other aspects of load migration. The fact that both provisions contain load migration-related adjustments prompted stakeholder inquiry as to whether the CRR process double-counts load migration. During the stakeholder process, the ISO explained that the two load migration-related adjustments capture distinct factors. The load migration adjustment in section 36.8.2.1 adjusts each LSE’s Seasonal CRR Load Metric to reflect the load that the LSE actually serves. LSEs must submit historical load values as part of the CRR process. The values submitted may not reflect the actual load served at the time the allocation process is run because the LSE could have subsequently lost or gained load as a result of load migration. The adjustment in section 36.8.2.1 captures these potential changes. In contrast, the

adjustments in section 36.8.3.5.1 reflect a LSE's CRR portfolio associated with long term CRRs that are valid for the time period for which the annual allocation is being performed. As an example, in the 2013 annual process if the ISO calculates a LSE's base seasonal eligible quantity for season 1 on peak as 75MW, then this is the starting point for the total amount of CRRs that this LSE will be able to request through the annual allocation for 2013. If this LSE were previously awarded long term CRRs that are valid for the 2013 season 1 on peak period then it already has CRRs to cover the load for that period and does not need to request CRRs for that load. Similarly, if an LSE received long term CRRs through the load migration process that are also valid for the 2013 season 1 on peak period then it also already has CRRs to cover the load for that period and does not need to request CRRs for that load. That is the adjustment that section 36.8.3.5.1 is designed to address.

While the ISO does not believe that these two distinct provisions count the impact of load migration twice, the fact that stakeholders have submitted inquiries regarding this language suggests that the provisions can benefit from additional clarity. Accordingly, the ISO proposes adding clarifying language to section 36.8.2.1 to make it more apparent how the seasonal eligible quantity is adjusted for load migration. These tariff modifications, along with the clarity provided through the instant transmittal letter, hopefully will make it easier for the ISO's stakeholders and the Commission to understand how load migration is accounted for in the CRR annual process.

All of the above changes are ministerial because they do not change the meaning of the existing tariff provisions and they do not in any way modify the ISO's existing policy and current practices in accounting for load migration from year-to-year. However, these changes enhance the readability of the tariff language and eliminate any ambiguity that previously existed. The proposed changes were unopposed by any stakeholders. Therefore, the ISO respectfully asks that the Commission accept the proposed revisions.

3. Removing a Redundant and Potentially Confusing Provision

During the course of the stakeholder process, one stakeholder suggested that a particular sentence in section 36.8.3.5.1 was no longer necessary. The sentence in question states: "The maximum quantity of CRRs that an LSE or a Qualified OBAALSE may nominate in the PNP is fifty (50) percent of its Adjusted Load Metric, minus any previously allocated Long Term CRRs that are valid for the term of the CRRs being nominated." This statement essentially restates the starting point of the first criterion. This is because half of the adjusted load metric is mathematically equivalent to two-thirds of a LSE's seasonal CRR eligible quantity.⁹ Because these two values are

⁹ A simple example demonstrates the equivalence. Assume a LSE has a load metric of 100 MW. Its seasonal eligible quantity is 75% of those 100 MW, or 75 MW. Two-thirds of that seasonal eligible quantity is 50 MW. Half of the 100 MW load metric is also 50 MW. Thus, half of the adjusted load metric is the same as two-thirds of the seasonal eligible quantity.

equivalent and the provision defines the priority nomination process eligibility as being the smaller of the two criterion, the sentence regarding the adjusted load metric is unnecessary and would only serve to create confusion in instances where the party reviewing the tariff does not immediately recognize the equivalence between half of the adjusted load metric and two-thirds of the seasonal eligible quantity.

