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California Independent
System Operator

FEDERAL ENERGY
REGULATORY COMMISSION

May 7, 2007

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

RE: Amendments to Facilitate the Initial Congestion Revenue Right Allocation and Auction Process under the Market Redesign and Technology Upgrade program, California Independent System Operator Corporation, Docket No. ER07-____-000; and

Congestion Revenue Rights For Sponsors of Merchant Transmission Upgrades, California Independent System Operator Corporation Docket No. ER06-615-____

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act (“FPA”), 16 U.S.C. § 824d, and Part 35 of the Federal Energy Regulatory Commission’s (“FERC” or “Commission”) regulations, 18 C.F.R. § 35 *et seq.*, the California Independent System Operator Corporation (“CAISO”) hereby submits proposed tariff amendments to implement the initial Congestion Revenue Right (“CRR”) allocation and auction processes under its Market Redesign and Technology Upgrade (“MRTU”). This filing seeks effectiveness of the conditionally-accepted CRR rules: (1) as filed and further amended on compliance on November 20, 2006 in Docket ER06-615; (2) as filed on March 9, 2007 in ER07-613; (3) as filed in compliance with Commission Order Nos. 681 and 681-A on January 29, 2007 in Docket ER06-475,¹ and (3) as further amended in this filing.

I. OVERVIEW

As described in greater detail herein, the proposed amendments to the previously filed tariff language fall into two broad categories: (a) those CRR-related changes filed under FPA Section 205 that have come out of either the stakeholder process following the CRR Dry Run or the process of reconciling the material in the Business Practice Manual (“BPM”) for CRRs and the conditionally-approved MRTU Tariff, and (b) those CRR-related changes filed in compliance

¹ See *Long-Term Firm Transmission Rights in Organized Electricity Markets*, Order No. 681, 71 FR 43564 (Aug. 1, 2006), FERC Stats. & Regs. ¶ 31,226 (2006) (“Order No. 681”); and Order No. 681-A, 117 FERC ¶ 61,201 (2006) (“Order No. 681-A”).

with either the Commission's September 21, 2006 Order² or its April 20, 2007 Order on Rehearing.³ The rule changes being proposed under the first category involve:

- 1) the use of Trading Hubs as sources for Long Term CRRs,
- 2) the process of renewing an expiring Long Term CRR as well as allowing expiring Existing Transmission Contracts ("ETCs") and Converted Rights ("CVRs") to transition to Long Term CRRs,
- 3) a change to the proposed historical reference period for source verification for CRR Year One to calendar year 2006,⁴ and
- 4) Tariff changes as a result of reconciling material in the BPM for CRRs and the conditionally-approved MRTU Tariff.

The proposed amendments in the latter compliance category provide:

- 5) additional detail on the allocation of CRRs to the sponsors of Merchant Transmission upgrades or projects in compliance with the Paragraphs 873 and 1357 of the *September 21 Order* and *Order No. 681* and *Order No. 681-A*; and
- 6) tariff language as directed by the Commission in the *April 20 Order* on Rehearing regarding the allocation of CRRs to Load external to the CAISO Control Area (referred to as an "Out-of-Control Area Load Serving Entity" or "OCALSE").⁵

This filing proposes to add to the currently-effective ISO Tariff the necessary language to enable the CAISO to implement CRRs later this summer.⁶ As previously described by the CAISO, the process of releasing CRRs to market participants is a multi-stage, multi-month

² *California Independent System Operator Corporation*, 116 FERC ¶ 61,274 (September 21, 2006) ("September 21 Order").

³ *California Independent System Operator Corporation*, 119 FERC ¶ 61,076 (April 20, 2007) ("April 20 Order").

⁴ This change was described in the CAISO's January 29, 2007 compliance filing in Docket No. ER07-475-000 in response to *Order Nos. 681 and 681-A* (the Commission's Final Rule regarding Long-Term Firm Transmission Rights in Organized Electricity Markets). However, because the change to the historical reference period for source verification affects all CRRs (and not just Long Term CRRs), the CAISO did not submit tariff language changing the historical reference period to calendar year 2006 until the instant filing.

⁵ *See April 20 Order* at PP 368-380.

⁶ Because of the various sources from which the proposed changes stem and prior pending proceedings before the Commission affected by the changes proposed herein the CAISO, in support of this pleading the CAISO is submitting a table in Attachment F that describes the source and reason for the changes and whether any pending proceeding is affected by the proposed changes to the provisions amended by this filing.

sequential process.⁷ This process must be conducted in advance of February 2008 when the CAISO plans go live with the Day-Ahead Market and Real-Time Market under MRTU. As described by Ms. Deborah Le Vine in her testimony included in this filing, the first annual CRR Allocation process must begin on or about July 20, 2007 in order for the CAISO to complete its initial annual and monthly CRR Allocation and CRR Auction process leading up to the start of the MRTU markets on Trading Date February 1, 2008. The CAISO therefore requests an effective date of July 9, 2007 for the proposed tariff provisions in order to be able to commence preparations for the nominations process of the annual CRR Allocation.⁸

II. BACKGROUND

A. Congestion Revenue Rights Under the MRTU Tariff

On February 9, 2006 the CAISO filed the MRTU proposal (“MRTU Tariff Filing”) that provided for one-year Seasonal and Monthly CRRs.⁹ CRRs are a core component of the MRTU market design. The MRTU market design is based on the use of Locational Marginal Pricing (LMPs). LMP determines marginal energy prices for each settlement period that accurately reflect the cost of serving the next MWh of demand at each location on the CAISO Controlled Grid, including the marginal cost of congestion and transmission losses, based on market participants’ submitted bids for supply and demand or the CAISO’s forecast of CAISO demand.

CRRs are financial instruments that enable CRR holders to manage the hour-to-hour variability in congestion charges that transmission customers are subject to by virtue of their use of the transmission system under the MRTU Tariff. CRRs entitle the holder to receive revenues or charges based on the congestion components of the LMPs calculated for each hour in the Integrated Forward Market (IFM). Under the MRTU Tariff, the CAISO first allocates CRRs to load serving entities that pay for the embedded costs of the CAISO Controlled Grid. Following the allocation process, CRRs are then made available through auctions open to all creditworthy parties.

B. Long Term CRR Filing

On January 29, 2007, in compliance with the Commission’s Final Rule in Docket RM06-8-000, the CAISO filed its proposal to make available Long Term CRRs under the MRTU Tariff.¹⁰ Long Term CRRs are ten years in length and the CAISO’s proposal to implement Long

⁷ See generally Attachment D to this filing, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1; see also Transmittal Letter to February 9, 2006 MRTU Filing (“MRTU Filing”) in Docket No. ER06-615-000 at 23-31; Testimony of Scott Harvey and Susan Pope submitted with the MRTU Filing, Exh. ISO-2 at p. 81-109; and Testimony of Dr. Lorenzo Kristov and Dr. Susan Pope filed in Docket ER07-475-000 on January 29, 2007, Exhibit No. ISO-1 and Exhibit No. ISO-2, respectively.

⁸ As described in Attachment F, the CAISO continues to seek an effective date of May 9, 2007 for the provisions filed on March 9 in Docket ER07-613, which are not substantively affected by the present filing. These include Sections 36.5, 36.5.1, 36.5.2, 36.8.2, 36.8.2.1, 36.8.2.2, 36.8.6, and 36.10.

⁹ See Transmittal Letter to MRTU Tariff Filing at 23-32; see also Exhibit No. ISO-2 to the MRTU Tariff Filing (CRR testimony of Scott M. Harvey and Susan L. Pope).

¹⁰ See January 29, 2007 filing in Docket No. ER07-475 (“January Filing”).

Term CRRs incorporates the provision of those rights into the CRR process under the MRTU Tariff that was conditionally approved in the *September 21 Order* and the *April 20 Order*. The January Filing proposing to implement Long Term CRRs is pending at the Commission.

C. March 9, 2007 Filing To Facilitate Implementation of MRTU

On March 9, 2007, the CAISO filed certain amendments to the currently-effective ISO Tariff to facilitate implementation of MRTU. *See* the CAISO's filing in Docket No. ER07-613-000. The amendments did not pertain to current ISO Market operations but were designed to enable the CAISO to obtain the necessary information and authority to ensure that previous, conditionally-accepted aspects of the MRTU program were in place and ready to be implemented at the start of the MRTU market. The filing, among other things, involved the treatment of ETCs, Transmission Ownership Rights ("TORs"), and CVRs as they related to the release of CRRs and the MRTU market design.

D. CRR Dry Run Report

In acting on the MRTU Tariff Filing, the Commission noted that moving to an LMP market with CRRs is a major paradigm shift and that market participants were entitled to more detailed information prior to making their CRR allocation requests and submitting auction bids.¹¹ The Commission also noted that the CAISO and stakeholders were in the process of conducting a CRR Dry Run and that a CRR Dry Run Report would be available by the end of January 2007.¹² The Commission directed the CAISO to file the results of the CRR Dry Run process within 30 days of its completion for informational purposes.¹³

The CAISO submitted the CRR Dry Run Report on March 30, 2007. The CAISO conducted the CRR Dry Run between July 2006 and January 2007, which consisted of a process through which the CAISO and market participants performed, on a non-binding market simulation basis, a complete sequence of activities for the allocation and auction of one-year Seasonal and Monthly CRRs based on the rules specified in the CAISO's February 9, 2006 MRTU Tariff.

The purpose of the CRR Dry Run was to provide an opportunity for the CAISO and market participants to run through the CRR allocation and auction procedures in a practice mode well in advance of the first annual CRR Allocation and Auction. The CRR Dry Run provided illustrative allocations and awards of Seasonal and Monthly CRRs to LSEs, including a financial analysis to demonstrate the potential of the filed CRR allocation rules to provide each LSE with a portfolio of CRRs that reasonably covers its estimated exposure to congestion charges under MRTU, and also provided an opportunity to identify any potential problems with the filed rules and procedures that require modifications to the MRTU Tariff. As described in the next section,

¹¹ *September 21 Order* at P 741.

¹² *Id.*

¹³ *Id.*

the CAISO discussed the CRR Dry Run results and certain targeted tariff modifications with stakeholders, the outcome of which is, in part, the instant filing.¹⁴

III. STAKEHOLDER PROCESS

The CAISO is grateful for the tremendous effort and dedication of its stakeholders in participating in the stakeholder process to develop the rules for the allocation and auction of CRRs under the MRTU Tariff. The CRR provisions of the MRTU Tariff were developed through an extensive stakeholder process that began in the spring of 2005 and featured regular meetings, CAISO white papers with detailed examples, written comments by the parties, and an in-depth simulation study in which the interested parties participated. The proposals contained in the instant filing were developed during the stakeholder process conducted during February and March but, as noted by Dr. Kristov, the two-month process was an extension of a much longer stakeholder process that included the CRR Dry Run and Long Term CRR processes conducted over the second half of 2006.¹⁵

The CAISO is especially appreciative of its most recent stakeholder process through which parties provided comments and guidance on many complicated issues that needed to be resolved in time for this filing, which is necessary to allow the CAISO to kick-off MRTU with its first annual CRR Allocation process on time. This most recent stakeholder period was particularly sensitive and complicated for the CAISO because it required stakeholders to be able to address concerns with possible rule changes but at the same time not undo the careful balance that was struck with stakeholders and the Commission in the already conditionally-accepted MRTU Tariff. The CAISO appreciates that not all stakeholders received every outcome they desired through the process but also believes that the product of this process, shaped by the careful consideration of both stakeholder concerns and sound policymaking, is a just and reasonable result. The filing addresses many of the concerns raised following the CRR Dry Run without, as described further below, undoing what was accomplished previously.

The following dates and milestones provide an overview of: (i) the CRR stakeholder process conducted since the middle of 2006, (ii) the stakeholder process on the specific CRR proposals in the instant filing, and (iii) upcoming milestones for the CRR stakeholder process.

CRR Stakeholder Events from May of 2006

- CRR Dry Run - conducted from May 2006 to January 2007;

¹⁴ The CAISO notes that the procedures for allocating Long Term CRRs were not part of the CRR Dry Run due to the timing of the Commission's Final Rule on long-term firm transmission rights. The CRR Dry Run was planned (and began) prior to the issuance of the Commission's Final Rule on July 20, 2006. The CRR Dry Run was almost concluded by January 29, 2007, the date the CAISO filed its Long-Term CRR proposal in compliance with the Commission's Final Rule. However, the LT CRR allocation proposal is based on an extension of the rights obtained through the first two tiers of the short-term seasonal CRRs and parties may be able to use the results of the dry run as an indication of the nominations for LT CRRs that they could have made based on what they were allocated in the two prior tiers.

¹⁵ See Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at p. 8

- Long Term CRR effort initiated - August 2006 in response to July 2006 FERC order;
- Long Term CRR proposal filed - January 29, 2007; and
- CRR Dry Run Report - filed at FERC on March 30, 2007.

Stakeholder Process on CRR Tariff Changes Contained in the Instant Filing

- CRR Issues Paper issued on February 21, 2007;
- All-day stakeholder meeting on February 27, 2007;
- Stakeholder written comments submitted on March 9, 2007;
- Updated CRR Issues Paper issued on March 19, 2007;
- Stakeholder Conference Call on March 26, 2007;
- Stakeholder Conference Call on March 29, 2007;
- All-day stakeholder meeting on April 3, 2007;
- Stakeholder written comments submitted on April 6, 2007;
- Stakeholder Conference Call on April 12, 2007; and
- Stakeholder Conference Call on proposed tariff language on May 1, 2007.

Upcoming CRR Milestones

- Filing on CRR Credit Requirements, to be presented to the Board in May and filed promptly thereafter;
- Filing on the Rules for Load Migration and Outage Modeling, to be presented to Board in July and filed on August or earlier; and
- Production CRR release process to begin formally in July, gathering of relevant information began in late April.

IV. DESCRIPTION OF PROPOSED TARIFF CHANGES

As noted in Section I of this Transmittal Letter, the proposed tariff changes involve items (a) coming out of either the stakeholder process following the CRR Dry Run and the reconciliation of the material in the BPM for CRRs with the conditionally-approved MRTU Tariff, and (b) CRR-related changes filed in compliance with the *September 21 Order* and *April 20 Order*. The proposed tariff changes are described in this Transmittal Letter in the following order: (1) the use of Trading Hubs as sources for Long Term CRRs, (2) the process for renewing an expiring Long Term CRR as well as allowing expiring ETCs and CVRs to transition to Long Term CRRs, (3) the historical reference period used for source verification for CRR Year One of calendar year 2006, (4) the allocation of CRRs to the sponsors of Merchant Transmission upgrades or projects, (5) the allocation of CRRs to OCALSEs, and (6) the tariff changes that originated in the process of reconciling the material in the BPM for CRRs and the CRR tariff language.

A. Trading Hubs as Sources for Allocated CRRs

In the CAISO's Long-Term CRR proposal filed in compliance with the Commission's Final Rule, there was a prohibition on the use of Trading Hubs as source locations for Long Term CRRs.¹⁶ The purpose of the decision to impose a prohibition was to address two phenomena identified in the CRR Dry Run process as discussed below.¹⁷ The two phenomena affect the allocation of all CRRs but, due to the 10-year duration of Long Term CRRs, the CAISO particularly was concerned that the adverse impact of the phenomena in the Long Term CRR allocation process could be long-lived. Therefore, in developing its filing in compliance with the Commission's Final Rule, the CAISO made a policy decision not to release Long Term CRRs with sources at Trading Hubs. After the CAISO filed its Long Term CRR proposal on January 29, 2007, it continued to assess the CRR Dry Run results and discussed the two phenomena with stakeholders.¹⁸

The phenomena identified in the CRR Dry Run involved the fact that LSEs can nominate CRRs at Trading Hubs and at the individual generator PNodes that comprise the Trading Hubs. The problematic results occur when a transmission constraint associated with specific generator PNodes becomes binding in the simultaneous feasibility tests ("SFTs"). When this occurs, the first phenomena is that CRR nominations from the generator PNodes associated with binding constraints are likely to be prorated prior to CRR nominations from Trading Hubs.¹⁹ This is because the proration algorithm reduces the most effective nominations in order to reduce the fewest nominated MWs to relieve the binding constraint. Typically, the CRR nominations from the PNode associated with the constraint are more effective than CRR nominations from a Trading Hub. The second phenomena is that once such a constraint becomes binding in one tier of the tiered allocation process, no additional Trading Hub CRRs can be allocated in subsequent tiers unless the nominated CRR has a zero shift factor or effectiveness factor over the binding constraint. If the binding constraint is associated with a generator PNode that is also contained in definition of a Trading Hub, it means that no further CRR nominations using the Trading Hub as the source will be feasible.²⁰

The CAISO discussed three options with stakeholders to allow CRR source nominations at Trading Hubs.²¹ One option was to limit the amount of nominations that could use Trading Hubs as sources.²² A second option was to disaggregate the Trading Hub source nominations into individual point-to-point CRR nominations from the generator PNodes making up the

¹⁶ See Attachment A to the January Filing (Redline Tariff Sheets) at § 36.8.4 - "Eligible Sources for CRR Allocation."

¹⁷ See Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at p. 9-13.

¹⁸ *Id.* at 12.

¹⁹ *Id.* at 10.

²⁰ *Id.*

²¹ See generally, Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at p. 12-24.

²² *Id.* at 13-14.

Trading Hub.²³ The third option was to create alternative Trading Hubs using a smaller set of PNodes compared to the Trading Hub.²⁴ The alternative Trading Hub would reduce the number of potentially binding constraints and enable CRR source nominations using the alternative Trading Hub.

The CAISO expressed an early preference for the first option (nomination limits), however, stakeholders expressed significant interest in the other two options. After considering stakeholders' comments and further deliberation, the CAISO is proposing to implement the second option, *i.e.*, to disaggregate CRR nominations sourced at Trading Hubs for CRR allocation purposes into the individual generator CRRs that comprise each Trading Hub. Under this approach, for purposes of CRR allocation the CAISO will disaggregate CRR nominations sourced at Trading Hubs into individual point-to-point CRRs from all the generator PNodes making up the Trading Hub (based on the weighting factors used to establish the Trading Hub). This proposal eliminates the adverse effects of the phenomena observed in the Dry Run because in the SFTs there are no Trading Hub nominations, just individual point-to-point CRR nominations sourced at either generator PNodes or Scheduling Points (interties).