B. Clarifying How the Seasonal Eligible Quantity is Adjusted for Load Migration – §§ 36.8.3.5.3 & 36.8.3.5.4

Sections 36.8.3.5.3 and 36.8.3.5.4 define the maximum quantity of CRRs that a LSE can receive in tier 2 and tier 3, respectively, of the annual process. Both sections establish the upper bound for that tier by starting with a percentage of the seasonal eligible quantity (66% for tier 2 and 100% for tier 3) and then adjusting for: (a) CRRs allocated in prior tiers of that year's allocation; and (b) previously allocated long term CRRs effective for the term currently being allocated. On the basis of section 36.8.5, the ISO's practice has been to account for the net impact of load migration on long term CRRs under criterion b. The intent of the overall CRR process is that a LSE never be able to acquire more than 75% of its seasonal eligible quantity through the annual process so as to reserve capacity for subsequent monthly allocations. Without accounting for long term CRRs acquired through load migration, a LSE could exceed this threshold under current tariff language. On the other hand, if the LSE lost long term CRRs through load migration, it could be unfairly penalized.

To address this situation, the ISO proposes to amend sections 36.8.3.5.3 and 36.8.3.5.4 to account explicitly for long term CRRs gained or lost through load migration. These proposed amendments do not change the substance of the CRR process. Instead, they make the tariff clearer in terms of how the process works.

C. Altering the Amount of Notice CRR Holders Need to Provide to the Secondary Registration System – § 36.7.3

Section 36.7.3 requires CRR holders to report bilateral CRR transactions through the ISO's secondary registration system. Such reporting ensures that the ISO will settle CRRs with the correct entity and that the credit and collateral calculations will reflect a party's holdings properly. At the time the CRR process began, the ISO needed five business days to ensure that it would have time to perform the necessary credit checks. Accordingly, the ISO included a tariff requirement that parties provide notice of five business days before a transaction registered on the secondary registration system would become effective. Over time, the ISO's systems have become faster at performing the necessary credit calculations so that a five business day requirement is no longer necessary in most circumstances.

Accordingly, the ISO proposes to amend section 36.7.3 so that parties must register their transactions "with sufficient time necessary for the CAISO to evaluate the credit-worthiness of the transferor and transferee" To provide continuity, the tariff will continue to impose a maximum notice period of five business days. That is, the

most notice the ISO will be able to require will continue to be five days. Through the proposed amendments, the ISO would only be able to shorten the notice period but not lengthen it.

D. Removing Need for Manual Credit Calculations Associated with Load Migration CRRs – § 36.8.5.4

Section 36.8.5.4 outlines a manual calculation that is performed in cases where a LSE to which load migrates does not meet the credit requirements for holding the associated load migration CRRs. This section also describes what happens in the event the load-gaining LSE has not registered with the ISO to hold CRRs. The ISO's automated credit processes already calculate changes in credit requirements on a daily basis. For this reason, any changes to the load-gaining LSE's credit situation would already be picked up through this process. In addition, in cases where a LSE receives load migration CRRs it has had a small impact on the LSE's overall credit standing with the ISO and thus the ISO has not had any reason to conduct the time-consuming manual calculations described in this section. The ISO therefore proposes to eliminate these requirements and simply align this section with the ISO's overall credit processes by providing that the credit impact of load migration CRRs will be accounted for "through the otherwise applicable credit and collateral processes delineated in Section 12 and the appropriate Business Practice Manuals."

Section 36.8.5.4 also provides that if the load-gaining LSE persistently fails to meet credit requirements, then the ISO can place the CRRs into the CRR auctions. The ISO has never invoked this provision and would be unlikely to do so because of the logistical difficulties of auctioning off the CRRs. For example, it is unclear how the ISO would determine the clearing price and, with counterflow CRRs, where the ISO would get the funds to pay the auction winner to accept the CRRs. More fundamentally, invoking this provision would raise questions as to whether the ISO is acting as a market participant in the market it is responsible for administering. Accordingly, the ISO proposes to remove this provision from section 36.8.5.4. Again, this amendment should not create any noticeable change in the CRR process because this authority for the ISO to re-auction previously auctioned CRRs has never been invoked.

E. Removing Obsolete Language in Provisions Relating to Merchant Transmission Process – § 36.11.3.2.3

Section 36.11, *et seq.*, describes how the ISO awards CRRs to merchant transmission developers choosing to request merchant transmission CRRs. One subsection, section 36.11.3.2.3, contains references to a "multi-period SFT." This term refers to a feature that would allow the simultaneous feasibility test to consider multiple FNM variations in a single allocation process and was considered when the CRR system began. Implementation of this feature was deferred and is not in the current CRR system. Section 36.11.3.2.3, however, contains references to this obsolete terminology. This section also refers to the evaluation of two sets of grid conditions,

which is itself a reference to the multi-period simultaneous feasibility test. The ISO therefore proposes tariff amendments to remove these obsolete references.

Separately, section 36.11.3.2.3 states that the simultaneous feasibility test will “maximize the MWs of Merchant Transmission CRRs” This is also an obsolete reference. In July 2010 the ISO proposed, and the Commission subsequently accepted, implementation of a weighted least squares optimization formulation by which the CRR software no longer optimizes the allocation by “maximizing” awarded MWs.¹⁰ Instead, through the weighted least squares optimization, the ISO shares capacity on binding constraints based on the square of the shift factors of the relevant nominations that affect the binding constraint. Therefore, the reference in section 36.11.3.2.3 to maximizing awarded CRRs does not reflect current practice. Accordingly, the ISO proposes to strike this reference.

III. DESCRIPTION OF STAKEHOLDER PROCESS

The stakeholder process commenced in late April 2012 with the publication of a draft proposal.¹¹ The instant proposal has received universal stakeholder support, and stakeholders expressed a desire that it be approved in time for the 2013 annual process.

IV. EFFECTIVE DATES

The ISO respectfully requests that the tariff amendments, contained in the instant filing, be approved as of September 15, 2012. The ISO requests that the Commission issue an order on this matter by that date as well.

V. COMMUNICATIONS

Communications regarding this filing should be addressed to the following individuals. The individual identified with an asterisk is the person whose name should be placed on the official service list established by the Secretary with respect to this submittal:

Anna A. McKenna
Senior Counsel
David Zlotlow*
Counsel

¹⁰ The ISO filed its proposal on July 12, 2010 in Docket No. ER10-1756-000. The Commission accepted the ISO’s proposal by letter order on September 1, 2010.

¹¹ More information on the ISO’s stakeholder process is available at:

<http://www.caiso.com/informed/Pages/StakeholderProcesses/CongestionRevenueRightsTariffClarification2012.aspx>.

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VI. SERVICE

The ISO has served copies of this transmittal letter, and all attachments, on the California Public Utilities Commission and the California Energy Commission, and all parties with effective Scheduling Coordinator Service Agreements under the ISO Tariff. In addition, the ISO is posting this transmittal letter and all attachments on the ISO website.

VII. ATTACHMENTS

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

Attachment A Revised ISO Tariff Sheets – Clean

Attachment B Revised ISO Tariff Sheets – Blackline

VIII. CONCLUSION

For the foregoing reasons, the ISO respectfully requests that the Commission approve this tariff revision as filed. Please contact the undersigned if you have any questions concerning this matter.

Respectfully submitted,

By: /s/ David S. Zlotlow

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Attorneys for the California Independent

System Operator Corporation

Dated: July 16, 2012

Attachment A – Clean Tariff

CRR Tariff Amendment

California Independent System Operator Corporation

Fifth Replacement FERC Electric Tariff

July 16, 2012

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36.7.3 CRR Holder Reporting Requirement

CRR Holders must report to the CAISO by way of the Secondary Registration System all bilateral CRR transactions consistent with the terms of this CAISO Tariff and the Business Practice Manuals. Both the transferor and the transferee of the CRRs must register the transfer of the CRR with the CAISO using the Secondary Registration System five (5) Business Days prior to the effective date of transfer of revenues associated with a CRR, or with sufficient time necessary for the CAISO to evaluate the creditworthiness of the transferor and transferee, whichever is shorter. The CAISO shall not transfer any Settlement related to any CRR until such time that the CRR transfer has been successfully recorded through the SRS and the transferee has met all the creditworthiness requirements as specified in Section 12 and Section 12.6. Both the transferor and transferee shall submit the following information to the Secondary Registration System: (i) the effective start and end dates of the transfer of the CRR; (ii) the identity of the transferor; (iii) the identity of the transferee; (iv) the quantity of CRRs being transferred; (v) the CRR Sources and CRR Sinks of the CRRs being transferred; and (vi) time of use period of the CRR. The transferee must meet all requirements of CRR Holders, including disclosure to the CAISO of all entities with which the transferee is affiliated that are CRR Holders or Market Participants as defined in Section 36.5.