Under the proposal, LSEs who have Trading Hubs as verified CRR sources may nominate CRRs with the Trading Hub sources in: (a) Tiers 1 and 2 and Tier LT of the CRR Year One annual allocation process and (b) Tier 1 of the CRR Year One monthly allocation processes. However, LSEs who nominate CRRs with the Trading Hub sources and are awarded CRRs would not receive Trading Hub CRRs; rather, they would receive individual, Point-to-Point CRRs corresponding to the generator PNodes in the Trading Hub.²⁵ For Tier LT in CRR Year One, an LSE that was allocated Point-to-Point CRRs as a result of CRR nominations sourced at Trading Hubs in Tiers 1 and 2 can not nominate the Point-to-Point CRRs as a Long Term CRR. Rather, the LSE is required to nominate a Long Term CRR *sourced at the Trading Hub* up to the total amount of MWs of the Point-to-Point CRRs it received in as a result of the CRR nominations sourced at Trading Hubs in Tiers 1 and 2.²⁶ The reason for these rules is explained by Dr. Kristov.²⁷

In developing the rules for Seasonal and Long Term CRRs sourced at Trading Hubs, the CAISO had a choice whether to maintain the principle that only CRRs awarded in Tiers 1 and 2 could be nominated in Tier LT or to maintain the principle of source verification in CRR Year One. The CAISO chose to maintain the principle of source verification which is why LSEs in CRR Year One must nominate Trading Hub CRRs in Tier LT. As explained by Dr. Kristov, if the CAISO had chosen to maintain the principle that only the CRRs awarded in Tiers 1 and 2 can be nominated in Tier LT, this would have allowed an LSE to nominate some or all of the Point-to-Point CRRs it received as a result of the Trading Hub nominations in Tiers 1 and 2 as Long Term CRRs. The LSE would then be able to nominate and receive Long Term CRRs from

²³ *Id.* at 14-22.

²⁴ *Id.* at 22-23.

²⁵ *Id.* at 15.

²⁶ *See* Attachment C, proposed tariff § 36.8.3.1.3.

²⁷ Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1. at 17-18.

individual generator PNodes for which they had *no* verified source (the verified source was the Trading Hub) and could pick the most valuable CRRs out of the set of point-to-point CRRs they were awarded (based on their source-verified Trading Hub nominations in Tiers 1 and 2).

By choosing to maintain the principle of source verification, an LSE in CRR Year One is required to submit Trading Hub nominations in Tier LT corresponding to CRRs they obtained from Hub nominations in Tiers 1 and 2. In running the SFT for Tier LT, the CAISO again will disaggregate the Trading Hub nomination into individual Point-to-Point CRRs from all generator PNodes making up the Trading Hub. The Point-to-Point Long Term CRRs the LSE receives will be similar to the composition of the Trading Hub.

In the Tier LT process for CRR Year Two and beyond, the principle that only the CRRs awarded in Tiers 1 and 2 can be nominated in Tier LT is restored. In other words, in the Priority Nomination Process (“PNP”) that takes place each year after CRR Year One, LSEs can nominate only CRRs they were awarded in the previous year’s annual allocation process. Since the allocated or awarded CRRs are Point-to-Point CRRs (not Trading Hub CRRs), LSEs are not able to submit CRR nominations with sources at Trading Hubs in the PNP.²⁸ However, LSEs would be able to make new Trading Hub nominations in tiers 2 and 3 of the annual allocation process and tiers 1 and 2 of the monthly allocation process for CRR Year Two and beyond, because these are free choice tiers and are not limited to previous CRR awards.²⁹

There are a number of reasons supporting the CAISO’s proposed resolution regarding the issues surrounding CRR source nominations at Trading Hubs. First, while it is likely that the disaggregated and allocated point-to-point CRRs will not match perfectly the congestion exposure for the Trading Hub contracts, the allocated point-to-point CRRs should cover a substantial portion of the congestion exposure for the Trading Hub contracts. Second, the approach will lead to a more efficient use of CRRs because it avoids inefficient competition between Trading Hub CRRs and individual generator CRRs described earlier. Third, the approach will provide for reasonable outcomes between parties that require Trading Hub CRRs as compared to those parties that require individual generator CRRs. Fourth, this approach will allow Trading Hub CRRs to participate in process for allocating Long Term CRRs without the adverse impacts that prompted the CAISO’s policy decision in January of 2007 to prohibit Long Term CRRs sources at Trading Hubs. Finally, there is broad support for the approach among stakeholders and the approach is recommended by the Market Surveillance Committee.

²⁸ See Attachment C, proposed tariff § 36.8.3.5.2; *see also* Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at p. 18-19.

²⁹ Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at p.18.

B. Renewal of Expiring Long Term CRRs and Allowing Expiring Existing Transmission Contracts and Expiring Converted Rights to Transition to Long Term CRRs

In its Long Term CRR proposal, the CAISO had to propose tariff provisions that complied with Commission Guideline No. 4 for long term firm transmission rights.³⁰ The Long Term CRRs proposed by the CAISO have 10-year terms and can be renewed for additional 10-year terms.³¹ In addition, in developing the Long Term CRR proposal and in response to stakeholder comments, the CAISO proposed to allow ETC and CVRs holders with expiring ETCs or CVRs to transition to Long Term CRRs by using the Priority Nomination Process (“PNP”) as if the ETCs and CVRs had been previously allocated Seasonal CRRs³² and then nominating awarded Seasonal CRRs to receive Long Term CRRs in the same annual process.

Since the Long Term CRR proposal was filed on January 29, 2007, stakeholders identified an aspect of the CRR Year Two and beyond process that could negatively impact the ability of the holders of expiring rights (*i.e.*, expiring Long Term CRRs, ETCs and CVRs) to renew Long Term CRRs (or to transition to Long Term CRRs for holders of ETCs and CVRs). While providing an example of the identified issue requires a long narrative,³³ conceptually the issue is relatively simple to describe.

The key point is that the grid capacity corresponding to the expiring rights becomes available for allocation of Long Term CRRs in the annual allocation process one year prior to the year in which the rights actually expire. This creates an opportunity for other LSEs who are not the holders of the expiring rights to obtain Long Term CRRs that utilize some of this capacity in the year prior to the first opportunity, under the originally filed rules, for the holder of the expiring rights to obtain such Long Term CRRs. As a result, when the holder of the expiring rights tries to renew the expiring Long Term CRRs or convert the expiring ETCs or CVRs into Long Term CRRs under the terms of the original filed proposal, there is a possibility that some of the associated grid capacity will already be encumbered by Long Term CRRs issued the previous year to other LSEs. This situation could thus place the expiring rights holder at a disadvantage in obtaining the full amount of Long Term CRRs it is eligible to nominate and for which it should be entitled to compete on a level basis with other LSEs. The simple rule change proposed in the current filing is designed to allow the holders of the expiring rights to participate in that one-year-prior Long Term CRR allocation process, so that they can compete on a level

³⁰ Guideline 4 requires that: “LTTRs must be made available with term lengths (and/or rights to renewal) that are sufficient to meet the needs of load serving entities to hedge long-term power supply arrangements made or planned to satisfy a service obligation. The length of term of renewals may be different from the original term. Transmission organizations may propose rules specifying the length of terms and use of renewal rights to provide long-term coverage, but must be able to offer firm coverage for at least a 10 year period.” *See, e.g., Order No. 681-A* at P 15.

³¹ *See* Attachment C, tariff § 36.2.7 and § 36.8.3.5.5. The CAISO notes that tariff § 36.2.7 was filed in the January Filing in Docket No. ER07-475.

³² *See* MRTU tariff § 36.8.3.5.1 as filed in the January Filing in Docket No. ER07-475.

³³ *See* March 19, 2007 Updated CRR Issues Paper at 23-26. The Updated CRR Issues Paper can be found at <http://www.caiso.com/1ba6/1ba612cfe2cae0.pdf>.

basis with non-holders of the expiring rights for Long Term CRRs that utilize the capacity freed up by the expiring rights.³⁴ The CAISO has not received any comments opposing this change.

Under the proposed alternative, the renewal option will be for a term of nine (9) years, not ten (10) years as required by *Order Nos. 681* and *681-A*. However, the CAISO notes that the new alternative for renewal addresses a problem identified by stakeholders and merely is an option for CRR Holders; the tariff language still provides for renewal rights of ten years. Some LSEs may value the certainty in the ability to renew more of the MW amount of the expiring right (the new option) while other LSEs may prefer a renewal term of 10 years with somewhat increased risk of not being able to obtain as many Long Term CRRs as they would like. There is no way at this time to estimate the magnitude of the impact of the problem this proposal addresses. It will vary depending on, among other things, the MW volume and the source and sink locations of the expiring rights. Therefore, the CAISO believes it is prudent to allow LSEs both options, to permit them to evaluate their specific situation and elect the option that best meets their needs. In short, the alternative renewal process provides flexibility to LSEs regarding renewal and recognizes that different LSEs may make different choices regarding renewal.

C. Historical Reference Period

The February 9, 2006 MRTU Tariff Filing used a historical reference period to verify source nominations for CRRs of September 1, 2004 to August 31, 2005.³⁵ After considering numerous comments from stakeholders that this period was too far in the past relative to the MRTU start-up date, the CAISO announced its intent to change the reference period to calendar year 2006 in the CAISO's January 29, 2007 compliance filing in response to the Commission's Final Rule regarding long-term firm transmission rights.³⁶ However, because the change to the historical reference period for source verification affects all CRRs (and not just Long Term CRRs), the CAISO did not submit tariff language until the instant filing. The revised historical reference period to verify source nominations for CRRs is calendar year 2006.³⁷

D. Methodology for Allocating CRRs to Sponsors of Merchant Transmission Upgrades or Projects

In its Order on the MRTU Tariff Filing, the Commission stated that the CAISO's proposal to allocate CRRs to the sponsors of Merchant Transmission projects lacked sufficient

³⁴ See Attachment C, proposed tariff § 36.8.3.5.5; see also Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at p. 24-26. The CAISO notes that part of the language of proposed tariff § 36.8.3.5.5 was previously approved (conditionally) as part of § 36.8.3.5.1 (the previous tariff language on renewal) and part of the language is being proposed for the first time in this filing (*i.e.*, the alternative renewal option).

³⁵ See MRTU Tariff Filing, proposed § 36.8.3.4.

³⁶ See Transmittal Letter to January Filing at 9; and Exhibit No. ISO-1 attached to the January Filing (testimony of Dr. Kristov) at pp. 30-31.

³⁷ See Attachment C, proposed tariff § 36.8.3.4. The CAISO notes that there was a tariff change discussed with stakeholders that was not accepted that involved the revised historical reference period of calendar year 2006. The change would have expanded the set of resources that LSEs could present for CRR source verification in calendar year 2006. This item is discussed, *infra*, in Section V.A. of this Transmittal Letter.

detail.³⁸ The Commission required the CAISO, in consultation with stakeholders, to develop the proposal to allocate CRRs to the sponsors of Merchant Transmission projects further and file new tariff language within 90 days of the Order.³⁹ In its filing to establish Long Term CRRs on January 29, 2007, the CAISO noted that it would comply with the Commission's directive by the spring of 2007 and that a White Paper for stakeholders input and discussion would be posted soon.⁴⁰

On February 21, 2007 the CAISO posted a Whitepaper on CRRs for Merchant Transmission projects. The Whitepaper was discussed at a February 27, 2007 stakeholder meeting. On March 23, 2007, the CAISO issued a revised paper on the Methodology for Determining CRRs for Merchant Transmission Upgrades that was discussed on a March 29, 2007 stakeholder call. A further revised Methodology for Determining CRRs for Merchant Transmission Upgrades was issued by the CAISO on April 6, 2007 and was discussed on an April 12, 2007 stakeholder call.

The proposed tariff amendments regarding CRRs allocated to the sponsors of Merchant Transmission upgrades or projects are modeled on an approach approved by the Commission and in use in PJM. Stakeholders are supportive generally of the proposed approach. The CAISO notes that in developing the proposed amendments, it had the assistance of a member of the Market Surveillance Committee and an LECG consultant who has worked on these matters for other regional transmission organizations ("RTOs") and independent system operators ("ISOs"). The CAISO also notes that scope of the proposed tariff changes is narrow. For example, the methodology described below assumes that: (i) the project or upgrade is well defined in terms of the physical facilities being installed, (ii) the project or upgrade is nearing the point of being energized for operation, (iii) any operating parameters associated with the project (thermal limits, operating procedures, path ratings where appropriate, etc.) have been determined; and (iv) the CAISO's planning department has developed the appropriate AC Full Network Model ("FNM") incorporating the project for use in the CAISO markets.⁴¹ The proposed methodology takes the "before" and "after" AC FNMs provided by grid planning to construct corresponding DC FNMs for CRR purposes.⁴² The methodology for determining the incremental CRRs to be allocated to sponsors of Merchant Transmission Facilities is described more fully in Section 3 below.

³⁸ *September 21 Order* at P 873.

³⁹ *Id.* In its October 3, 2006 Request for Clarification/Rehearing of the *September 21 Order*, the CAISO requested an extension of time to comply with the Commission's order. Request for Clarification/Rehearing in Docket No. ER06-615 dated, October 23, 2006 at 19-20.

⁴⁰ In the January Filing, the CAISO noted that additional MRTU Tariff language may be required and that it would make a filing to amend the MRTU Tariff such that CRRs for the sponsors of Merchant Transmission projects would be made available before any Long Term CRRs are allocated. *See* Transmittal Letter to the January Filing at 20.

⁴¹ Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at p. 26-36.

⁴² *Id.*

1. Eligibility For, and Attributes of, Merchant Transmission CRRs

The sponsor of a Merchant Transmission Facility is eligible to receive an allocation of Merchant Transmission CRRs only if the sponsor has not elected to recover the cost of its investment using the CAISO's Transmission Access Charge, Wheeling Access Charge or other regulatory cost recovery mechanism with a regulated return. Merchant Transmission CRRs include the following attributes. The term of the Merchant Transmission CRRs begins when the Merchant Transmission project has been energized and operational control has been turned over to the CAISO, and extends for thirty (30) years or the pre-specified intended life of the Merchant Transmission Facility, whichever is less.⁴³ Merchant Transmission CRRs can be either options or obligations (or a combination of both) at the Sponsor's election.⁴⁴ The quantity of the allocated Merchant Transmission CRRs will be commensurate with the transfer capacity that the project adds to the CAISO Controlled Grid.

2. Nominations for Merchant Transmission CRRs

The sponsor of Merchant Transmission facilities or upgrades may request up to five nominations of Merchant Transmission CRRs. Each individual, point-to-point nomination must specify: (i) a single CRR source location; (ii) a single CRR sink location, (iii) a MW quantity; (iv) a time-of-use ("TOU") period (on-peak or off-peak); and (v) a CRR type, either CRR Options or CRR Obligations.⁴⁵

3. Methodology for Determining the Amount Merchant Transmission CRRs to Allocate

The CAISO's proposed methodology for allocating CRRs to the sponsors of Merchant Transmission Facilities is modeled on an approach approved by the Commission and is in use in PJM. In determining the amount of CRRs to be allocated, the CAISO will assess the simultaneous feasibility of the incremental Merchant Transmission CRRs and all other outstanding encumbrances on the transmission grid including ETCs, CVRs and outstanding CRRs, as well as the feasibility of the Merchant Transmission CRRs absent these other encumbrances.

For each nominated Merchant Transmission CRR, the CAISO will determine the feasible incremental Merchant Transmission CRRs using a three-step process. In the first step, the CAISO must determine how many of the nominated CRRs would have been feasible on the network model *prior to* the addition of the Merchant Transmission Facility. Once the CAISO has made this determination it must provide some mechanism to ensure that the project sponsor may not use this capacity as it is not the result of the addition of the Merchant Transmission Facility. In the second step, the CAISO ensures that adding Merchant Transmission Facility will

⁴³ See Attachment C, proposed tariff § 36.11.1.

⁴⁴ *Id.* at § 36.11.

⁴⁵ *Id.* at § 36.11.3.1.

not adversely affect any of the previously released CRRs or other existing encumbrances on transmission capacity. In the final step, the CAISO adds the Merchant Transmission Facility to the transmission system and determines how many of the project sponsor's nominations are feasible. The outcome of the third step represents the incremental CRRs attributable to the project; these are the CRRs awarded to the sponsor. Each of these steps is described below.

a. Step One: Determining the Base System CRR Capability

The CAISO will determine the base CRR capability of the system using a SFT that incorporates as Fixed CRRs all existing encumbrances through the end of the CRR year for which the annual CRR Allocation and Auction process has already been conducted, including encumbrances for the month covered by the most recently conducted Monthly CRR Allocation and Auction process.⁴⁶ For example the encumbrances could include existing awarded Long Term, Seasonal, and Monthly CRRs; ETCs; CVRs; TORs; and any previously allocated Merchant Transmission CRRs. This analysis also will incorporate any known changes to the transmission system that will occur prior to the projected in-service date of the Merchant Transmission Facilities.

This first step determines the extent to which the nominated Merchant Transmission CRRs are feasible on the existing transmission system *absent* the Merchant Transmission Facility.⁴⁷ The end result of this analysis is that the CAISO will establish temporary test CRR Options that will reserve grid capacity that the Project Sponsor is not eligible to receive.⁴⁸ The “temporary test CRR Options” are a device used only for the purpose of reserving capacity that is already available in the grid without the Merchant Transmission Facility.⁴⁹ The temporary test CRR Options will have the same CRR Source and CRR Sink pairs as the Merchant Transmission CRR nominations submitted by the Project Sponsor.

b. Step Two: Mitigation of Impacts on Existing Encumbrances.

In the second step, the CAISO will ensure that the addition of a Merchant Transmission Facility does not negatively impact any existing encumbrances through the end of the CRR year for which the annual CRR Allocation and Auction process for Annual CRRs has already been conducted.⁵⁰ The CAISO will add the proposed Merchant Transmission Facility to the DC FNM and run a SFT using the Fixed CRRs. The Fixed CRRs represent the existing encumbrances and include: ETCs, CVRs, any previously allocated Merchant CRRs for other projects, and the “temporary test CRR Options”. To the extent the Fixed CRRs are not feasible, the infeasibility is attributable to the Merchant Transmission Facility. For any impacts identified in this step the Project Sponsor of the Merchant Transmission Facility will be required to mitigate the impacts for the same period. The mitigation can include having the Project Sponsor of the Merchant

⁴⁶ *Id.* at § 36.11.3.2.1.

⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *See* Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at p. 31-32.

⁵⁰ *See* Attachment C, proposed tariff § 36.11.3.2.2.

Transmission Facility hold counterflow CRRs that maintain the feasibility of the existing encumbrances over the same period.⁵¹

c. Step Three: Determine 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.⁵² 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. Due to the length of Merchant Transmission CRRs, the CAISO will perform a multi-period SFT that simultaneously evaluates two sets of grid conditions. The first set of grid conditions includes all existing encumbrances for the month covered by the most recently conducted CRR Allocation and Auction process for Monthly CRRs including any temporary test CRRs from step one and any counterflow CRRs from step two.⁵³ The second set of grid conditions models only Transmission Ownership Rights.