* * *

36.8.2.1 Seasonal CRR Eligible Quantity

The CAISO constructs Load duration curves by season and time of use periods for the annual CRR Allocation process for each LSE based on the LSE's submission to the CAISO of its historical hourly Load data for the prior year, for each LAP within which the LSE serves Load. For load that is subject to variable and difficult-to-predict hydrological conditions, the LSE has the option to submit the load's five-year rolling average historical hourly load data and the CAISO will use the submitted five-year average data for constructing the load duration curves. Once the LSE has exercised this option, the LSE must continue to submit five-year rolling average historical hourly load data for the annual CRR Allocation process in subsequent years. An LSE's Seasonal CRR Load Metric for each season and time of use period is the MW level of Load that is exceeded only in 0.5% of the hours based on the LSE's historical Load data. In the event that the LSE has lost or gained net Load through Load Migration during the

course of the prior year, the Seasonal CRR Load Metric will be adjusted to reflect the loss or gain in accordance with the applicable BPM. The CAISO calculates an LSE's Seasonal CRR Eligible Quantity by first adjusting that LSE's Seasonal CRR Load Metric based on load migration and subtracting the quantity of Load served by its TORs, ETCs, and Converted Rights to form the LSE's Adjusted Load Metric, and then multiplying the result by 0.75.

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36.8.3.5.1 Tier 1 – Priority Nomination Process

Tier 1 of the annual CRR Allocation in years beyond CRR Year One will be a Priority Nomination Process through which CRR Holders may nominate some of the same CRRs that they were allocated in the immediately previous annual CRR Allocation process. As provided in Section 36.8.3.4.2, nominations by a Qualified OBAALSE in the PNP are subject to source verification. In all annual CRR Allocations after CRR Year One, an LSE or a Qualified OBAALSE may make PNP nominations up to the lesser of: (1) its Seasonal CRR Eligible Quantity multiplied by two-thirds; minus the quantity of Long Term CRRs for each season, time of use period and CRR Sink for that year; and minus the net MW amount of load migration CRRs valid for each season, time of use period and CRR sink for that year; or, (2) the total quantity of Seasonal CRRs allocated to that LSE in the previous annual CRR Allocation; plus the net quantity of load migration CRRs associated with the immediately preceding Seasonal CRR Allocations for the corresponding season, time of use, and CRR sink location; minus the quantity of Long Term CRRs allocated in the immediately preceding Seasonal CRR Allocation for each season, time of use period and CRR Sink; and minus the net MW amount of load migration CRRs valid for each season, time of use period and CRR sink for that year. In addition, an LSE's or Qualified OBAALSE's nomination of any particular CRR Source-CRR Sink combination in the PNP may not exceed the MW quantity of CRRs having that CRR Source and CRR Sink that the LSE or Qualified OBAALSE was allocated in the previous annual CRR Allocation, reduced by the MW quantity of those Long-Term CRRs with the same CRR Source and CRR Sink that were awarded in the prior year's Long-Term CRR allocation, for the same season and time of use period, and in the case of an LSE, adjusted for net Load loss or gain resulting from Load Migration as described in Section 36.8.5.2.2. An LSE or a Qualified OBAALSE may nominate CRRs awarded with a CRR Source at the Trading Hubs in the PNP. CRRs whose CRR Sink is a Sub-