The CAISO will conduct separate SFTs for each time-of-use (“TOU”) period. Each SFT will consider the entire set of Merchant Transmission CRR nominations for the TOU period and will solve to maximize the MWs of Merchant Transmission CRRs to be allocated to the Project Sponsor, subject to simultaneous feasibility. The nominated Merchant Transmission CRRs that are feasible in the multi-period SFTs for each TOU period will be allocated to the Project Sponsor of the Merchant Transmission Facility.⁵⁴ The proposed methodology will be an effective mechanism to award CRRs to a sponsor of a Merchant Transmission Facility.

4. The Transmission Planning Process and Compliance with Commission Order No. 890 Regarding OATT Reform

The CAISO’s present proposal addresses the rules for determining the incremental Merchant Transmission CRRs to be allocated to a Project Sponsor. The rules for interconnection of Merchant Transmission projects are part of the CAISO’s transmission planning process, which is under review pursuant to the Commission’s Final Rule in Docket Nos. RM05-17-000 and RM05-25-000 which amends the Commission’s pro forma open access transmission tariff (“OATT”).⁵⁵

Order No. 890 was issued on February 16, 2007 and that the CAISO currently is conducting a stakeholder process to develop its compliance filings pursuant to *Order No. 890*. Any revised grid planning provisions necessary in light of *Order No. 680* and *681-A*, including Merchant Transmission CRRs, will be addresses as part of its filing in compliance with *Order No. 890*.

⁵¹ See Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at p. 32-33; see also Attachment C, proposed tariff § 36.11.3.2.2.

⁵² See Attachment C, proposed tariff § 36.11.3.2.3.

⁵³ *Id.*

⁵⁴ *Id.*; see also, See Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at p.33-34.

⁵⁵ See the Final Rule issued in Docket Nos. RM05-17-000 and RM05-25-000, “Preventing Undue Discrimination and Preference in Transmission Service” (February 16, 2007) (“*Order No. 890*”).

The timing of these sequential filings is not unreasonable and should not delay the Commission's consideration the Merchant Transmission CRRs for two reasons. First, there are no Merchant Transmission projects in the queue to utilize the proposed methodology.⁵⁶ Second, for any existing Merchant Transmission Facility already in service, the CAISO will file appropriate provisions for the transition to the MRTU markets.⁵⁷ Any transition will build upon build upon the arrangements established at the time the Merchant Transmission Facility was energized.⁵⁸ Therefore, based on the narrow scope of the current proposal described above, the CAISO believes that the proposed methodology will be an effective and robust mechanism for awarding CRRs to Merchant Transmission Sponsors.

Consistent with this discussion regarding *Order No. 890* and transmission planning, the CAISO notes that certain stakeholders have voiced concern regarding the need to prevent sponsors of Merchant Transmission Facilities from receiving Merchant Transmission CRRs that utilize capacity that was previously unusable or "awakened" by the merchant project. The CAISO believes that the transmission planning process and the upcoming compliance filing is the appropriate place to address this concern, rather than in the instant filing.

E. Compliance with April 20 Order on Rehearing

In its Order on Rehearing, the Commission approved most of the CAISO provisions regarding the allocation of CRRs to OCALSEs including the requirements that OCALSEs must assume the obligation to pay wheeling access charges ("WAC") on an annual basis and must make a showing of legitimate need in order to receive CRRs.⁵⁹ However, the Commission granted rehearing on two issues. One issue involved the prepayment of the WAC by an OCALSE. While the Commission approved of the requirement, it directed the CAISO to allow OCALSEs the option of meeting their annual payment obligation through monthly installment payments.⁶⁰ The second issue involved the allocation of wheel-through CRRs. On this issue the Commission directed the CAISO to allow OCALSEs to obtain CRRs that are sourced outside of the CAISO Control Area on a basis similar to LSEs serving Load within the CAISO Control Area.⁶¹

1. Prepayment of the WAC

The proposed tariff amendments allow an OCALSE to prepay its determined WAC responsibility on a monthly basis for the Seasonal CRRs that they seek as allocations. The OCALSE must meet the creditworthiness requirements in Section 12 of the CAISO Tariff and

⁵⁶ See Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at p. 35-36.

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ See *April 20 Order* at PP 368-380.

⁶⁰ *April 20 Order* at PP 368, 378.

⁶¹ *April 20 Order* at PP 368, 379.

must demonstrate a commitment to pay for the entire term of the CRR sought by submitting to the CAISO a written sworn statement by an executive that can bind the OCALSE.⁶²

An OCALSE choosing to pay on a monthly basis must make its prepayment for the first month of the applicable term prior to submitting nominations in the annual CRR Allocation. Monthly prepayments for subsequent months of an allocated Seasonal CRRs (or for participation in a Monthly CRR Allocation) must be made prior to the start of the Monthly CRR Allocation process for the applicable month.⁶³

2. Allocation of Wheel-Through CRRs to OCALSEs

In complying with the Commission's *April 20 Order* the paramount principle to be adhered to (for OCALSEs as well as LSEs internal to the CAISO Control Area) is that the LSE is entitled to participate in the CRR allocation process only to the extent that the load they serve is exposed to congestion charges on the CAISO Controlled Grid.⁶⁴ Due to the Commission's decision, additional provisions related to the calculation of CRR eligible quantities for OCALSEs as well as additional provisions regarding the legitimate need showing were necessary. As described by Dr. Kristov in his testimony, entitlement to participate in the CRR allocation process for load serving entities is only to the extent that the load they serve is truly exposed to congestion charges on the CAISO Controlled Grid. This is a fundamental principle of which the CAISO based eligibility even for internal load. Therefore, the CAISO must be sure that OCALSEs that want to obtain wheel-through CRRs are legitimately using the CAISO transmission grid to serve their load that is exposed to CAISO congestion charges.

Regarding CRR Sources, an OCALSE must demonstrate that it has a verified CRR source according to the same rules that apply to internal LSEs. Specifically, OCALSEs must have a supply arrangement that delivered energy to the OCALSE during the 2006 historical reference period, through either ownership of or an energy contract with an external generating resource.⁶⁵ In addition the OCALSE must demonstrate that it has transmission arrangements to deliver the energy to the import Scheduling Point on the CAISO grid.⁶⁶ These requirements are identical to those for internal LSEs seeking to be allocated import CRRs in CRR Year One.

With regard to CRR Sources, the principle that the OCALSE must legitimately be using the CAISO transmission grid to serve their load that is exposed to CAISO congestion charges requires the following. First, the OCALSE must have a record of hourly historical exports at the Scheduling Point desired as the CRR Sink.⁶⁷ The OCALSE must submit two sets of hourly data

⁶² See Attachment C, proposed tariff § 36.9.2.

⁶³ *Id.*

⁶⁴ See, e.g., Attachment C, at proposed tariff § 36.9.3; see also Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at p. 36-44.

⁶⁵ See Attachment C, proposed tariff § 36.9.1.

⁶⁶ See Attachment C, proposed tariff § 36.9.3.

⁶⁷ *Id.*

from which the CAISO will construct load duration curves for determining the Seasonal and Monthly CRR Eligible Quantities. One set of hourly data must reflect the OCALSE's historical hourly exports at the Scheduling Point that is the CRR Sink of the nominated CRRs.⁶⁸ The second set of hourly data must reflect the prior year's hourly metered load for the end-use customers the OCALSE served outside the CAISO Control Area that were exposed to Congestion charges for use of the CAISO Controlled Grid.

An OCALSE's Seasonal and Monthly CRR Eligible Quantities will be based on the lesser of: (1) the total historical hourly export data for all Scheduling Points submitted as CRR Sinks, and (2) the hourly metered load for the external end-use customers served by the OCALSE that were exposed to CAISO Congestion Charges. An OCALSE also must demonstrate that it has firm transmission rights pursuant to the tariffs of intervening transmission providers from its Scheduling Point sink to the end-use customers in the OCALSE's Control Area.⁶⁹ In addition, a generating resource that is the external supply source for the OCALSE can not be located in the same control area as the OCALSE.⁷⁰ Finally, the OCALSE must support its data submission and the demonstration of transmission rights to its end-use customers with a sworn affidavit by an executive employee authorized to represent the OCALSE and attest the accuracy of the data and demonstration.⁷¹ The CAISO believes the requirements discussed above will ensure parity between OCALSEs that desire wheel-through CRRs and internal LSEs the desire import CRRs.

F. Additional Tariff Details from BPMs

As noted earlier, some of the tariff changes originated in the process of reconciling the material in the BPM for CRRs and the CRR tariff language. All of these changes were made in response to stakeholder comments and moved information from the BPM into the MRTU Tariff. Attached to this Transmittal Letter is a chart that categorizes and describes each Tariff change that is the result of this reconciliation process. *See* Attachment F.

V. CHANGES CONSIDERED BUT NOT ADOPTED IN THIS FILING

The changes proposed by the CAISO in this filing, as well as the CAISO's decision not to adopt certain changes that were recently proposed by certain stakeholders, preserve the balance struck through the lengthy stakeholder and FERC process over the past several years in

⁶⁸ *Id.* The historical hourly exports shall be based on the tagged Real-Time Interchange Export Schedules for the OCALSE. An OCALSE that wishes to nominate multiple Scheduling Points as CRR Sinks in the allocation process will have distinct CRR Eligible Quantities for each nominated Scheduling Point, and, prior to each annual CRR Allocation process must submit historical hourly export data at each such Scheduling Point from which the CAISO will calculate the associated CRR Eligible Quantities. *Id.*

⁶⁹ *Id.*

⁷⁰ *See* Attachment C, proposed tariff § 36.9.1.

⁷¹ As necessary, the CAISO may request and the OCALSE must produce the raw data and calculations used to develop the submitted data set and the demonstration of transmission rights to its end-use customers. *Id.*

arriving to the CRR rules as first filed in the February 9, 2006 MRTU filing and then amended by its January 29, 2007 filing in compliance to Order Nos. 681 and 681-A. The balanced approach reflected by the CAISO process is appropriate because of the significant diversity of stakeholder preference between the need for flexibility and greater turnover of CRR holdings versus the ability to obtain CRRs initially and hold them for years into the future. The CAISO's proposals in this filing – which also reflects its decision not to file certain proposals – are aimed narrowly at providing solutions to important problems that are best addressed through changes to the rules and complying with specific Commission directives, while avoiding any changes that would unnecessarily alter the fundamentals of the filed CRR proposals or the balance struck in arriving at those proposals, and in so doing avoid any adverse impacts on the process leading to the full launch of the new MRTU markets early in 2007.

As described more fully by Dr. Kristov, the requisite balance in the design of the rules and processes for the distribution of financial transmission rights is best described in terms of two dimensions. The first dimension reflects a trade-off between the need by load serving for flexibility to modify CRR holdings over time to reflect changes in usage of the transmission grid to serve their load, versus their need for certainty regarding their ability to retain certain of their CRRs to maintain a sufficient level of protection against congestion cost variation over a multiple-year horizon. The second dimension reflects a trade-off between allocation and auction approaches to releasing CRRs, specifically a “high-priority allocation of grid capacity as CRRs to LSEs” versus “utilization of a deep and liquid auction process in which CRRs are available to all participants and are valued at market-clearing prices.”

The main elements of the proposed CRR rules, as conditionally accepted in part and further amended in this filing, that reflect the CAISO's balanced approach are: (1) the source verification rules based on the historical reference period; (2) the Priority Nomination Process which provides LSEs a first-priority opportunity to renew CRRs they were allocated in a previous year; (3) a tiered allocation process containing “free choice” tiers in which load serving entities are not restricted either to use verified sources nor to renew previously allocated CRRs; (4) the integration of Long Term CRRs into the annual CRR release process; and (5) the various rules and quantity limits that specify which and how many CRRs load serving entities may nominate in each of the tiers. From the start of the stakeholder process to design the CRR rules in spring 2005 to the filing of the Long Term CRR proposal in January 2007, the CAISO and its stakeholders – as well as the Commission through its rulings – have devoted a significant amount of time and effort to arrive at a workable and reasonable balance in this particular trade-off that is fair to all stakeholders. The CRR rules in support of these elements as previously filed reflect the previously expressed predominant stakeholder preference to provide greater certainty of CRR holdings to maintain a sufficient level of protection against congestion cost variation over a multiple-year horizon.

Another aspect of the balance the CAISO has struck is the availability of grid capacity to the CRR allocation and auction processes. As explained by Dr. Kristov, some parties favor a set-aside or reservation of a share of grid capacity over the entire grid to make it unavailable in the allocation process so it would be guaranteed to be available in the auction, while other parties strongly opposed such a reservation. The balance struck in the CAISO's CRR rules includes a set-aside of import capacity on the interties, recognizing that non-LSEs may face congestion

costs in order to deliver energy under existing bilateral contracts to locations inside the CAISO Control Area. Overall, with respect to this trade-off the CAISO's rules place greater emphasis on allocation than on auction because, as explained by Dr. Kristov, this was clearly the dominant preference during the stakeholder process.

As described in Dr. Kristov's testimony accompanying this filing, the CAISO worked with stakeholders on a number of aspects of the CRR design for which tariff changes were considered. Included were certain changes that the CAISO eventually decided with stakeholder input not to adopt. The decision not to adopt certain proposed changes was based on the realization, after careful consideration, that each of these changes was inappropriate for one or more of the following reasons: (1) it was not focused narrowly enough and would therefore have impacts beyond the identified problem it was aimed at relieving; (2) it would alter some more fundamental aspect of the filed CRR design and thereby reopen debate on a major decision made previously; (3) it could not be adopted without complications and undesirable side effects that did not appear to have workable solutions. At the end of the recent process, the CAISO concluded that the conditionally-approved tariff provisions and policies embodied the appropriate balance for the market as a whole.

There were two main areas where the CAISO and the stakeholders considered but did not adopt changes to the filed CRR rules: (1) changes to source verification rules, and (2) the Reservation of Capacity at the Interties for Auctions.

A. Changes Considered to the Source Verification Rules

As explained by Dr. Kristov, the CAISO and its stakeholders considered two specific changes to the rules for CRR source verification that would expand the set of supply arrangements eligible to be counted as verified sources for nomination in the source-verified tiers of the first-year CRR allocation, *i.e.*, tiers 1 and 2 of the annual process and tier 1 of the monthly process. The first change would have relaxed the requirement that Energy contracts submitted for source verification must have delivered Energy to the LSE during the historical reference period (regarding which the CAISO is proposing in this pleading to change to calendar year 2006). In relaxing the requirement, the CAISO would have allowed LSEs to submit contracts that were signed in 2006 or earlier for delivery of Energy in a future time period. The second change in this area would have relaxed the requirement that Energy contracts submitted for source verification must be at least one month in duration, and would allow LSEs to submit contracts as short as one day in duration. The one-month minimum requirement was relaxed for the CRR Dry Run that the CAISO conducted with stakeholders during 2006, so the question raised in the recent discussions was whether to formally eliminate the one-month minimum or retain it for the upcoming production CRR allocation.

After careful consideration of both these issues, and lengthy discussions with its stakeholders as discussed further in Dr. Kristov's testimony, the CAISO did not believe that adoption of either of these two changes was appropriate. With respect to the first change, the CAISO found that changing the nature of the historical reference period to allow contracts for future delivery would either have to be limited to a time horizon too short to provide any benefit to the parties advocating this change, or if extended several years into the future would raise

difficult complexities regarding how to allocate pro rata shares of generating units to multiple LSEs and how to model non-existent generation in the CRR network model without creating vastly unrealistic flow patterns in the SFT. Moreover, the introduction of a forward-looking aspect into the source verification would go against the recommendations of the Market Surveillance Committee and the expert LECG consultants who had advised on the development of the CAISO's CRR proposal, who all warned strenuously against creating any rules whereby parties could utilize new supply contracts to get a priority allocation of CRRs.

With respect to the second potential change to the source verification rules, *i.e.*, to allow contracts of less than one month in duration to count for source verification as explained by Dr. Kristov there were considerable objections raised regarding the potential administrative burdens in providing evidence of daily contracts to the CAISO for source verification, while none of the stakeholders actually advocated relaxing the one-month minimum so the CAISO is not proposing to make this change.

B. Changes Considered to the Rules Reserving Capacity at the Interties

The CAISO and its stakeholders also considered changes to the matter of setting aside or reserving import capacity on the interties in the allocation process so that this capacity could be made available for the auctions.⁷² The CRR rules filed in February 2006 already contain this feature, and the Commission in its conditional approval directed the CAISO to assess on the basis of the CRR Dry Run whether changes to the filed rules would be needed. As explained by Dr. Kristov, in considering potential changes, the CAISO concluded each of the changes considered would have impacts beyond their stated objective and therefore were not sufficiently narrowly targeted.

Moreover, the results of the CRR Dry Run did not provide evidence to support the need for changes to the rules. An additional reason for not adopting any changes at this time is that presently there is no way to assess the likelihood of the concerns raised by stakeholders being realized. As explained by Dr. Kristov, there already exist incentives and opportunities in the rules for LSEs to modify their CRR holdings, and there is no basis to determine with any confidence whether the rules will result in sufficient liquidity in the free choice tiers to enable LSEs to meet their needs when the time comes. Absent any evidence that the filed CRR rules are indeed problematic, the CAISO decided not to propose changes that would at a minimum shift the balance point from where it was left with stakeholders and the Commission in the CAISO's prior filings.

C. The CRR Rules as Proposed Are Just and Reasonable

Based on its evaluation of these issues with its stakeholders since February, the CRR Dry Run Results as filed on March 30, 2007, the CAISO's prior stakeholder process leading up to the February 9, 2006 MRTU and January 29, 2007 Long Term CRR filings, and the Commission's prior order on the desired characteristics of financial transmission rights, the CAISO's CRR proposal as previously filed and amended in this filing is just and reasonable. Moreover, the

⁷² See Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at p. 66-68.

CAISO has not found any evidence that the filed rules as further amended in this filing result in a distribution of CRRs that are unduly burdensome to any particular party.⁷³ The justness and reasonableness of the proposed rules is based on the careful balance struck by the CAISO as described above. In reviewing the proposed changes or the exclusion of changes proposed by certain stakeholders at this time, the Commission should be careful not to upset the balance struck in the CRR rules through the prior process in light of concerns raised by certain stakeholders. Parties should not at this late juncture be provided an opportunity to obtain what they could not obtain through the stakeholder and prior FERC process.

D. Impact on MRTU Implementation Timeline

In addition, the need to carefully consider the balance that was struck by the CAISO, its stakeholders and the Commission in the process prior to the CRR Dry Run, the Commission should not to impose any rule changes that would unnecessarily cause a delay in the first annual CRR Allocation and Auction. As explained by Ms. Le Vine in her testimony, any rule change that significantly impacts the CRR procedures embedded in the timeline described in Exhibit No. ISO-3 could cause a delay in CRR implementation schedule, which in turn would have implications for the implementation of the rest of MRTU. Therefore, as has the CAISO over the past several months, the Commission also has to balance the desire for parties to continue to want to modify the rules to meet their needs with the overall objective of getting MRTU started.⁷⁴

In his testimony, Dr. Kristov provides certain examples of rule changes that, while they would shift the balance struck by the CAISO through the stakeholder and FERC process, would not have a significant impact on the CRR implementation schedule. These include: (1) identifying a sunset date for the PNP renewal of CRRs associated with energy contracts submitted for source verification for the first-year release of CRRs, and (2) across-the-board adjustments in grid capacity in setting up the network model for CRR release.⁷⁵ As discussed by Dr. Kristov, the CAISO considered but did not adopt these rule changes because the CAISO concluded that the balance it has struck (as guided by the stakeholders and the Commission) is just and reasonable.

VI. EFFECTIVE DATE AND COMPLIANCE WITH PART 35

The process for releasing CRRs to market participants is a multi-stage, multi-month process that must be concluded in advance of the February 2008 start-up of the MRTU markets. The process must begin on or about July 20, 2007 and, consequently, the CAISO is requesting an effective date 60 days from the date of this filing or July 9, 2007. In addition, the CAISO continues to seek an effective date of May 9, 2007 for the provisions as filed on March 9 in Docket ER07-613: 1) not affected at all by the instant filing; and 2) the following provisions not

⁷³ See Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at p. 62-65.

⁷⁴ *April 20 Order* at PP 663-670.

⁷⁵ See Attachment D, Testimony of Dr. Lorenzo Kristov, Exhibit No. ISO-1 at p.62-65.

substantively affected by the instant filing - Sections 36.5, 36.5.1, 36.5.2, 36.8.2, 36.8.2.1, 36.8.2.2, 36.8.6, and 36.10.⁷⁶

Although the clean MRTU Tariff sheets provided in Attachment B to this transmittal letter contain header and footer information, the CAISO requests waiver of the requirements of Order No. 614⁷⁷ and section 35.9 of the Commission's regulations⁷⁸ to the extent the information does not comport full with these requirements. Waiver is necessary because the MRTU Tariff that serves as the basis for the tariff sheets will be amended in between the filing date and the proposed January 31, 2008 MRTU start date. Prior to start-up of MRTU, the CAISO will submit tariff sheets containing the MRTU Tariff provisions approved by the Commission that fully comply with Order No. 614.

The CAISO also requests waiver of section 35.13 of the Commission's regulations, 18 C.F.R. § 35.13, to the extent applicable to this filing and requests waiver of any other applicable requirement of 18 C.F.R. Part 35 for which waiver is not specifically requested, if necessary, in order to permit Commission acceptance of this filing. As noted above, the CAISO respectfully requests that the revised tariff sheets attached hereto be approved, without modification, suspension, or hearing, to go into effect on July 9, 2007.

VII. CONTENTS OF FILING

In addition to this transmittal letter, this filing is comprised of the following:

- Attachment A - Clean Tariff Sheets
- Attachment B - Blacklined Tariff Sheets Against Currently-Effective ISO Tariff
- Attachment C - Blacklined Tariff Sheets Against Conditionally-Approved MRTU Tariff
- Attachment D - Exhibit ISO-1, Direct Testimony of Dr. Lorenzo Kristov
- Attachment E - Exhibit ISO-2, Direct Testimony of Deborah A. Le Vine
Exhibit ISO-3, Timeline for CRR Data Gathering
Exhibit ISO-4, CRR Registration and Data Submission Requirements
Exhibit ISO-5, TRTC Instruction Data-Gathering Effort
Exhibit ISO-6, Timeline of CRR Allocation and Auction Process
- Attachment F - Chart that categorizes and describes each Tariff change

⁷⁶ See Attachment F.

⁷⁷ *Designation of Electric Rate Schedule Sheets*, FERC Stats. & Regs., Regs. ¶ 31,096 [Preambles 1996-2000] (2000).

⁷⁸ 18 C.F.R. § 35.9 (2006)

VIII. SERVICE

This filing has been served on all parties on the Secretary's official service list for Docket Nos. ER07-475, ER07-613, and ER06-615-000.

IX. COMMUNICATIONS

Communications regarding this filing should be addressed to the following individuals whose names should be placed on the official service list established by the Secretary with respect to this submittal.⁷⁹

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⁷⁹ The CAISO respectfully requests waiver of Rule 203(b)(3), 18 C.F.R. § 385.203(b)(3), to permit each of the persons listed above to be included on the service list for this proceeding.

X. CONCLUSION

For all the reasons stated herein, the CAISO respectfully requests that this compliance filing be accepted without modification and that the revised tariff sheets included in this filing also be approved, without modification, suspension, or hearing to go into effect on July 9, 2007 as requested.

Respectfully Submitted,



Anna A. McKenna
Counsel for the
California Independent System Operator
Corporation

ATTACHMENT A

CLEAN SHEETS

Congestion Revenue Rights Amendment Filing

PART A. INFORMATION TO BE PROVIDED BY THE CAISO TO MARKET PARTICIPANTS.

The provisions of this Part A are necessary to enable the CAISO to provide information to Market Participants, Candidate CRR Holders, and CRR Holders that will enable entities to prepare for participation in the CRR Allocation and CRR Auction to be conducted in the summer and fall of 2007.

6.5.1 Communication With Market Participants, Congestion Revenue Rights Participants, and the Public.

6.5.1.1 Market Participants With Non-Disclosure Agreements.

6.5.1.1.1 Annually, the CAISO shall provide information that will include, but is not limited to, the following:

- (a) CRR Full Network Model;
- (b) Constraints and interface definitions;
- (c) Load Distribution Factors for each CRR Allocation and CRR Auction that are published prior to the CRR Allocation and CRR Auction; and
- (d) Nominations and/or parameters to be used for modeling in each annual CRR Allocation and CRR Auction processes: Transmission Ownership Rights, Existing Contracts and Converted Rights expected usage, and Merchant Transmission CRRs.

6.5.1.1.2 Monthly, the CAISO shall provide information that will include, but is not limited to, the following:

- (a) CRR Full Network Model;
- (b) Constraints and interface definitions;
- (c) Load Distribution Factors for each CRR Allocation and CRR Auction that are published prior to the CRR Allocation and CRR Auction; and
- (d) Nominations and/or parameters to be used for modeling in each monthly CRR Allocation and CRR Auction processes: Transmission Ownership Rights, Existing Contracts and Converted Rights expected usage, and Merchant Transmission CRRs.

PART C. MSS OPERATOR SETTLEMENT OPTIONS

In preparation for the first annual CRR Allocation to be held in 2007 prior to the date on which the version of the CAISO Tariff as filed and accepted in FERC Docket No. ER06-615 shall become effective, an MSS Operator Candidate CRR Holder's load eligibility for allocation of CRRs in the annual and monthly CRR Allocation will depend on its election of Settlement options as follows.

[NOT USED]

[NOT USED]

[NOT USED]

4.9.13.1 Gross or Net Settlement.

An MSS Operator has the option to settle with the CAISO on either a gross basis or a net basis for its Load and generating resources. This election shall be made annually for a period consistent with annual CRR Allocation. If the MSS Operator elects net settlement, then CRRs would be allocated on MSS net Load and the MSS may choose the MSS LAP as its CRR Sink in the first tiers of CRR Allocation. If the MSS Operator elects gross settlement, then CRRs would be allocated on a gross load basis and the MSS may not choose the MSS LAPs as its CRR Sink in the first tiers of CRR Allocation.

PART D. CANDIDATE CRR HOLDER AND CRR HOLDER REQUIREMENTS

The provisions of this Part D are necessary to enable the CAISO to register and certify Candidate CRR Holders in advance of their participation in the CRR Allocation and CRR Auction to be conducted in the summer and fall of 2007.

Adjusted Load Metric	A Load Serving Entity's Load Metric minus the megawatts of Load served using Existing Transmission Contracts, Converted Rights, and Transmission Ownership Rights.
Adjusted Verified CRR Source Quantity	The MW amount eligible for nomination by an LSE or Qualified OCALSE in a verified tier of the CRR Allocation process, determined by reducing a Verified CRR Source Quantity to account for circumstances where the ownership or contract right to a generating resource is effective only for a portion of a particular season or month for which CRRs are being nominated.
CAISO	See ISO in Appendix A.
CAISO Controlled Grid	The system of transmission lines and associated facilities of the Participating TOs that have been placed under the CAISO's Operational Control.
CAISO Tariff	The California Independent System Operator Corporation Operating Agreement and Tariff, dated March 31, 1997, as it may be modified from time to time.
CAISO Website	The CAISO internet home page at http://www.aiso.com / or such other internet address as the CAISO shall publish from time to time.
CRR Balancing Account	The financial account held by the CAISO for CRRs.
CRR Charge	The Charge assessed by the CAISO on the holder of a CRR Obligation when Congestion is in the opposite direction of the CRR Source to CRR Sink specification.
CRR Year One	The first period of time for which the CAISO conducts an annual CRR Allocation, as defined in the Business Practice Manuals.
Existing Transmission Contract (ETC) or Existing Contracts	The contracts which grant transmission service rights in existence on the CAISO Operations Date (including any contracts entered into pursuant to such contracts) as may be amended in accordance with their terms or by agreement between the parties thereto from time to time.

Fixed CRRs	Congestion Revenue Rights that are used in the running of an SFT to represent known encumbrances on the transmission system and which may include some or all of the following: previously allocated or awarded Monthly, Seasonal, Long Term, and Merchant Transmission CRRs, Existing Transmission Contracts, and Converted Rights.
Inter-SC Trade	A trade between Scheduling Coordinators of Energy or Ancillary Services in accordance with the CAISO Tariff.
Load-Serving Entity (LSE)	Any entity (or the duly designated agent of such an entity, including, e.g. a Scheduling Coordinator), including a load aggregator or power marketer, that (a) (i) serves End Users within the CAISO Control Area and (ii) has been granted authority or has an obligation pursuant to California state or local law, regulation, or franchise to sell electric energy to End Users located within the CAISO Control Area; (b) is a federal power marketing authority that serves End Users; or (c) is the State Water Resources Development System commonly known as the State Water Project of the California Department of Water Resources.
Merchant Transmission CRRs	Incremental CRRs that are created by the addition of a Merchant Transmission Facility. Merchant Transmission CRRs are effective for thirty (30) years or for the pre-specified intended life of the facility, whichever is less.
Merchant Transmission Facility	A transmission facility or upgrade that is part of the CAISO Controlled Grid and whose costs are paid by a Project Sponsor that does not recover the cost of the transmission investment through the CAISO's Access Charge or WAC or other regulatory cost recovery mechanism.
Monthly CRR	A Congestion Revenue Right whose term is one calendar month in length and distributed in the monthly CRR Allocation and monthly CRR Auction.
Multi-Point CRR	A CRR Obligation specified according to one or more CRR Sources and one or more CRR Sinks and a flow from the CRR Source(s) to the CRR Sink(s), provided that at least the CRR Sink or the CRR Source identifies more than one point.

Out-of-Control Area Load Serving Entity (OCALSE)	An entity serving end-users located outside the CAISO Control Area and that has been granted authority or has an obligation pursuant to Federal, State or local law, or under contracts to provide electric service to such end-users located outside the CAISO Control Area.
PMax	The maximum normal capability of the Generating Unit. PMax should not be confused as an emergency rating of the Generating Unit.
PNP Eligible Quantity	The maximum MW quantity of CRRs an LSE is eligible to nominate in the Priority Nomination Process of the CRR Allocation.
Point-to-Point CRR	A CRR Option or CRR Obligation with a single CRR Source to a single CRR Sink.
Priority Nomination Process (PNP)	The step in an annual CRR Allocation in years beyond CRR Year One through which CRR Holders re-nominate (1) Seasonal CRRs they were allocated in the prior year, (2) Long Term CRRs that are expiring, and (3) Existing Transmission Contracts and Converted Rights that are expiring.
Qualified OCALSE	An OCALSE which the CAISO has certified has met all the requirements for eligibility for CRR Allocation in accordance with Section 36.9 of this Appendix.
Real-Time Interchange Export Schedule	An agreement to transfer Energy from the CAISO Control Area to a interconnected Control Area at a Scheduling Point based on agreed-upon size (megawatts), start and end time, beginning and ending ramp times and rate, and type required for delivery and receipt of power and Energy between the source and sink Control Areas involved in the transaction.
Seasonal Available CRR Capacity	The upper limit of network capacity that will be used in the annual CRR Allocation and annual CRR Auction calculated by effectively reducing OTC for Transmission Ownership Rights as if all lines will be in service for the relevant year.
Sub-LAP	A CAISO defined subset of PNodes within a Default LAP.
Tier LT	The tier of the annual CRR Allocation process through which the CAISO allocates Long Term CRRs.
Verified CRR Source Quantity	The MW amount corresponding to a verified CRR Source and the LSE or OCALSE that submitted that verified CRR Source to the CAISO, as described in Section 36.8.3.4 of this Appendix.

PART H. CONGESTION REVENUE RIGHTS

36 Congestion Revenue Rights.

36.1 Overview of CRRs and Procurement of CRRs.

The CAISO distributes CRRs through an allocation and auction process as described in this Section 36. CRR Holders and Market Participants eligible to become CRR Holders can also buy, sell, or trade CRRs bilaterally as described in Section 36.7 of this Appendix.

36.2 Types of CRR Instruments.

CRRs can be CRR Obligations or CRR Options. Each CRR is fully specified by its type (CRR Obligation or CRR Option), its CRR Source(s), its CRR Sink(s), its MW quantity, and the Trading Hours for which it is valid. The CRR Source(s) and CRR Sink(s) determine the direction of the CRR, which is from CRR Source(s) to CRR Sink(s).

36.2.1 CRR Obligations.

A CRR Obligation entitles its holder to receive a CRR Payment if the Congestion in a given Trading Hour is in the same direction as the CRR Obligation, and requires the CRR Holder to pay a CRR Obligation charge if the Congestion in a given Trading Hour is in the opposite direction of the CRR. The CRR Payment or CRR Obligation charge is equal to the per-MWh cost of Congestion (which equals the MCC at the CRR Sink minus the MCC at the CRR Source) multiplied by the MW quantity of the CRR.

36.2.2 CRR Options.

A CRR Option entitles its CRR Holder to a CRR Payment if the Congestion is in the same direction as the CRR Option, but requires no CRR Obligation charge if the Congestion is in the opposite direction of the CRR. The CRR Payment is equal to the per-MWh cost of Congestion (which equals the MCC at the CRR Sink minus the MCC at the CRR Source, when this quantity is positive and zero otherwise) multiplied by the MW quantity of the CRR.

36.2.3 Point-to-Point CRRs.

A Point-to-Point CRR is a CRR Option or CRR Obligation defined from a single CRR Source to a single CRR Sink.

36.2.4 Multi-Point CRRs.

A Multi-Point CRR is a CRR Obligation defined by more than one CRR Source and/or more than one CRR Sink, plus a specified distribution of the total MW value of the CRR over the multiple CRR Sources and/or multiple CRR Sinks such that the total MW assigned to all CRR Sources equals the total MW assigned to all CRR Sinks equals the MW value of the CRR. For the allocation of CRRs under this Section 36, an LSE seeking to be allocated a Multi-Point CRR must specify a single CRR Sink in its nomination.

36.2.5 Monthly CRRs.

Monthly CRRs have a term of one month, are differentiated by time of use periods (on-peak and off-peak), and are available through the monthly CRR Allocation and CRR Auction processes in advance of each month.

36.2.6 Seasonal CRRs.

Seasonal CRRs have a term of three months, and are differentiated by the different time of use periods (on-peak and off-peak) for each day within a season. Seasonal CRRs are made available through the annual CRR Allocation and CRR Auction processes conducted each year prior to the year in which the Seasonal CRR applies.

36.2.7 Long Term CRRs.

Long Term CRRs have a term of ten years. Long Term CRRs are seasonal and are differentiated by the different time of use periods (on-peak and off-peak) for each day within a season. When Long Term CRRs are nominated and allocated they apply to the same season and time of use period for each year of the ten-year term and represent binding ten-year commitments by the CRR Holders that hold Long Term CRRs. Long Term CRRs are nominated and allocated to LSEs in Tier LT that is one tier in the sequence of tiers in the annual CRR Allocation process. Long Term CRRs are not available through the CRR Auction.

36.2.8 Full Funding of CRRs.

All CRRs will be fully funded; provided however, that full funding of CRRs will be suspended if a System Emergency as described in Section 7.7.4, an Uncontrollable Force as described in Section 14, or a Participating TO's withdrawal of facilities or Entitlements from the CAISO Controlled Grid as described in Section 36.8.7 of this Appendix leaves the CAISO with inadequate revenues.

36.3 CRR Specifications.

36.3.1 Quantity.

CRRs are distributed and settled in no less than one-tenth of a MW denomination.

36.3.2 Term.

CRRs are Monthly CRRs, Seasonal CRRs, Long Term CRRs or Merchant Transmission CRRs. For CRR purposes, the applicable seasons are conventional calendar quarters as defined in the Business Practice Manual.

36.3.3 On-Peak and Off-Peak Specifications.

CRRs are defined either for on-peak or off-peak hours as specified by the CAISO in the applicable Business Practice Manuals consistent with the WECC standards at the time of the relevant CRR Allocation or CRR Auction.

36.4 FNM for CRR Allocation and CRR Auction.

When the CAISO conducts its CRR Allocation and CRR Auction, the CAISO shall use the most up-to-date DC FNM which is based on the AC FNM used in the Day-Ahead Market. The Seasonal Available CRR Capacity shall be based on the DC FNM, taking into consideration: (i) any long-term scheduled transmission Outages, (ii) OTC adjusted for any long-term scheduled derates, and (iii) a downward adjustment due to TOR as determined by the CAISO. The Monthly Available CRR Capacity shall be based on the DC FNM, taking into consideration: (i) any scheduled transmission Outages known at least thirty (30) days in advance of the start of that month, adjustments to compensate for the expected impact of Outages that are not required to be scheduled thirty (30) days in advance or are planned, and adjustments to restore Outages or derates that were applied for use in calculating Seasonal Available CRR Capacity but are not applicable for the current month; (ii) any new transmission facilities added to the CAISO Controlled Grid that were not part of the DC FNM used to determine the prior Seasonal Available CRR Capacity and that have already been placed in-service and energized at the time the CAISO starts the applicable monthly process, (iii) OTC adjusted for any scheduled derates or Outages for that month, and (iv) a downward adjustment due to TOR as determined by the CAISO.