LAP are not eligible for nomination in the PNP. A CRR whose CRR Sink is a Custom LAP or PNode is eligible for nomination in the PNP. PNP Eligible Quantities are not affected by secondary transfers of CRRs, except as performed by the CAISO to reflect Load Migration as described in Section 36.8.5. That is, with the exception of transfers to reflect Load Migration: (i) an LSE or a Qualified OBAALSE may nominate in the PNP a CRR it was allocated in the prior annual CRR Allocation even though it transferred that CRR to another party during the year, and (ii) an LSE or a Qualified OBAALSE may not nominate in the PNP a CRR that it received through a secondary transfer from another party. CRRs received through a CRR Auction are not eligible for nomination in the PNP. CRRs received as Offsetting CRRs to reflect Load Migration are not eligible for nomination in the PNP. The CAISO does not guarantee that all CRR nominations in the PNP will be allocated. The CAISO will conduct an SFT to determine whether all CRR nominations in the PNP are simultaneously feasible. If the SFT determines that all priority nominations are not simultaneously feasible, the CAISO will reduce the allocated CRRs until simultaneous feasibility is achieved.

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36.8.3.5.3 Tier 2 In tier 2 of the annual CRR Allocation, the CAISO will allocate Seasonal CRRs to each LSE and Qualified OBAALSE up to two-thirds of its Seasonal CRR Eligible Quantity for each season, time of use period and CRR Sink, minus the quantity of: (i) CRRs allocated to that LSE or Qualified OBAALSE in tier 1, (ii) Long Term CRRs previously allocated to it that are valid for the CRR term currently being allocated, and (iii) the net MW amount of long-term Load Migrations CRRs assigned to the LSE that are valid for the term currently being allocated. In tier 2 of the annual CRR Allocation, Sub-LAPs will be eligible CRR Sinks provided that the Sub-LAP is within the nominating LSE's Default LAP. An LSE or a Qualified OBAALSE can nominate Seasonal CRRs sourced at Trading Hubs. In running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1.

36.8.3.5.4 Tier 3. In tier 3 of the annual CRR Allocation, the CAISO will allocate Seasonal CRRs to each LSE or Qualified OBAALSE up to one hundred (100) percent of its Seasonal CRR Eligible Quantity for each season, time of use period and CRR Sink, minus the quantity of: (i) CRRs allocated to that LSE or Qualified OBAALSE in tiers 1 and 2, (ii) Long Term CRRs previously allocated to that eligible entity that

are valid for the CRR term currently being allocated, and (iii) the net MW amount of long-term Load Migrations CRRs assigned to the LSE that are valid for the term currently being allocated. In tier 3 of the annual CRR Allocation, Sub-LAPs will be eligible CRR Sinks provided that the Sub-LAP is within the nominating LSE's

Default LAP. An LSE or a Qualified OBAALSE can nominate Seasonal CRRs where the CRR Source is a Trading Hub. In running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1.

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36.8.5.4 Load Migration and Compliance with CAISO Credit Requirements

To the extent that the credit requirements of an LSE as specified in Section 12 are updated by the allocation of new CRRs to reflect Load Migration, the LSE will have its respective credit requirements updated and any changes will be processed through the otherwise applicable credit and collateral processes delineated in Section 12 and the appropriate Business Practice Manuals. In the event that the Load gaining LSE is not a CRR Holder or Candidate CRR Holder at the time the Load Migration process takes place, then the Load Migration CRRs will not be transferred to that load gaining LSE and will not be financially settled. Instead, the unclaimed Load Migration CRRs will be absorbed within the CRR Balancing Account for the duration of the term of the Load Migration CRRs. In addition, the LSEs affected by the Load Migration will not be eligible to nominate the transferred CRRs in subsequent Priority Nomination Tiers.