36.4.1 Transmission Capacity Available for CRR Allocation and CRR Auction.

With the exception of the Tier LT, the CAISO makes available seventy-five percent (75%) of Seasonal Available CRR Capacity for the annual CRR Allocation and CRR Auction processes, and one hundred percent (100%) of Monthly Available CRR Capacity for the monthly CRR Allocation and CRR Auction processes. The CAISO makes available sixty percent (60%) of Seasonal Available CRR Capacity in the Tier LT. Available capacity at Scheduling Points shall be determined in accordance with Section 36.8.4.2 of this Appendix for the purposes of CRR Allocation and CRR Auction of CRRs that have a CRR Source identified at a Scheduling Point. Before commencing with the annual or monthly CRR Allocation and CRR Auction processes, the CAISO may distribute Merchant Transmission CRRs and will model those as fixed injections and withdrawals on the DC FNM to be used in the allocation and auction. These fixed injections and withdrawals are not modified by the Simultaneous Feasibility Test. Similarly, before commencing the annual or monthly CRR Allocation and CRR Auction processes, the CAISO will model any previously allocated Long Term CRRs as fixed injections and withdrawals on the DC FNM to be used in the CRR Allocation and CRR Auction. These fixed injections and withdrawals are not modified by the Simultaneous Feasibility Test, which will ensure no degradation of previously allocated and outstanding Long Term CRRs due to the CRR Allocation and CRR Auction processes. Maintaining the feasibility of allocated Long Term CRRs over the length of their terms also is accomplished through the transmission planning process in Section 24.1.3.

36.4.2 Simultaneous Feasibility.

The annual and monthly CRR Allocation processes release CRRs to fulfill CRR nominations as fully as possible subject to a Simultaneous Feasibility Test. To the extent that nominations are not simultaneously feasible, the nominations are reduced in accordance with the CRR Allocation optimization formulation until simultaneous feasibility is achieved. The CRR Allocation optimization formulation, detailed in the Business Practice Manuals, reduces nominated CRRs based on effectiveness in relieving overloaded constraints in order to minimize the total MW volume reduction of nominations while achieving simultaneous feasibility. In the event that there are two or more identical nominations for a specific combination of CRR Source and CRR Sink that affect an overloaded constraint, the CRR Allocation optimization formulation cannot distinguish these nominations based on effectiveness and, therefore, the CRR Allocation optimization formulation will award each such Candidate CRR Holder a pro rata share of the CRRs that can be awarded based on each Candidate CRR Holder's nominated MW amount. In addition to the adjustments in Section 36.4.1, the SFT for each CRR Allocation considers:

- a. CRRs representing ETCs, Converted Rights and any TOR capacity that was not captured in the adjustments described in Section 36.4 of this Appendix, which the CAISO deems necessary to prevent the Congestion Settlement of ETCs, Converted Rights, and TORs from causing revenue inadequacy of allocated and auctioned CRRs;
- b. In the case of the monthly CRR Allocation, the CRRs already released for that month in the annual CRR Allocation and Auction; and,
- c. The CRRs allocated in previous CRR Allocation tiers as described in Sections 36.8.3.1 through 36.8.3.6 of this Appendix.

In the event that transmission Outages and derates modeled for the monthly CRR Allocation and CRR Auction render previously issued Seasonal CRRs infeasible, the CAISO will increase the transfer capacity on the overloaded facilities just enough to render all Seasonal CRRs issued for the month feasible without creating any additional capacity beyond what is needed for the feasibility of the Seasonal CRRs. The CAISO will announce these adjustments to the market prior to conducting the monthly CRR Allocation and CRR Auction so that Candidate CRR Holders can take these facts into consideration in preparing their nominations and bids.

36.5 Candidate CRR Holder and CRR Holder Requirements.

Any entity that holds or intends to hold CRRs must register and qualify with the CAISO and comply with the other terms of this Section, regardless of whether they acquire CRRs by CRR Allocation, CRR Auction, or the Secondary Registration System.

36.5.1 Creditworthiness Requirements.

All CRR Holders and Candidate CRR Holders must comply fully with all creditworthiness requirements as provided in Section 12 of the CAISO Tariff and Section 12.6 of this Appendix and as further developed in the applicable Business Practice Manuals. The amount of available credit for participating in a CRR Auction cannot exceed the entity's Aggregate Credit Limit as provided in Section 12.

36.5.2 Required Training.

CRR Holders and Candidate CRR Holders must attend a training class at least once prior to participating in the CRR Allocations or CRR Auctions. The CAISO may update training requirements annually or on an as-needed basis. Unless granted a waiver by the CAISO, Candidate CRR Holders and CRR Holders shall at all times have in their employment a person that has attended the CAISO's CRR training class and shall notify the CAISO as soon as practicable of a change in such status.

36.6 [NOT USED]

36.7 Bilateral CRR Transactions.

36.7.1 Transfer of CRRs.

36.7.1.1 General Provisions of CRR Transfers.

A CRR Holder may sell or otherwise transfer CRRs in increments of at least a tenth of a MW. Sales or other such transfers must be for at least a full day term consistent with the on-peak or off-peak specification of the CRR. The transferee may be any entity that is a Candidate CRR Holder or a CRR Holder consistent with the CAISO Tariff and the applicable Business Practice Manuals. All CRRs that are so sold or otherwise transferred by the CRR Holder continue to be subject to the relevant terms and conditions set forth in the CAISO Tariff and the applicable Business Practice Manuals.

36.7.1.2 Specific Provisions for Transfer of Long Term CRRs.

A CRR Holder that holds Long Term CRRs may sell or transfer through the Secondary Registration System MW portions and temporal segments of a Long Term CRR corresponding to the current calendar year as well as the calendar year covered by the most recently completed annual CRR Allocation. For such sales or transfers the Long Term CRR will be subject to the same limits on granularity that apply to Seasonal CRRs and Monthly CRRs, as specified in Section 36.7.1 of this Appendix. A CRR Holder that holds Long Term CRRs may not transfer or sell through the Secondary Registration System any temporal segment of a Long Term CRR beyond the calendar year covered by the most recently completed annual CRR Allocation. For temporal segments beyond the year covered by the most recently completed annual CRR Allocation, the CRR Holder to whom a Long Term CRR was originally allocated remains the holder

of record of the entire Long Term CRR for CAISO Settlement purposes, unless and until such segments of the Long Term CRR or MW portion thereof are transferred to another LSE due to Load migration as described in Section 36.8.5 of this Appendix. Allocated Long Term CRRs represent binding ten-year commitments by a CRR Holder that holds Long Term CRRs and may not be terminated or otherwise modified by the CRR Holder prior to the end of the Long Term CRR's ten-year term.

36.7.2 Responsibility of the CAISO.

The CAISO provides Market Participants a Secondary Registration System to facilitate and track CRR bilateral transactions. The bulletin board of the Secondary Registration System enables any entity that wishes to purchase or sell CRRs to post that information.

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. 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 of the CAISO Tariff and Section 12.6 of this Appendix. 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 of this Appendix.

36.8 CRR Allocation.

The CAISO allocates CRRs to Load Serving Entities serving Load internal to CAISO Control Area, including MSS Operators as described in Section 36.10 of this Appendix, as well as Qualified OCALSEs. All CRRs allocated under the terms of this Section 36.8 will be CRR Obligations.

36.8.1 Structure of the CRR Allocation Process.

The CAISO conducts an annual CRR Allocation: (i) once a year for the entire year for Seasonal CRRs; and (ii) once a year for the ten-year term of Long Term CRRs. The annual CRR Allocation releases Seasonal CRRs and Long Term CRRs for four seasonal periods. The CAISO also conducts monthly CRR Allocations twelve times a year in advance of each month. Within each annual and monthly CRR Allocation process the CAISO performs distinct allocation processes for each on-peak and off-peak time of use specification. The CRR Allocation process for CRR Year One is a distinct process that differs from subsequent CRR Allocations as described in Sections 36.8.3.1 and 36.8.3.2 of this Appendix. Each CRR Allocation procedure is based on nominations to the CAISO by LSEs or Qualified OCALSEs eligible to receive CRRs. A timeline of the CRR Allocation and CRR Auction processes is contained in the BPMs.

36.8.2 Load Eligible for CRRs and Eligible CRR Sinks.

Any entity that wishes to participate in the CRR Allocation process must provide information that demonstrates that it has an obligation to serve load. An LSE's eligibility for allocation of CRRs is measured by the quantity of Load that it serves that is exposed to Congestion Charges for the use of the CAISO Controlled Grid as determined in Sections 36.8.2.1 and 36.8.2.2 of this Appendix. An OCALSE's eligibility for allocation of CRRs is also measured by the quantity of load that it serves that is exposed to Congestion Charges for the use of the CAISO Controlled Grid as determined in Section 36.9.3 of this Appendix. For LSEs, the information necessary may include, but is not limited to, Settlement Quality Meter Data or relevant documents filed with the California Energy Commission. For OCALSEs, the necessary information may include, but is not limited to, historical tagged Real-Time Interchange Export Schedules and historical load data reflecting the load they serve that is exposed to Congestion Charges for the use of the CAISO Controlled Grid. In addition, each such OCALSE shall support its data submission with a written sworn affidavit by an executive authorized to represent the OCALSE attesting to the accuracy of the data, and the CAISO will have the right to audit the raw data and calculations used to develop the submitted data set. An LSE serving internal Load is eligible for CRRs up to its Seasonal or Monthly CRR Eligible Quantity, which is derived from its Seasonal or Monthly CRR Load Metric as described in Sections 36.8.2.1 and 36.8.2.2 of this Appendix, respectively. Seasonal and Monthly CRR Eligible Quantities for Qualified OCALSEs are determined as provided in Section 36.9.3 of this Appendix. These quantities are calculated for each LSE or Qualified OCALSE separately for each combination of season and time of use period for the annual CRR Allocation process, and for each time of use period for each monthly CRR Allocation process, and for each CRR Sink at which the eligible LSE serves Load or the Qualified OCALSE exports Energy from the CAISO Control Area. MSS eligibility for CRRs will account for net or gross MSS Settlement in accordance with Section 4.9.13.1 of this Appendix. If the MSS Operator elects net Settlement, LSEs for such MSS Load Operator shall submit CRR Sink

nominations at the MSS LAP. If the MSS elects for gross Settlement, LSEs for such MSS Load shall submit CRRs Sink nominations at the applicable Default LAP. Load that is Pumped-Storage Hydro Units but is not Participating Load may be scheduled and settled at a PNode or Custom Load Aggregation Point and therefore LSEs for such Load shall submit CRR Sink nominations at the applicable PNode or Custom Load Aggregation Point. Load that is a Participating Load that is also aggregated is scheduled and settled at a Custom Load Aggregation Point that is customized specifically for such Load and, therefore, LSEs for such Participating Load shall submit CRR Sink nominations at the Custom Load Aggregation Point. Load that is Participating Load is scheduled and settled at an individual PNode, and therefore LSEs for such Load shall submit CRR Sink nominations at the applicable PNode. Load that is non-Participating Load, is not Pumped-Storage Hydro Units, and is not Load associated with ETCs, TORs, or MSS Operators that elect net Settlement, is scheduled and settled at the Default LAP. Therefore, LSEs for such Load shall submit CRR Sink nominations at their assigned Default LAP or Default LAPs if the Load they serve is located in more than one Default LAP. In tier 3 of the annual process and tier 2 of the monthly process, such LSEs may also submit CRR Sink nominations at a Sub-LAP of their assigned Default LAP. The CAISO will make available, prior to the beginning of the CRR Allocation process, a list of allowable CRR Sinks to be used in the allocation.

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. 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 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 subtracting from that LSE's Seasonal CRR Load Metric 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.

36.8.2.2 Monthly CRR Eligible Quantity.

Each month the CAISO uses the LSE's submitted monthly load forecast to calculate two load duration curves (one on-peak and one off-peak load duration curve for the applicable month) to form the basis for monthly allocations for each LAP in which the LSE serves Load. The Monthly CRR Load Metric is the MW level of Load that is exceeded only in 0.5% of the hours based on the LSE's submitted load forecast. The CAISO will calculate an LSE's Monthly CRR Eligible Quantity by subtracting from that LSE's Monthly CRR Load Metric the quantity of Load served by its TORs, ETCs, and Converted Rights.

36.8.3 CRR Allocation Process.

36.8.3.1 Annual CRR Allocation for CRR Year One.

The annual CRR Allocation process for CRR Year One consists of a sequence of four (4) tiers for each season and time of use period (on-peak and off-peak). Each tier will feature a SFT applied to the CRR nominations submitted by eligible LSEs or Qualified OCALSEs, the results of which are provided by the CAISO to the respective LSEs or Qualified OCALSEs prior to the LSEs or Qualified OCALSEs submitting their nominations to the next tier. Allocations of CRRs in each tier are considered final once they are provided by the CAISO to the respective LSEs or Qualified OCALSEs. After each tier, LSEs or Qualified OCALSEs will have an amount of time as specified in the Business Practice Manual after their receipt of the results of each tier to submit their nominations for the next tier, if there is one. The annual CRR Allocation allows LSEs or Qualified OCALSEs to submit nominations for Seasonal CRRs up to their Seasonal CRR Eligible Quantities for each season of the relevant year, each time of use period and each LAP, and nominations for Long Term CRRs up to fifty percent (50%) of their Adjusted Load Metric for each season, time of use period and each LAP. The annual CRR Allocation for CRR Year One will be conducted in the following sequence of tiers:

36.8.3.1.1 Tier 1. In tier 1, LSEs or Qualified OCALSEs may nominate and the CAISO will allocate to the LSEs or Qualified OCALSEs Seasonal CRRs up to 50% of their Seasonal CRR Eligible Quantity for each season. An LSE can nominate Seasonal CRRs sourced at Trading Hubs in accordance with the LSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1 of this Appendix.

36.8.3.1.2 Tier 2. In tier 2, LSEs or Qualified OCALSEs may nominate and the CAISO will allocate to the LSEs or Qualified OCALSEs Seasonal CRRs up to 75% of their Seasonal CRR Eligible Quantity for each season minus the quantity of CRRs allocated to that LSE or Qualified OCALSEs in tier 1. An LSE can nominate Seasonal CRRs sourced at Trading Hubs in accordance with the LSE's verified CRR Sources. In running the SFT for Seasonal CRR nominations sourced at Trading Hubs the CAISO will disaggregate the nominations into Point-to-Point CRRs. In tier 2 an LSE with a verified Trading Hub CRR Source may nominate up to 75% of the Adjusted Verified CRR Source Quantity for that Trading Hub minus the total MW quantity of Point-to-Point CRRs the LSE was allocated in tier 1 as a result of its tier 1 nomination of CRRs sourced at that Trading Hub.

36.8.3.1.3 Tier LT. Tier LT will follow tier 2 for CRR Year One. In Tier LT, LSEs or Qualified OCALSEs may nominate Long Term CRRs from the Seasonal CRRs allocated in tiers 1 and 2, except that Point-to-Point CRRs awarded as disaggregated CRR nominations sources at a Trading Hub must be nominated as Trading Hub CRRs as described in this Section 36.8.3.1.3. The quantity of Seasonal CRRs that can be nominated as Long Term CRRs is limited to fifty percent (50%) of the eligible entity's Adjusted Load Metric. An LSE can nominate Seasonal CRRs sourced at a Trading Hub in Tier LT up to the total MW amount of the Point-to-Point CRRs the LSE was allocated in tiers 1 and 2 as a result of its tier 1 and 2 nominations of CRRs sourced at that Trading Hub. The cleared Point-to-Point CRRs from the tier 1 and tier 2 that resulted from disaggregated CRR nominations sourced at a Trading Hub may not be nominated as Point-to-Point CRRs in Tier LT in CRR Year One. Qualified OCALSEs may not nominate as a Long Term CRR a Seasonal CRR that has a Scheduling Point as a CRR Source. After receiving nominations

for Long Term CRRs, the CAISO will run SFTs to ensure the feasibility of the nominated Long Term CRRs for the remaining nine years of the ten-year term of the Long Term CRR. In running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1. The SFT run in Tier LT will test the feasibility of only the Long Term CRR nominations and will not include in the analysis those Seasonal CRRs allocated in tiers 1 and 2 that are not nominated as Long Term CRRs. The quantity of Long Term CRRs that can be allocated for any season and time of use period must be feasible for the entire ten-year term of the Long Term CRR. As a result of the Tier LT SFT runs, Long Term CRR nominations may not be fully allocated; however, such a result will not affect the CRR Year One validity of the Seasonal CRR allocated in tiers 1 and 2. The CAISO will inform the nominating entity of the results of the Tier LT SFTs before the deadline for submission of the tier 3 nominations. All allocated Long Term CRRs will be Point-to-Point CRRs.

36.8.3.1.4 Tier 3. In tier 3, LSEs or Qualified OCALSEs may nominate and the CAISO will allocate to the LSEs Seasonal CRRs up to 100% of their Seasonal CRR Eligible Quantity for each season minus the quantity of CRRs allocated to that LSE in tiers 1 and 2. In tier 3, Sub-LAPs will be eligible CRR Sinks provided that the Sub-LAP is within the nominating LSE's Default LAP. An LSE 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 of this Appendix. Qualified OCALSEs can only nominate CRRs from their verified CRR Sources.

36.8.3.2 Monthly CRR Allocation for CRR Year One.

The monthly CRR Allocation in CRR Year One shall consist of a sequence of two (2) tiers for each time of use period (on-peak and off-peak). The monthly CRR Allocation will distribute Monthly CRRs to each LSE up to one hundred percent (100%) of its Monthly CRR Eligible Quantity minus CRRs allocated to that LSE in the annual CRR Allocation for the relevant month and time of use period. The monthly CRR Allocation for CRR Year One will be conducted as follows:

a. Tier 1. In tier 1 of the monthly CRR Allocations, LSEs or Qualified OCALSEs may nominate and the CAISO will allocate to the LSEs or Qualified OCALSEs Monthly CRRs up to 50% of the difference between their Monthly CRR Eligible Quantities and the quantity of Seasonal CRRs and Long Term CRRs they were allocated that apply to that month. An LSE can nominate Monthly CRRs sourced at Trading Hubs in accordance with the LSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1 of this Appendix.

b. Tier 2. In tier 2 of the monthly CRR Allocations, LSEs or Qualified OCALSEs may nominate and the CAISO will allocate to the LSEs or Qualified OCALSEs Monthly CRRs up to 100% of the difference between their CRR Eligible Quantities and the quantity of Seasonal CRRs and Long Term CRRs they were allocated that apply to that month, minus the quantity of CRRs they were allocated in tier 1 of the CRR Year One monthly CRR Allocation. An LSE can nominate Monthly CRRs sourced at Trading Hubs in accordance with the LSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1 of this Appendix. In tier 2 of the monthly CRR Allocation, Sub-LAPs will be eligible CRR Sinks provided that the Sub-LAP is within the nominating LSE's Default LAP. Qualified OCALSEs can only nominate CRRs from their verified CRR Sources.