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36.11.3.2.3 Step Three: the Incremental Merchant Transmission CRRs

In the third step, the CAISO will determine the Merchant Transmission CRRs to be allocated to the Project Sponsor of the Merchant Transmission Facility. The CAISO will determine the capability of the system to award incremental Merchant Transmission CRRs using a DC FNM that incorporates the proposed Merchant Transmission Facility. The CAISO will conduct separate SFTs for each time of use period and season, as needed. For each time of use period and season, as needed, the CAISO will perform a SFT. The SFT includes all existing Encumbrances for the month covered by the most recently

conducted CRR Allocation and CRR Auction processes for Monthly CRRs including any temporary test CRRs from step one and any counterflow CRRs from step two. Each SFT will consider the entire set of Merchant Transmission CRR nominations for the time of use period and will solve to award Merchant Transmission CRRs to the Project Sponsor of the Merchant Transmission Facility, subject to simultaneous feasibility. The nominated Merchant Transmission CRRs that are feasible in the SFT for each time of use period will be allocated to the Project Sponsor of the Merchant Transmission Facility.

Attachment B – Marked Tariff

CRR Tariff Amendment

California Independent System Operator Corporation

Fifth Replacement FERC Electric Tariff

July 16, 2012

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36.7.3 CRR Holder Reporting Requirement

CRR Holders must report to the CAISO by way of the Secondary Registration System all bilateral CRR transactions consistent with the terms of this CAISO Tariff and the Business Practice Manuals. Both the transferor and the transferee of the CRRs must register the transfer of the CRR with the CAISO using the Secondary Registration System ~~at least~~ five (5) Business Days prior to the effective date of transfer of revenues associated with a CRR, or with sufficient time necessary for the CAISO to evaluate the creditworthiness of the transferor and transferee, whichever is shorter. The CAISO shall not transfer any Settlement related to any CRR until such time that the CRR transfer has been successfully recorded through the SRS and the transferee has met all the creditworthiness requirements as specified in Section 12 and Section 12.6. Both the transferor and transferee shall submit the following information to the Secondary Registration System: (i) the effective start and end dates of the transfer of the CRR; (ii) the identity of the transferor; (iii) the identity of the transferee; (iv) the quantity of CRRs being transferred; (v) the CRR Sources and CRR Sinks of the CRRs being transferred; and (vi) time of use period of the CRR. The transferee must meet all requirements of CRR Holders, including disclosure to the CAISO of all entities with which the transferee is affiliated that are CRR Holders or Market Participants as defined in Section 36.5.

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36.8.2.1 Seasonal CRR Eligible Quantity

The CAISO constructs Load duration curves by season and time of use periods for the annual CRR Allocation process for each LSE based on the LSE's submission to the CAISO of its historical hourly Load data for the prior year, for each LAP within which the LSE serves Load. For load that is subject to variable and difficult-to-predict hydrological conditions, the LSE has the option to submit the load's five-year rolling average historical hourly load data and the CAISO will use the submitted five-year average data for constructing the load duration curves. Once the LSE has exercised this option, the LSE must continue to submit five-year rolling average historical hourly load data for the annual CRR Allocation process in subsequent years. An LSE's Seasonal CRR Load Metric for each season and time of use period is the MW level of Load that is exceeded only in 0.5% of the hours based on the LSE's historical

Load data. In the event that the LSE has lost or gained net Load through Load Migration during the course of the prior year, the ~~historical Load data~~Seasonal CRR Load Metric will be adjusted to reflect the loss or gain in accordance with the applicable BPM. The CAISO calculates an LSE's Seasonal CRR Eligible Quantity by first ~~adjusting subtracting from~~ that LSE's Seasonal CRR Load Metric based on load migration and subtracting the quantity of Load served by its TORs, ETCs, and Converted Rights to form the LSE's Adjusted Load Metric, and then multiplying the result by 0.75.

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36.8.3.5.1 Tier 1 – Priority Nomination Process

Tier 1 of the annual CRR Allocation in years beyond CRR Year One will be a Priority Nomination Process through which CRR Holders may nominate some of the same CRRs that they were allocated in the immediately previous annual CRR Allocation process. As provided in Section 36.8.3.4.2, nominations by a Qualified OBAALSE in the PNP are subject to source verification. In all annual CRR Allocations after CRR Year One, an LSE or a Qualified OBAALSE may make PNP nominations up to the lesser of: (1) ~~two-thirds of~~ its Seasonal CRR Eligible Quantity multiplied by two-thirds; minus the quantity of Long Term CRRs ~~allocated in the immediately preceding Seasonal CRR Allocation~~ for each season, time of use period and CRR Sink for that year; and minus the net MW amount of load migration CRRs valid for each season, time of use period and CRR sink for that year; or, (2) the total quantity of Seasonal CRRs allocated to that LSE in the previous annual CRR Allocation; plus the net quantity of load migration CRRs associated with the immediately preceding Seasonal CRR Allocations for the corresponding season, time of use, and CRR sink location; minus the quantity of ~~previously allocated~~ Long Term CRRs allocated in the immediately preceding Seasonal CRR Allocation for each season, time of use period and CRR Sink; and minus the net MW amount of load migration CRRs valid for each season, time of use period and CRR sink for that year ~~and minus any reduction for net loss of Load or plus any increase for net gain of Load through retail Load Migration as described in Section 36.8.5.4.~~ In addition, an LSE's or Qualified OBAALSE's nomination of any particular CRR Source-CRR Sink combination in the PNP may not exceed the MW quantity of CRRs having that CRR Source and CRR Sink that the LSE or Qualified OBAALSE was allocated in the previous annual CRR Allocation, reduced by the MW quantity of those Long-Term CRRs with the same CRR Source and CRR Sink that were awarded in the prior year's Long-Term CRR

allocation, for the same season and time of use period, and in the case of an LSE, adjusted for net Load loss or gain resulting from Load Migration as described in Section 36.8.5.2.2. An LSE or a Qualified OBAALSE may nominate CRRs awarded with a CRR Source at the Trading Hubs in the PNP. CRRs whose CRR Sink is a Sub-LAP are not eligible for nomination in the PNP. A CRR whose CRR Sink is a Custom LAP or PNode is eligible for nomination in the PNP. PNP Eligible Quantities are not affected by secondary transfers of CRRs, except as performed by the CAISO to reflect Load Migration as described in Section 36.8.5. That is, with the exception of transfers to reflect Load Migration: (i) an LSE or a Qualified OBAALSE may nominate in the PNP a CRR it was allocated in the prior annual CRR Allocation even though it transferred that CRR to another party during the year, and (ii) an LSE or a Qualified OBAALSE may not nominate in the PNP a CRR that it received through a secondary transfer from another party. CRRs received through a CRR Auction are not eligible for nomination in the PNP. CRRs received as Offsetting CRRs to reflect Load Migration are not eligible for nomination in the PNP. ~~The maximum quantity of CRRs that an LSE or a Qualified OBAALSE may nominate in the PNP is fifty (50) percent of its Adjusted Load Metric, minus any previously allocated Long Term CRRs that are valid for the term of the CRRs being nominated.~~—The CAISO does not guarantee that all CRR nominations in the PNP will be allocated. The CAISO will conduct an SFT to determine whether all CRR nominations in the PNP are simultaneously feasible. If the SFT determines that all priority nominations are not simultaneously feasible, the CAISO will reduce the allocated CRRs until simultaneous feasibility is achieved.

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36.8.3.5.3 Tier 2 In tier 2 of the annual CRR Allocation, the CAISO will allocate Seasonal CRRs to each LSE and Qualified OBAALSE up to two-thirds of its Seasonal CRR Eligible Quantity for each season, time of use period and CRR Sink, minus the quantity of: (i) CRRs allocated to that LSE or Qualified OBAALSE in tier 1, ~~and~~ (ii) Long Term CRRs previously allocated to it that are valid for the CRR term currently being allocated, and (iii) the net MW amount of long-term Load Migrations CRRs assigned to the LSE that are valid for the term currently being allocated. In tier 2 of the annual CRR Allocation, Sub-LAPs will be eligible CRR Sinks provided that the Sub-LAP is within the nominating LSE's Default LAP. An LSE or a Qualified OBAALSE can nominate Seasonal CRRs sourced at Trading Hubs. In

running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1.