36.8.3.3 [NOT USED]

36.8.3.4 Source Verification.

In CRR Year One, nominations for tier 1 and tier 2 of the annual CRR Allocation and tier 1 of the monthly CRR Allocations must be source verified. The CAISO will make available, prior to the beginning of the allocation process, a list of allowable CRR Sources to be used in the allocation. An LSE must demonstrate that it could actually submit Bids, including Self-Schedules and Inter-SC Trades, for Energy

from the locations to be nominated as CRR Sources to serve its Load either through ownership of, or contractual rights to receive Energy from, the relevant Generating Units, or a contract to take ownership of power at the relevant source such as a Trading Hub or a Scheduling Point. Source verification will use data for the period beginning January 1, 2006 and ending December 31, 2006 as the basis for verification. Such demonstrations shall be provided by the requesting LSE to the CAISO through the submission of a written sworn declaration by an executive employee authorized to represent the LSE and attest to the accuracy of the data demonstration. As necessary, the CAISO may request, and such LSE must produce in a timely manner, documents in support of such declaration. The provisions on source verification requirements based on legitimate need in Section 36.9.1 apply for Qualified OCALSEs. The Verified CRR Source Quantity associated with each verified CRR Source for a particular LSE or Qualified OCALSE will be: (i) for an owned generation resource the PMax of the unit multiplied by the LSE's or Qualified OCALSE's ownership share; (ii) for a contract with a generation resource, the hourly MWh of Energy specified in the contract averaged over all hours of the relevant time of use period, but no greater than the PMax of the unit; or (iii) for a contract that delivers Energy to a Trading Hub or Scheduling Point, the hourly MWh of energy specified in the contract for delivery from the supplier to the LSE or Qualified OCALSE at the Trading Hub or Scheduling Point, averaged over all hours of the relevant time of use period. Energy contracts submitted by LSEs to demonstrate that the LSE can submit Bids, including Self-Schedules and Inter-SC Trades, for Energy from the nominated CRR Sources to serve its Load must be at least one month in duration. Nominations of CRRs whose CRR Source is a Scheduling Point must be source verified in accordance with Section 36.8.4.2. The CAISO will consider a contract that covers a portion of a season (but not less than one month) to be acceptable verification, with the adjustment described below, for the entire season for which a CRR is nominated. The CAISO will also consider a contract not less than one month in duration that covers portions of two consecutive months to be acceptable verification, with the adjustment described below, for both of the months that are partially covered. In such cases, for a contract that covers only a portion of the season or month for which the

LSE or Qualified OCALSE wishes to nominate source-verified CRRs, the CAISO will calculate an Adjusted Verified CRR Source Quantity, which equals the Verified CRR Source Quantity times the ratio of the number of days covered by the contract for a particular month or season to the total number of days in that month or season, consistent with the time of use period of the CRRs being nominated.

36.8.3.5 Annual CRR Allocation Beyond CRR Year One.

The annual CRR Allocation for years beyond CRR Year One consists of a sequence of four (4) tiers for each season and time of use period (on-peak and off-peak). Allocations of CRRs in each tier are considered final once they are provided by the CAISO to the respective LSEs or Qualified OCALSEs. After each tier, LSEs or Qualified OCALSEs will have an amount of time as specified in the Business Practice Manual after their receipt of the results of each tier to submit their nominations for the next tier, if there is one. The annual CRR Allocation will allow LSEs or Qualified OCALSEs to submit nominations up to their Seasonal CRR Eligible Quantities minus the quantity of previously allocated Long Term CRRs for each season of the relevant year, each time of use period and each CRR Sink at which they serve Load. Annual CRR Allocations for years beyond CRR Year One will be conducted in the following sequence of tiers:

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 year. In all annual CRR Allocations after CRR Year One, an LSE or Qualified OCALSEs may make PNP nominations 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 through retail Load migration as described in Section 36.8.5.1. In addition, an LSE's or Qualified OCALSE's nomination of any particular CRR Source-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 OCALSE was allocated in the previous annual CRR Allocation for the same season and time of use period, adjusted for net Load loss resulting from Load migration. An LSE or Qualified OCALSE may not nominate CRRs sourced at Trading Hubs in the PNP. CRRs whose CRR Sink is a Sub-LAP are not eligible for nomination in the PNP. PNP Eligible Quantities are not affected by secondary transfers of CRRs. That is: (i) an LSE or a Qualified OCALSE 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 OCALSE 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. The maximum quantity of CRRs that such an eligible entity may nominate in the PNP is fifty percent (50%) of the eligible entity's 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.

36.8.3.5.2 Tier LT. In Tier LT, eligible entities may nominate Long Term CRRs from any of the Seasonal CRRs allocated in the PNP so long as the amount of the nominated Long Term CRRs is less than or equal to fifty percent (50%) of the eligible entity's Adjusted Load Metric minus the quantity of previously allocated Long Term CRRs that are valid for the term of the CRRs being nominated. An LSE or a Qualified OCALSE may not nominate CRRs sourced at Trading Hubs in Tier LT. A Qualified

OCALSE may not nominate as a Long Term CRR a Seasonal CRR where the CRR Source is a Scheduling Point. After receiving nominations for Long Term CRRs, the CAISO will run SFTs to ensure the feasibility of the nominated Long Term CRRs for the remaining nine years of the ten-year term of the Long Term CRR. The SFT run in Tier LT will test the feasibility of only the Long Term CRR nominations and will not include in the analysis those Seasonal CRRs allocated in the PNP that were not nominated as Long Term CRRs. The quantity of Long Term CRRs that can be allocated for any season and time of use period must be feasible for the entire ten-year term of the Long Term CRR. As a result of the Tier LT SFT runs, Long Term CRR nominations may not be fully allocated; however, such a result will not affect the validity of: (i) the Long Term CRRs allocated in previous years, or (ii) the Seasonal CRRs allocated in the PNP. The CAISO will inform nominating eligible entities of the results of the Tier LT SFTs before the deadline for submission of the tier 2 nominations.

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 OCALSE up to two-thirds of its Seasonal CRR Eligible Quantity for each season, time of use period and CRR Sink, plus 50% of the net Load gained by the LSE through Load migration during the year, minus the quantity of: (i) CRRs allocated to that LSE or Qualified OCALSE in tier 1, and (ii) Long Term CRRs previously allocated to that eligible entity that are valid for the CRR term currently being allocated. An LSE 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 of this Appendix.

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 OCALSE up to 100% of its Seasonal CRR Eligible Quantity for each season, time of use period and LAP, minus the quantity of: (i) CRRs allocated to that LSE or Qualified OCALSE 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. 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 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 of this Appendix.

36.8.3.5.5 Alternatives for Renewal of Long Term CRRs and for the Transition of Expiring ETCs and Converted Rights to Long Term CRRs.

Eligible entities may, in the final year of a Long Term CRR, nominate the identical CRR Source, CRR Sink, and MW terms of the expiring Long Term CRR in the PNP conducted that year, subject to any applicable quantity limitations specified in this Section 36. An eligible entity with an Existing Transmission Contract or Converted Rights that expire by the start of the year for which the CRR Allocation process is conducted may participate in the PNP as if its Existing Transmission Contract or Converted Rights sources and sinks were previously allocated Seasonal CRRs, subject to any applicable quantity limitations specified in this Section 36. In either case, if Seasonal CRRs are awarded to an LSE or Qualified OCALSE in the PNP based on its nomination of its expiring rights, such entity may then nominate those Seasonal CRRs in Tier LT of the same year's annual CRR Allocation process, subject to any applicable quantity limitations specified in this Section 36. Alternatively, CRR Holders of expiring LT CRRs, expiring Existing Transmission Contracts or expiring Converted Rights may bypass the tier 1 Priority Nomination Process and nominate their expiring rights as Long Term CRRs in Tier LT one year prior to the year of expiration, subject to any applicable quantity limitations specified in this Section 36. This alternative allows the holder of the expiring rights to nominate Long Term CRRs in the first Tier LT SFT in which the capacity corresponding to the expiring rights becomes available for the full nine year period of the Tier LT SFT. For any entity who elects this alternative and obtains an allocated Long Term CRR, the length of the renewed Long Term CRR (or initial Long Term CRR in the case of expiring Existing Transmission Contracts or expiring Converted Rights) will be nine years, corresponding to the years included in the Tier LT SFT.

36.8.3.6 Monthly CRR Allocation Beyond CRR Year One.

The monthly CRR Allocation shall consist of a sequence of two (2) tiers of allocations for each time of use period (on-peak and off-peak). The monthly CRR Allocation will distribute Monthly CRRs and will allow LSEs and Qualified OCALSEs to nominate up to one hundred percent (100%) of their Monthly CRR Eligible Quantities minus the total of any Seasonal CRRs allocated in the annual CRR Allocation and minus any holdings of Long Term CRRs that are valid for the month and time of use of the CRRs being nominated.

a. Tier 1. In tier 1 of the monthly CRR Allocations, each LSE or Qualified OCALSE may nominate Monthly CRRs up to 50% of the difference between its Monthly CRR Eligible Quantity and the total of any Seasonal CRRs allocated in the annual CRR Allocation and any holdings of Long Term CRRs that are valid for the month and time of use of the CRRs being nominated. An LSE can nominate Monthly CRRs where the CRR Source is a Trading Hub in accordance with the LSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1 of this Appendix.

b. Tier 2. In tier 2 of the monthly CRR Allocations, each LSE or Qualified OCALSE may nominate Monthly CRRs up to 100% of the difference between its Monthly CRR Eligible Quantity and the total of any Seasonal CRRs allocated in the annual CRR Allocation and any holdings of Long Term CRRs that are valid for the month and time of use of the CRRs being nominated, minus the quantity of CRRs allocated to that LSE or Qualified OCALSE in tier 1 of the current monthly CRR Allocation. In tier 2 of the monthly CRR Allocation, Sub-LAPs will be eligible CRR Sinks, provided that the Sub-LAP is within the nominating LSE's Default LAP. An LSE can nominate Monthly CRRs sourced at Trading Hubs in accordance with the LSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in section 36.8.4.1 of this Appendix.

36.8.4 Eligible Sources for CRR Allocation.

LSEs or Qualified OCALSEs may nominate up to one hundred percent (100%) of their Adjusted Verified CRR Source Quantities for their Seasonal or Monthly CRRs in all relevant tiers except as provided in this Section. In the CRR Allocation processes for Seasonal CRRs, Monthly CRRs, and Long Term CRRs, sources of CRR nominations can be either PNodes (including Scheduling Points) or Trading Hubs. For tiers 1 and 2 of the annual CRR Allocation in CRR Year One, an LSE may nominate CRRs from each of its verified CRR Sources in a quantity no greater than seventy-five (75) percent of the Adjusted Verified CRR Source Quantity corresponding to each CRR Source. For tiers 1, 2 and 3 of the annual CRR Allocation in CRR Year One, a Qualified OCALSE may nominate CRRs from each of its verified CRR Sources in a quantity no greater than seventy-five (75) percent of the Adjusted Verified CRR Source Quantity corresponding to each CRR Source. A Scheduling Point can be a CRR Source for the annual, monthly, and long term CRR Allocation to the extent the requirements of Section 36.8.4.2 of this Appendix are satisfied.

36.8.4.1 CRRs with Trading Hub Sources.

For purposes of the CRR Allocation processes the CAISO shall disaggregate CRR nominations with Trading Hub CRR Sources into Point-to-Point CRR nominations each of whose CRR Source is a Generating Unit PNode that is an element of the Trading Hub. In performing this disaggregation the MW quantity of each Point-to-Point CRR nomination will equal the MW quantity of the CRR nomination multiplied by the weighting factor of the corresponding Generating Unit PNode in the defined Trading Hub. The disaggregated, individual Point-to-Point CRRs will be used by the CAISO in conducting the SFTs for the nominated CRRs. In CRR years other than CRR Year One, any allocated Point-to-Point CRRs that are the result of Seasonal CRR nominations with Trading Hubs as CRR Sources can be nominated in the PNP tier and, if awarded in the PNP, may be nominated as Long Term CRRs. The allocated Point-to-Point CRRs that are Seasonal CRRs will be used to conduct the SFTs for Tier LT. Any Long Term CRRs allocated by the CAISO will be Point-to-Point CRRs.

36.8.4.2 Import CRRs.

LSEs may nominate CRRs whose CRR Source is a Scheduling Point in the annual, monthly, and long term CRR Allocation in accordance with this Section.

36.8.4.2.1 Scheduling Points as CRR Sources in CRR Year One.

In CRR Year One, in tiers 1 and 2 of the annual CRR Allocation process an LSE may nominate such CRRs to the extent that it can demonstrate to the CAISO that, for the verification period stated in Section 36.8.3.4 of this Appendix, it owned or was a party to a contract with a System Resource, and that it or the counter-party to the contract had procured appropriate transmission from the applicable transmission provider outside the CAISO to the Scheduling Point. In addition, also in tiers 1 and 2 of the annual CRR Allocation in CRR Year One, all LSEs eligible to nominate CRRs under this Section 36.8 may nominate as CRR Sources, without any verification, shares of the residual import CRR capacity at each Scheduling Point that remains after the completion of the CRR Source verification process. Each LSE's share of the residual import CRR capacity will be calculated as follows. Starting with the total capacity at each Scheduling Point that is available in the DC FNM for the annual CRR Allocation and Auction process, the CAISO will calculate the residual amount of capacity that remains at each Scheduling Point after subtracting the capacity accounted for by those Scheduling Point CRR Sources submitted by LSEs for verification that have been verified. The CAISO will then set aside 50 percent of this residual amount at each Scheduling Point for the annual CRR Auction, and will allow LSEs to nominate pro rata shares of the other 50 percent in proportion to their Seasonal CRR Eligible Quantities. In each monthly CRR Allocation during CRR Year One, CRR Source verification will be required in tier 1 as in the annual CRR Allocation process. Following the verification process, the CAISO will calculate and set aside for the

monthly CRR Auction 50 percent of the import capacity that remains at each Scheduling Point after accounting for the verified Scheduling Point CRR Source submissions to the monthly process and the annual CRR Allocation and Auction results for that month, and will allow LSEs to nominate in tier 1 Monthly CRRs with CRR Sources at each Scheduling Point in quantities up to their pro rata shares of the other 50 percent in proportion to their Monthly CRR Eligible Quantities.

36.8.4.2.2 Scheduling Points as CRR Sources Beyond CRR Year One.

In the annual CRR Allocation processes subsequent to CRR Year One, there will be no special provisions regarding CRR Sources at Scheduling Points in tiers 1 and 2. For tier 3 the CAISO will calculate and set aside for the annual CRR Auction 50 percent of the import capacity at each Scheduling Point that remains after the tier 1 and tier 2 CRR Allocations and after considering any previously allocated Long Term CRRs that are valid for that month as described in Section 36.4.1 of this Appendix. In the monthly CRR Allocation processes subsequent to CRR Year One there will be no special provisions regarding CRR Sources at Scheduling Points in tier 1. For tier 2 the CAISO will calculate and set aside for the monthly CRR Auction 50 percent of the import capacity that remains at each Scheduling Point after accounting for the annual CRR Allocation and Auction results for that month, any previously allocated Long Term CRRs that are valid for that month, and the results of tier 1 of the monthly CRR Allocation.

36.8.5 Load Migration Between LSEs.

Load migration between LSEs will be reflected in the hourly Load data and load forecasts used by the CAISO to calculate the CRR Load Metrics and Seasonal and Monthly CRR Eligible Quantities for each LSE, in accordance with procedures set forth in the applicable BPM. When Load migration occurs during an annual CRR cycle, such migration will be reflected in appropriate adjustments to each affected LSE's Seasonal and Monthly CRR Eligible Quantities in subsequent annual and monthly CRR Allocations, as well as its PNP Eligible Quantities in the next annual CRR Allocation. LSEs with Seasonal CRRs that lose Load through Load migration must comply with Section 36.8.5.2 of this Appendix.

36.8.5.1 Adjustments Reflected in the Annual CRR Allocation Process Due To Load Migration.

An LSE who loses or gains net Load through Load migration in a given year will have its Seasonal CRR Eligible Quantities in the next annual CRR Allocation reduced or increased, respectively, in proportion to the net Load lost or gained through Load migration. In addition, an LSE that loses Load through Load migration in a given year will have its PNP Eligible Quantities reduced in proportion to the gross amount of Load lost through Load migration. The reduction in PNP Eligible Quantities will be applied as a constant percentage to all CRRs allocated to that LSE in the prior annual CRR Allocation. There is no increase in an LSE's PNP Eligible Quantities due to an increase in Load due to Load migration. Such an LSE may acquire additional CRRs for net Load gained in tiers 2 and 3 of the subsequent annual CRR Allocation. The CAISO will reserve CRRs in the annual PNP corresponding to the CRRs released by LSEs whose PNP Eligible Quantities were reduced, and will then release these CRRs for tiers 2 and 3. This mechanism will ensure, in the event that changes to the DC FNM prevent the full allocation of PNP Eligible Quantities, the CRRs nominated in the PNP undergo the same proportional reduction as CRRs released by the LSEs who lose Load due to Load migration, so as not to unfairly disadvantage those LSEs who gain Load through Load migration. The Load-gaining LSE will not be required to request the precise CRRs released by the relevant Load-losing LSE but will be able to nominate its preferred CRRs in tiers 2 and 3.

36.8.5.2 Transfers of Allocated CRRs to Reflect Load Migration.

LSEs that have been allocated Seasonal CRRs or Long Term CRRs and that lose Load through Load migration must transfer allocated Seasonal CRRs and Long Term CRRs in accordance with this Section 36.8.5.2. An LSE that receives shares of allocated CRRs due to Load migration must meet all requirements applicable to CRR Holders.

36.8.5.2.1 Mid-Year Adjustments in Seasonal CRRs.

If an LSE loses Load through Load migration to another LSE at any time between annual CRR Allocations, the Load-losing LSE must compensate the Load-gaining LSE in one of the following two manners: 1) using the SRS, the Load-losing LSE may transfer a percentage of each of the Seasonal CRR that it was allocated for the remainder of the annual CRR cycle and for both on-peak and off-peak periods to the Load-gaining LSE in a quantity proportionate to the percentage of its Load lost to the other LSE through Load migration; or 2) the LSE who loses Load through Load migration to another LSE may make cash payments to the relevant Load-gaining LSE in a value commensurate with the hourly CRR Payment stream that would have accrued to the CRRs transferred, based on the quantity of CRRs awarded to the Load-losing LSE.

36.8.5.2.2 Load Migration and Allocated Long Term CRRs.

An LSE that is a CRR Holder that holds a Long Term CRR and that loses Load to Load migration must transfer a proportionate share of each of its Long Term CRRs to the Load-gaining LSE, in a quantity proportionate to the percentage of its Load lost to the other LSE through Load migration. After the transfer of the Long Term CRR (or the proportionate share thereof) to the Load-gaining LSE, the Load-gaining LSE is the holder of record for the transferred Long Term CRR for CAISO Settlement purposes.