36.8.3.5.4 Tier 3. In tier 3 of the annual CRR Allocation, the CAISO will allocate Seasonal CRRs to each LSE or Qualified OBAALSE up to one hundred (100) percent of its Seasonal CRR Eligible Quantity for each season, time of use period and CRR Sink, minus the quantity of: (i) CRRs allocated to that LSE or Qualified OBAALSE in tiers 1 and 2, ~~and~~ (ii) Long Term CRRs previously allocated to that eligible entity that are valid for the CRR term currently being allocated, and (iii) the net MW amount of long-term Load Migrations CRRs assigned to the LSE that are valid for the term currently being allocated. In tier 3 of the annual CRR Allocation, Sub-LAPs will be eligible CRR Sinks provided that the Sub-LAP is within the nominating LSE's

Default LAP. An LSE or a Qualified OBAALSE can nominate Seasonal CRRs where the CRR Source is a Trading Hub. In running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1.

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36.8.5.4 Load Migration and Compliance with CAISO Credit Requirements

To the extent that the credit requirements of an LSE as specified in Section 12 are updated by the allocation of new CRRs to reflect Load Migration, the LSE will have its respective credit requirements updated and any changes will be processed through the otherwise applicable credit and collateral processes delineated in Section 12 and the appropriate Business Practice Manuals. CAISO will do the following. ~~For new CRRs that result in net charges to the affected LSE over a Settlement period these charges will appear on the LSE's Settlement Statement irrespective whether the LSE has met the updated credit requirement. For new CRRs that result in net payments to the affected LSE over a Settlement period and that LSE has not met the updated credit requirements affected by the allocation of new CRRs to reflect Load Migration, the CAISO shall withhold payment until those updated credit requirements are met. At the end of each Settlement period, if the LSE has not met the updated credit requirements resulting from Load Migration CRR transfers, the CAISO will add any net payments that accrued to the transferred CRRs to the CRR Balancing Account to be included in the daily clearing of the CRR Balancing Account, and those net payments will no longer be recoverable by the LSE. The CAISO~~

~~may place new allocated CRRs into CRR Auctions if the non-compliance with credit or applicable Financial Security requirements is persistent.~~ In the event that the Load gaining LSE is not a CRR Holder or Candidate CRR Holder at the time the Load Migration process takes place, then the Load Migration CRRs will not be transferred to that load gaining LSE and will not be financially settled. Instead, the unclaimed Load Migration CRRs will be absorbed within the CRR Balancing Account for the duration of the term of the Load Migration CRRs. In addition, the LSEs affected by the Load Migration will not be eligible to nominate the transferred CRRs in subsequent Priority Nomination Tiers.

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36.11.3.2.3 Step Three: the Incremental Merchant Transmission CRRs

In the third step, the CAISO will determine the Merchant Transmission CRRs to be allocated to the Project Sponsor of the Merchant Transmission Facility. The CAISO will determine the capability of the system to award incremental Merchant Transmission CRRs using a DC FNM that incorporates the proposed Merchant Transmission Facility. The CAISO will conduct separate SFTs for each time of use period and season, as needed. For each time of use period and season, as needed, the CAISO will perform a ~~multi-period SFT that simultaneously evaluates two sets of grid conditions~~. The SFT first set of grid conditions includes all existing Encumbrances for the month covered by the most recently conducted CRR Allocation and CRR Auction processes for Monthly CRRs including any temporary test CRRs from step one and any counterflow CRRs from step two. ~~The second set of grid conditions models only Transmission Ownership Rights.~~ Each SFT will consider the entire set of Merchant Transmission CRR nominations for the time of use period and will solve to award ~~maximize the MWs of~~ Merchant Transmission CRRs to ~~be allocated to~~ the Project Sponsor of the Merchant Transmission Facility, subject to simultaneous feasibility. The nominated Merchant Transmission CRRs that are feasible in the ~~multi-period SFTs~~ for each time of use period will be allocated to the Project Sponsor of the Merchant Transmission Facility.