36.8.5.2.3 Load Migration That Occurs After Completion of the Annual Allocation Process.

If Load migration occurs after the annual CRR Allocation process has been completed for the following year, a CRR Holder that holds Long Term CRRs may transfer the following year's segment of the Long Term CRR using the options set forth in Section 36.8.5.2.1 of this Appendix. For all of the other remaining years of the Long Term CRR, the CRR Holder that holds Long Term CRRs may not use the options set forth in Section 36.8.5.2.1 of this Appendix to transfer the Long Term CRR (or the proportionate portion thereof) to the Load-gaining LSE.

36.8.5.3 Load Migration Reflected in the Monthly CRR Allocation Process.

An LSE who loses or gains net Load through Load migration must reflect that loss or gain in the monthly Load forecasts it submits to the CAISO for determining its monthly CRR Eligible Quantities for future monthly CRR Allocations.

36.8.5.4 Adjustments for Load Growth.

LSEs who experience Load growth that is not due to Load migration will reflect such Load growth in the data submitted to the CAISO for determining Seasonal and Monthly CRR Eligible Quantities for the CRR Allocation processes.

36.8.6 Load Forecasts Used to Calculate CRR MW Eligibility.

The CAISO will work closely with appropriate state and Local Regulatory Authorities and agencies to ensure that historical Load data and load forecasts used to establish Seasonal and Monthly CRR Eligible Quantities are consistent with the data and forecasts used to establish resource adequacy requirements.

36.8.7 Long Term CRRs and Participating TO Withdrawals from the CAISO Controlled Grid.

In the event a Participating TO gives the required notice and withdraws facilities or Entitlements from the CAISO Controlled Grid, the CAISO will reconfigure Long Term CRRs as necessary to reflect the CAISO Controlled Grid after the withdrawal. After reconfiguration, the CAISO will run SFTs on the reconfigured Long Term CRRs and, if necessary, reduce some of the reconfigured Long Term CRRs to ensure their feasibility. If the CRR Source and CRR Sink for an allocated Long Term CRR both are located within a departing Participating TO Service Territory, the Long Term CRR would expire on the effective date of the Participating TO's withdrawal.

36.9 CRR Allocation to OCALSEs.

OCALSEs who wish to nominate and be allocated CRR Obligations in the same annual and monthly CRR Allocation processes described in Section 36.8 of this Appendix may do so subject to the provisions of this Section 36.9 and if such OCALSEs are qualified and registered as Candidate CRR Holders or CRR Holders. An OCALSE may participate in the CRR Allocation processes and be allocated CRRs to the extent that: (1) such OCALSE makes a showing of legitimate need for the CRRs nominated as provided by Section 36.9.1 of this Appendix; (2) such OCALSE pre-pays the appropriate Wheeling Access Charge in the amount of MWs of CRRs nominated as provided in Section 36.9.2 of this Appendix; (3) the nominated CRRs clear the relevant SFTs; (4) the external load for which CRRs are nominated is not served through an ETC, TOR or Converted Rights which has been designated as eligible to receive the reversal of Congestion Charges; and (5) such OCALSE complies with the verification requirements in Section 36.9.4 of this Appendix. Such OCALSEs that participate in the CRR Allocation processes will be subject to the applicable rules governing the tiered structure of these processes. All CRRs allocated under the terms of this Section 36.9 will be CRR Obligations.

36.9.1 Showing of Legitimate Need.

An OCALSE must make a showing to the CAISO of legitimate need for the CRRs requested. The showing of legitimate need for OCALSEs will have different requirements depending on whether the generation source to be used to verify the CRR Source to be nominated is internal or external to the CAISO Control Area. For internal Generating Units to be used to verify the CRR Sources the determination of legitimate need will be based on demonstration by the OCALSE of an Energy contract from a Generating Unit that covers the time period of the CRRs nominated, or ownership of such Generating Unit. For such CRR Sources the showing of legitimate need must be made for each year that the OCALSE wants to nominate such CRRs in a timely manner prior to the start of the annual CRR

Allocation process. For CRR Sources that will be verified based on an Energy contract from or ownership of a generating resource located outside of the CAISO Control Area, source verification rules in Section 36.8.3.4 of this Appendix will apply. For CRR Sources that will be verified based on generating resources located outside the CAISO Control Area, a Scheduling Point must be nominated as the corresponding CRR Source. Generating resources located outside of the CAISO Control Area to be used by the OCALSE to verify a Scheduling Point as a CRR Source must not be located within the OCALSE's own Control Area. Nominations by OCALSEs of Scheduling Points as CRR Sources shall be subject to the same verification and showing requirements as described in Section 36.8.4.2 of this Appendix. The Verified CRR Source Quantity and Adjusted Verified CRR Source Quantity corresponding to any CRR Source nominated by an OCALSE will be calculated in accordance with Section 36.8.3.4 of this Appendix, with the modification that the Verified CRR Source Quantities and Adjusted Verified CRR Source Quantities corresponding to CRR Sources that are based on an internal Generating Unit and not a Scheduling Point will be calculated annually in conjunction with the OCALSE's annual showing of legitimate need. The annual legitimate need showing for all OCALSEs will include a showing that the OCALSE has firm transmission rights pursuant to the tariffs of intervening transmission providers between the CAISO Control Area and their designated end-users. Such demonstrations shall be provided by the requesting OCALSE to the CAISO through the submission of a written sworn declaration by an executive employee authorized to represent the OCALSE and attest to the accuracy of the data demonstration. As necessary, the CAISO may request, and such OCALSE must produce in a timely manner, documents in support of such declaration.

36.9.2 Prepayment of Wheeling Access Charges.

An OCALSE will be required to prepay relevant Wheeling Access Charges for the term of the CRR it intends to nominate in order to participate in the CRR Allocation processes and be allocated CRRs. For

each MW of CRR nominated the nominating OCALSE must prepay one MW of the relevant Wheeling Access Charge, which equals the per-MWh WAC that is expected at the time the CRR Allocation process is conducted to be applicable for the period of the CRR nominated, times the number of hours comprising the period of the CRR nominated. An OCALSE deemed creditworthy pursuant to the requirements of Section 12 may elect to prepay the determined WAC responsibility on a monthly basis for the Seasonal CRRs that they seek to be allocated, provided that such OCALSE has demonstrated a commitment to pay for the entire term of the CRRs sought by submitting to the CAISO a written sworn statement by an executive that can bind the entity. Allocated CRRs represent binding commitments by a CRR Holder that holds the CRRs and may not be terminated or otherwise modified by the CRR Holder prior to the end of the CRR's term. An OCALSE choosing to pay on a monthly basis shall make its prepayment for the first month of the applicable term prior to submitting nominations in the annual CRR Allocation. Monthly prepayments for subsequent months of the applicable CRR term of allocated Seasonal CRRs or for participation in a monthly CRR Allocation shall be made prior to the start of the monthly CRR Allocation process for the applicable month. To the extent that an OCALSE prepays a quantity of the WAC and is not allocated the full amount of CRRs nominated, WAC prepayment for CRRs not allocated will be refunded by the CAISO within a reasonable time following the completion of the relevant CRR Allocation process.

36.9.2.1 Prepayment of Wheeling Access Charges for Long Term CRRs.

An OCALSE will be required to prepay for the full ten year term of the CRR to be nominated as a LT CRR the relevant Wheeling Access Charges in order to participate in the CRR Allocation process to be allocated such LT CRRs. An OCALSE deemed creditworthy pursuant to the requirements of Section 12 may elect to prepay its determined WAC responsibility on an annual basis, provided that such OCALSE has demonstrated a commitment to pay for the entire term of the LT CRRs sought by submitting to the CAISO a written sworn statement by an executive that can bind the entity. An OCALSE choosing to pay such WAC obligation on an annual basis shall make its prepayment each year at the beginning of the annual CRR Allocation process for the following year.

36.9.3 CRR Eligible Quantities.

The CAISO will calculate the Seasonal and Monthly CRR Eligible Quantities for OCALSEs as described in Section 36.8.2 of this Appendix with the following modifications. The OCALSE must submit two sets of hourly data from which the CAISO will construct load duration curves for determining the Seasonal and Monthly CRR Eligible Quantities. One set of hourly data must reflect the OCALSE's historical hourly exports at the Scheduling Point that is the CRR Sink of the nominated CRRs. The historical hourly exports shall be based on the tagged Real-Time Interchange Export Schedules for the OCALSE. An OCALSE that wishes to nominate multiple Scheduling Points as CRR Sinks in the CRR Allocation process will have distinct CRR Eligible Quantities for each nominated Scheduling Point, and prior to each annual CRR Allocation process must submit historical hourly export data at each such Scheduling Point from which the CAISO will calculate the associated CRR Eligible Quantities. The second set of hourly data must reflect the prior year's hourly metered load for the end-use customers the OCALSE served outside the CAISO Control Area that were exposed to Congestion Charges for use of the CAISO Controlled Grid. The OCALSE's Seasonal and Monthly CRR Eligible Quantities will be based on the lesser of (1) the total historical hourly export data for all Scheduling Points submitted as CRR Sinks, and (2) the hourly metered load for the external end-use customers served by the OCALSE that were exposed to CAISO Congestion Charges. An OCALSE also must demonstrate that it has firm transmission rights pursuant to the tariffs of intervening transmission providers from its Scheduling Point sink to the end-use customers in the OCALSE's Control Area. The OCALSE shall support its data submission and the demonstration of transmission rights to its end-use customers with a sworn affidavit by an executive employee authorized to represent the OCALSE and attest the accuracy of the data and demonstration. As necessary, the CAISO may request, and such OCALSE must produce in a timely manner, the raw data and calculations used to develop the submitted data set and the demonstration of transmission rights to its end-use customers.

36.9.4 Eligible CRR Sources and Sinks.

Eligible CRR Sources will be the PNodes of the Generating Units or Scheduling Points for which the OCALSE has made a legitimate need showing as described above in Section 36.9.1 of this Appendix. Eligible CRR Sinks will be the Scheduling Points for which the CAISO has established Seasonal and Monthly CRR Eligible Quantities as described in Section 36.9.3 of this Appendix. An OCALSE nominating CRRs having CRR Sources internal to the CAISO Control Area will be limited to seventy-five percent (75%) of each of its corresponding Adjusted Verified CRR Source Quantities in all tiers of the annual CRR Allocation process in CRR Year One and in subsequent years. An OCALSE nominating CRRs having CRR Sources external to the CAISO Control Area will be limited to seventy-five percent (75%) of each of its corresponding Adjusted Verified CRR Source Quantities in all tiers of the annual CRR Allocation process in CRR Year One. In CRR years subsequent to CRR Year One, the OCALSE may renew previously allocated CRRs having external CRR Sources, subject to the applicable quantity limitations and other requirements specified in this Section 36.

36.9.5 Priority Nomination Process.

CRRs allocated pursuant to this Section 36.9 shall be eligible for nomination in the Priority Nomination Process to the extent that the requirements of this Section 36.9 are met at the time of the relevant CRR Allocation.

36.10 CRR Allocation to Metered Subsystems.

An MSS Operator that elects gross Settlement may participate in the CRR Allocation processes and be allocated CRR Obligations. An MSS Operator that elects net Settlement may participate in the CRR Allocation processes and be allocated CRRs, except that its Seasonal and Monthly CRR Eligible Quantities will reflect its net Load and its allocated CRRs will use MSS-LAPs as CRR Sinks. The MSS Operator will be required to submit to the CAISO the appropriate hourly historical net Load data and net Load forecast data from which the CAISO will construct net Load duration curves to determine the Seasonal and Monthly CRR Eligible Quantities.

36.11 CRR Allocation to Merchant Transmission Facilities.

Project Sponsors of Merchant Transmission Facilities who turn such facilities over to CAISO Operational Control and do not recover the cost of the transmission investment through the CAISO's Access Charge or WAC or other regulatory cost recovery mechanism may be allocated, at the Project Sponsor's election, either CRR Options or Obligations that reflect the contribution of the facility to grid transfer capacity as determined below.

36.11.1 Eligibility for Merchant Transmission CRRs.

The Project Sponsor of a Merchant Transmission Facility shall be entitled to receive Merchant Transmission CRRs as determined in accordance with this Section 36.11. A Merchant Transmission CRR allocated through this process is effective for thirty (30) years or for the pre-specified intended life of the Merchant Transmission Facility, whichever is less. Merchant Transmission CRRs represent binding commitments for thirty (30) years or for the pre-specified intended life of the Merchant Transmission Facility, whichever is less. The binding commitment by a CRR Holder that holds Merchant Transmission CRRs may not be terminated or otherwise modified by the CRR Holder prior to the end of the term of the Merchant Transmission CRR.

36.11.2 Procedure for Allocating Merchant Transmission CRRs.

No less than forty-five (45) days prior to the in-service date of a Merchant Transmission Facility, the Project Sponsor of the facility will inform the CAISO of the in-service date of the facility and that the Project Sponsor will be requesting Merchant Transmission CRRs associated with the Merchant Transmission Facility. The CAISO will complete the Merchant CRR Allocation after the in-service date of the facility and will allocate Merchant Transmission CRRs whose payment stream will be retroactive back to the in-service date.

36.11.3 Determination of Merchant Transmission CRRs to be Allocated to a Project Sponsor of a Merchant Transmission Facility.

36.11.3.1 Nominations of Merchant Transmission CRRs.

The Project Sponsor of a Merchant Transmission Facility must submit nominations for Merchant Transmission CRRs at least twenty-one (21) days prior to the in-service date of the facility. The Project Sponsor may nominate up to five individual, Point-to-Point CRRs for each of the two on-peak and off-peak time of use periods. Each of the individual, point-to-point nominations must specify: (i) a single CRR Source location; (ii) a single CRR Sink location, (iii) a MW quantity; (iv) a time of use period (on-peak or off-peak); and (v) a CRR type, either CRR Options or CRR Obligations.

36.11.3.2 Methodology to Determine Merchant Transmission CRRs.

The CAISO shall determine the incremental Merchant Transmission CRRs associated with a Merchant Transmission Facility pursuant to this Section 36.11.3.2. The determination will include an assessment of the simultaneous feasibility of the incremental Merchant Transmission CRRs and all other outstanding CRRs. The CAISO will determine the feasible incremental Merchant Transmission CRRs using a three-step process.

36.11.3.2.1 Step One: the Capability of the Existing Transmission System.

In step one the CAISO will determine the base CRR capability of the system using a Simultaneous Feasibility Test that incorporates as Fixed CRRs all existing encumbrances through the end of the CRR year for which the annual CRR Allocation and Auction process has already been conducted, including encumbrances for the month covered by the most recently conducted monthly CRR Allocation and Auction process. This analysis will determine the extent to which the nominated Merchant Transmission CRRs are feasible on the existing transmission system absent the Merchant Transmission Facility. As a result of this analysis, the CAISO will create temporary test CRR Options to reserve grid capacity that the Project Sponsor of the Merchant Transmission Facility is not eligible to receive. The temporary test CRR Options will have the same CRR Source and CRR Sink pairs as the Merchant Transmission CRR nominations submitted by the Project Sponsor.

36.11.3.2.2 Step Two: Mitigation of Impacts on Existing Encumbrances.

In the second step, the CAISO will add the proposed Merchant Transmission Facility to the DC FNM and run a SFT using the Fixed CRRs. The second step will ensure that the addition of a Merchant Transmission Facility does not negatively impact any existing encumbrances through the end of the CRR year for which the annual CRR Allocation and Auction process for Annual CRRs has already been conducted, including encumbrances for the month covered by the most recently conducted monthly CRR Allocation and Auction process. For any impacts identified in this step the Project Sponsor of the Merchant Transmission Facility will be required to mitigate the impacts for the same period. The mitigation can include having the Project Sponsor of the Merchant Transmission Facility hold counterflow CRRs that maintain the feasibility of the existing encumbrances over the same period.

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. For each time of use period, the CAISO will perform a multi-period SFT that simultaneously evaluates two sets of grid conditions. The first set of grid conditions includes all existing encumbrances for the month covered by the most recently conducted CRR Allocation and Auction process 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 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.

36.12 [NOT USED]

36.13 CRR Auction.

The CAISO shall conduct CRR Auctions on an annual and monthly basis subsequent to each annual and monthly CRR Allocation process. Candidate CRR Holders may bid to purchase and may acquire CRR Obligations through the CAISO's annual and monthly CRR Auctions in accordance with the provisions of this Section 36.13. CRR Auction results shall be settled as provided in Section 11.2.4.3 of this Appendix.

36.13.1 Scope of the CRR Auctions.

The CAISO will conduct a CRR Auction corresponding to and subsequent to the completion of each CRR Allocation process, and prior to the start of the period to which the auctioned CRRs will apply. Each CRR Auction will release CRRs having the same seasons, months and time of use specifications as the CRRs released in the corresponding CRR Allocation. Each CRR Auction will utilize the same DC FNM that was utilized in the corresponding CRR Allocation. For each CRR Auction, the CRRs allocated in the corresponding CRR Allocation will be modeled as fixed injections and withdrawals on the DC FNM and will not be adjusted by the SFT in the CRR Auction process. Thus the CRR Auction will release only those CRRs that are feasible given the results of the corresponding CRR Allocation. CRRs released in a CRR Auction will be indistinguishable from CRRs released in the corresponding CRR Allocation for purposes of settlement and secondary trading. The following additional provisions apply. First, participants in the CRR Auctions will have more choices regarding CRR Sources and CRR Sinks than are eligible for nomination in the CRR Allocations, as described in Section 36.13.5 of this Appendix. Second, to the extent a Market Participant receives CRRs in both a CRR Allocation and the corresponding CRR Auction, the CRRs obtained in the CRR Auction will not be eligible for nomination in the PNP. Third, in CRR Year One the CRR Auction cannot be used by CRR Holders to offer for sale CRRs they acquired in a prior CRR Allocation, CRR Auction or through the Secondary Registration System. In the annual and monthly CRR Auction processes for years following CRR Year One, CRR Holders may offer for sale any CRRs held by such holders, subject to the limitations on sale and transfer of Long Term CRRs specified in Section 36.7.1.2 of this Appendix. Merchant Transmission CRRs that are CRR Options may be offered for sale in the annual and monthly CRR Auctions for years following CRR Year One, subject to the same temporal limitations that apply to Long Term CRRs as specified in Section 36.7.1.2 of this Appendix.

36.13.2 Responsibilities of the CAISO Prior to Each CRR Auction.

The CAISO shall publish on the CAISO Website a notice of upcoming CRR Auctions at least seven (7) days prior to the CRR Auction. The CAISO will also provide additional information needed by CRR Auction participants in accordance with the provisions of Section 6.5.1 of this Appendix.

36.13.3 CRR Holder Creditworthiness.

All Market Participants are eligible to acquire CRRs by participating in the CRR Auction, provided that the Market Participant has met all the CRR Holder requirements described in Section 36.5, the creditworthiness provisions in Section 12 of the CAISO Tariff and Section 12.6 of this Appendix and the relevant Business Practice Manual.

36.13.4 Bids in the CRR Auctions.

Bids to purchase CRRs shall be submitted in accordance with the requirements set out in this Section 36.13.4 and as further specified in the applicable Business Practice Manuals. Once submitted to the CAISO, CRR bids may not be cancelled or rescinded by the Market Participant after the CRR Auction is closed. Market Participants may bid for Point-to-Point CRRs and Multi-Point CRRs. Each bid for a Point-to-Point CRR shall specify:

- a) The associated month or season and time of use period;
- b) The associated CRR Source and CRR Sink;
- c) A monotonically non-increasing piecewise linear bid curve in quantities (denominated in tenths of MW) and prices (\$/MW).

Each bid for a Multi-Point CRR shall specify:

- d) The associated month or season and time of use period;
- e) The associated CRR Sources and CRR Sinks;
- f) For each CRR Source, a monotonically non-decreasing piecewise linear bid curve in quantities (denominated in tenths of MW) and prices (\$/MW).
- g) For each CRR Sink, a monotonically non-increasing piecewise linear bid curve in quantities (denominated in tenths of MW) and prices (\$/MW).

Bid prices in all CRR bids may be negative.

36.13.5 Eligible Sources and Sinks for CRR Auction.

Allowable CRR Sources for CRRs acquired in the CRR Auction will be PNodes, Scheduling Points, Trading Hubs, LAPs, MSS-LAPs and Sub-LAPs. Allowable CRR Sinks for CRRs acquired in the CRR Auction will be PNodes, Scheduling Points, Trading Hubs, LAPs, MSS-LAPs and Sub-LAPs.

36.13.6 Clearing of the CRR Auction.

The SFT used to clear the CRR Auction will utilize the same DC FNM and optimization algorithm as the corresponding CRR Allocation, except that nominations to the CRR Auction will have associated price-quantity bid curves. The CRR Auction SFT will use the bid prices in determining which CRRs to award when not all nominations are simultaneously feasible, will select the set of simultaneously feasible CRRs with the highest total auction value as determined by the CRR bids, and will calculate nodal prices at each PNode of the DC FNM. In the event that there are two or more identical bids for a specific

combination of CRR Source and CRR Sink that affect an overloaded constraint, the CRR Auction optimization cannot distinguish these bids based on either effectiveness or price and therefore the CRR Auction optimization will award each CRR bidder a pro rata share of the CRRs that can be awarded based on the bid MW amounts. Based on the nodal prices calculated by the CRR Auction SFT, the CRR Market Clearing Price per MW for a specific CRR will equal the nodal price at the CRR Sink minus the nodal price at the CRR Source. For a Multi-Point CRR the CRR Market Clearing Price will equal the sum over all relevant CRR Sinks of the nodal price at each CRR Sink times that CRR Sink's share of the total MW of the CRR, minus the sum over all relevant CRR Sources of the nodal price at each CRR Source times that CRR Source's share of the total MW of the CRR Market Participants shall pay the associated CRR Market Clearing Prices for all CRRs bought through the CRR Auction.

36.13.7 Announcement of CRR Auction Results.

Within five (5) Business Days after the close of a CRR Auction, the CAISO shall post the results. The results shall include but are not limited to the MW quantity, the CRR Source and CRR Sink for each CRR awarded, the nodal prices calculated by the CRR Auction SFT, and the parties to whom the CRRs were awarded. The CAISO shall not disclose prices specified in any CRR bid.

PART I. MISCELLANEOUS SECTIONS

11.2.4.3 Payments and Charges for Monthly and Annual Auctions.

The CAISO shall charge CRR Holders for the market clearing price for CRRs obtained through the clearing of the CRR Auction as described in Section 36.13.6 of this Appendix. To the extent the CRR Holder purchases a CRR through a CRR Auction that has a negative value, the CAISO shall pay the CRR Holder for taking the applicable CRR. The CAISO shall net all revenue received and payments made through this process and shall add the net remaining seasonal and monthly CRR Auction revenue amounts (either negative or positive amounts) to the CRR Balancing Account for the appropriate month. CRR Auction revenues for each season are allocated uniformly across the three monthly accounts comprising each season.

24.7.3 Provided that the CAISO has Operational Control of the Merchant Transmission Facility, a Project Sponsor that does not recover the investment cost under a FERC-approved rate through the Access Charge or a reimbursement or direct payment from a Participating TO shall be entitled to receive Merchant CRRs as provided in Section 36.11 of this Appendix. The full amount of capacity added to the system by such transmission upgrades or additions will be as determined through the regional reliability council process of the Western Electricity Coordinating Council or its successor. Pursuant to its Project Sponsor status as specified in Section 4.3.1.3, consistent with FERC's findings in Docket Nos. EL04-133-001, ER04-1198-000, and ER04-1198-001, issued on May 16, 2006 (115 FERC ¶ 61,178), Western Path 15 shall receive compensation associated with transmission usage rights modeled for Western Path 15. In the event that Western Path 15 has an approved rate schedule that returns excess revenue from any compensation obtained from the CAISO associated with the transmission usage rights for Western Path 15, such revenue shall be returned to the CAISO through a procedure established by the CAISO and the Western Area Power Administration for that purpose.

Attachment B
Blacklines to S&R Tariff
Congestion Revenue Rights Amendment Filing

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ISO TARIFF APPENDIX BB

Prior to the date that the CAISO Tariff as filed in FERC Docket No. ER06-615 shall become effective, the CAISO will continue to operate as provided in the ISO Tariff in effect prior to such time. For purposes of activity related to the preparation for allocation, auction and transfer of Congestion Revenue Rights, the CAISO shall operate pursuant to this Appendix BB. This Appendix BB is included in the CAISO Tariff to set forth temporary provisions that are derived from conditionally accepted the CAISO Tariff in FERC Docket ER06-615 that enable the CAISO to implement certain activities in preparation of its first annual and monthly CRR Allocation and CRR Auction. These provisions enable the CAISO to: 1) register and qualify entities that intend to participate in the CRR Allocation, CRR Auction, or to transfer and obtain allocated or awarded CRRs through the Secondary Registration System; 2) provide to Market Participants any relevant information to enable such parties to participate in the CRR Allocation, CRR Auction or the Secondary Registration System; 3) obtain from Candidate CRR Holders eligible to participate in the CRR Allocation information necessary to verify the load metric that is eligible for allocation of CRRs; and 4) obtain from Participating TOs, entities that have TORs, and New Participating TOs the Transmission Rights and Transmission Curtailment Instructions that will be used to validate ETC, TOR and Converted Rights Self-Schedules submitted consistent with such rights as well as to model usage under such rights in the allocation and auction of CRRs.

This Appendix BB, therefore, does not replace or supersede the provisions contained in the ISO Tariff in effect prior to the effective date of the version of the tariff as filed and accepted in FERC Docket ER06-615, which will continue to apply until such time that the tariff provisions as filed and finally approved in Docket ER06-615 become fully effective. When all the provisions as filed and conditionally accepted in Docket ER06-615 become fully effective the CAISO will conform its tariff accordingly.

* * *

PART A. INFORMATION TO BE PROVIDED BY THE CAISO TO MARKET PARTICIPANTS.

The provisions of this Part A are necessary to enable the CAISO to provide information to Market Participants, Candidate CRR Holders, and CRR Holders that will enable entities to prepare for participation in the CRR Allocation and CRR Auction to be conducted in the summer and fall of 2007.

6.5.1.1 Market Participants With Non-Disclosure Agreements.

6.5.1.1.1 Annually, the CAISO shall provide information that will include, but is not limited to, the following:

- (a) CRR Full Network Model;
- (b) Constraints and interface definitions; ~~and~~
- (c) Load Distribution Factors for each CRR Allocation and CRR Auction that are published prior to the CRR Allocation and CCR Auction-; and
- (d) Nominations and/or parameters to be used for modeling in each annual CRR Allocation and CRR Auction processes: Transmission Ownership Rights, Existing Contracts and Converted Rights expected usage, and Merchant Transmission CRRs.

6.5.1.1.2 Monthly, the CAISO shall provide information that will include, but is not limited to, the following:

- (a) CRR Full Network Model;
- (b) Constraints and interface definitions; ~~and~~
- (c) Load Distribution Factors for each CRR Allocation and CRR Auction that are published prior to the CRR Allocation and CRR Auction-; and

(d) Nominations and/or parameters to be used for modeling in each monthly CRR Allocation and CRR Auction processes: Transmission Ownership Rights, Existing Contracts and Converted Rights expected usage, and Merchant Transmission CRRs.

* * *

PART C. ~~DETERMINATION OF LOAD ELIGIBLE FOR PARTICIPATION IN CRR ALLOCATION~~MSS OPERATOR SETTLEMENT OPTIONS

In preparation for the first annual CRR Allocation to be held in 2007 prior to the date on which the version of the CAISO Tariff as filed and accepted in FERC Docket No. ER06-615 shall become effective, an MSS Operator ~~the CAISO will determine a~~ Candidate CRR Holder's load eligibility for allocation of CRRs in the annual and monthly CRR Allocation will depend on its election of Settlement options as follows.

~~36.8.2~~ Load Eligible for CRRs and Eligible CRR Sinks.

~~An LSE serving internal Load is eligible for CRRs up to its Seasonal or Monthly CRR Eligible Quantity, which is derived from its Seasonal or Monthly CRR Load Metric as follows. These quantities are calculated for each LSE separately for each combination of season and time of use period for the annual process, and for each time of use period for each monthly process, and for each CRR Sink at which the eligible LSE serves Load. MSS eligibility for CRRs will account for net or gross MSS settlement in accordance with Section 4.9.13.1 of this Appendix. If the MSS elects net settlement, LSEs for such MSS Load shall submit CRR Sink nominations at the MSS LAP, and if the MSS elects for gross settlement LSEs for such MSS Load shall submit CRRs Sink nominations at the applicable Default LAP. Load that is Pumped Storage Hydro Units but is not Participating Load may be scheduled and settled at a PNode or Custom Load Aggregation Point and therefore LSEs for such Load shall submit CRR Sink nominations at the applicable PNode or Custom Load Aggregation Point. Load that is a Participating Load that is also aggregated is scheduled and settled at a Custom Load Aggregation Point that is customized specifically for such Load and, therefore, LSEs for such Participating Load shall submit CRR Sink nominations at the Custom Load Aggregation Point. Load that is Participating Load is scheduled and settled at an individual PNode, and therefore LSEs for such Load shall submit CRR Sink nominations at the applicable PNode.~~

~~Load that is non-Participating Load, is not Pumped-Storage Hydro Units, and is not Load associated with ETCs, TORs, or MSS that elects net settlement, is scheduled and settled at the Default LAP. Therefore, LSEs for such Load shall submit CRR Sink nominations at their assigned Default LAP or Default LAPs if the Load they serve is located in more than one Default LAP. In tier 3 of the annual process and tier 2 of the monthly process, such LSEs may also submit CRR Sink nominations at a sub-LAP of their assigned Default LAP.~~

~~**36.8.2.1 Seasonal CRR Eligible Quantity.**~~

~~The CAISO constructs load duration curves 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. 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 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 subtracting from that LSE's Seasonal CRR Load Metric the quantity of Load served by its TORs, ETCs, and Converted Rights, and multiplying the result by 0.75.~~

~~**36.8.2.2 Monthly CRR Eligible Quantity.**~~

~~Each month the CAISO uses the LSE's submitted monthly load forecast to calculate two load duration curves (one on-peak and one off-peak load duration curve for the applicable month) to form the basis for monthly allocations for each LAP in which the LSE serves Load. The Monthly CRR Load Metric is the MW level of Load that is exceeded only in 0.5% of the hours based on the LSE's submitted load forecast. The CAISO will calculate an LSE's Monthly CRR Eligible Quantity by subtracting from that LSE's Monthly CRR Load Metric the quantity of Load served by its TORs, ETCs, and Converted Rights.~~

~~**36.8.6 Load Forecasts Used to Calculate CRR MW Eligibility.**~~

~~The CAISO will work closely with appropriate state and Local Regulatory Authorities and agencies to ensure that historical load data and load forecasts used to establish CRR Eligible Quantities are consistent with the data and forecasts used to establish resource adequacy requirements.~~

~~36.9 CRR Allocation to LSEs serving External Load.~~

~~LSEs serving Load outside the CAISO Control Area who wish to nominate and be allocated CRR Obligations in the same annual and monthly allocation processes described in Section 36.8.2 of this Appendix may do so subject to the provisions of this Section. LSEs serving load outside the CAISO Control Area may participate in the CRR Allocation processes and be allocated CRRs to the extent that: (1) such LSEs makes a showing of legitimate need for the CRRs nominated; (2) such entities pre-pay the appropriate Wheeling Access Charge in the amount of MWs of CRRs nominated; (3) the nominated CRRs clear the relevant SFTs; and (4) the external load for which CRRs are nominated is not served through an ETC, TOR or Converted Rights which as been designated as eligible to receive the reversal of Congestion Charges. Such LSEs that participate in the CRR Allocation processes will be subject to the applicable rules governing the tiered structure of these processes. All CRRs allocated under the terms of this Section 36.9 will be CRR Obligations.~~

~~36.9.1 Showing of Legitimate Need.~~

~~LSEs serving load outside the CAISO Control Area must make a showing to the CAISO of legitimate need for the CRRs requested. The determination of legitimate need will be based on demonstration of an existing contract for Generation internal to the CAISO Control Area that covers the time period of the CRRs nominated, or ownership of a Generating Unit internal to the CAISO Control Area.~~

~~36.9.2 Prepayment of Wheeling Access Charges.~~

~~LSEs serving load outside the CAISO Control Area will be required to prepay relevant Wheeling Access Charges in order to participate in the CRR Allocation processes and be allocated CRRs. For each MW of CRR nominated the nominating LSE must prepay one MW of the relevant Wheeling Access Charge, which equals the per-MWh WAC that is expected at the time the CRR Allocation process is conducted to be applicable for the period of the CRR nominated, times the number of hours comprising the period of the CRR nominated. To the extent that an LSE prepays a quantity of the WAC and is not allocated the full amount of CRRs nominated, WAC prepayment for CRRs not allocated will be refunded by the CAISO within a reasonable time following the completion of the relevant CRR Allocation process.~~

~~36.9.2.1~~ — ~~Prepayment of Wheeling Access Charges for Long Term CRRs.~~

~~An entity serving load outside the CAISO Control Area that wants to nominate an allocated Seasonal CRR as a Long Term CRR must execute a contract with the CAISO committing the entity to make annual Wheeling Access Charge payments for each year of the term of a Long Term CRR. Each year's payment will be made at the beginning of the annual CRR Allocation process for the following year.~~

~~36.9.3~~ — ~~CRR Eligible Quantities.~~

~~The CAISO will calculate the Seasonal and Monthly CRR Eligible Quantities for LSEs serving external Load as described in Section 36.8.2 of this Appendix with the following modifications. The load data submitted by the load serving entity serving external load from which the CAISO will construct load duration curves for determining the Seasonal and Monthly CRR Eligible Quantities must reflect the load serving entity's historical hourly exports at the Scheduling Point that is the CRR Sink of the nominated CRRs. Load serving entities serving external load that wish to nominate multiple Scheduling Points as CRR Sinks in the allocation process will have distinct CRR Eligible Quantities for each nominated Scheduling Point, and must submit historical hourly export data at each such Scheduling Point from which the CAISO will calculate the associated CRR Eligible Quantities.~~

~~36.9.4~~ — ~~Eligible Sources and Sinks.~~

~~Eligible CRR Sources will be the PNodes of the Generating Units for which the load serving entity serving external load has made a legitimate need showing as described above. Eligible CRR Sinks will be the Scheduling Points for which the CAISO has established CRR Eligible Quantities based on the LSE's submitted historical hourly export data. Entities serving load external to the CAISO Control Area requesting CRRs whose CRR Source is a specific Generating Unit will be limited to seventy five percent (75%) of that Generating Unit's PMax in Tiers 1 and 2 of the annual CRR Allocation process in CRR Year One.~~

~~36.10~~ — ~~CRR Allocation to Metered Subsystems.~~

~~An MSS that elects gross settlement may participate in the CRR Allocation processes and be allocated CRR Obligations. An MSS Operator that elects net settlement may participate in the CRR Allocation~~

~~processes and be allocated CRRs, except that its CRR Eligible Quantities will reflect its net load and its allocated CRRs will use MSS-LAPs as CRR Sinks. The MSS will be required to submit to the CAISO the appropriate hourly historical net load data and net load forecast data from which the CAISO will construct net Load duration curves to determine the CRR Eligible Quantities.~~

~~***~~

PART D. CANDIDATE CRR HOLDER AND CRR HOLDER REQUIREMENTS

The provisions of this Part D are necessary to enable the CAISO to register and certify Candidate CRR Holders in advance of their participation in the CRR Allocation and CRR Auction to be conducted in the summer and fall of 2007.

~~36.5 Candidate CRR Holder and CRR Holder Requirements.~~

~~Any entity that holds or intends to hold CRRs must register and qualify with the CAISO and comply with the other terms of this Section, regardless of whether they acquire CRRs by CRR Allocation, CRR Auction, or the Secondary Registration System.~~

~~36.5.1 Creditworthiness Requirements.~~

~~All CRR Holders and Candidate CRR Holders must comply fully with all creditworthiness requirements as provided in Section 12 of the CAISO Tariff and Section 12.6 of this Appendix and as further developed in the applicable Business Practice Manuals.~~

~~36.5.2 Required Training.~~

~~CRR Holders and Candidate CRR Holders must attend a training class at least once prior to participating in the CRR Allocations or CRR Auctions. The CAISO may update training requirements annually or on an as-needed basis.~~

~~***~~

PART G. DEFINITIONS

Unless defined in this Appendix BB or the context otherwise requires, all capitalized terms and expressions used in this Appendix BB shall have the meaning as defined in the Master Definitions Supplement in Appendix A. The following capitalized terms and expressions used in this Appendix BB

shall have the meanings set forth below unless otherwise stated or the context otherwise requires. If two or more capitalized terms are used together in a manner not uniquely defined in Appendix A or this Appendix BB, the meanings of each defined term apply.

* * *

Adjusted Load Metric

A Load Serving Entity's Load Metric minus the megawatts of Load served using Existing Transmission Contracts, Converted Rights, and Transmission Ownership Rights.

* * *

Adjusted Verified CRR Source Quantity

The MW amount eligible for nomination by an LSE or Qualified OCALSE in a verified tier of the CRR Allocation process, determined by reducing a Verified CRR Source Quantity to account for circumstances where the ownership or contract right to a generating resource is effective only for a portion of a particular season or month for which CRRs are being nominated.

* * *

CAISO

See ISO in Appendix A.

* * *

CAISO Controlled Grid

The system of transmission lines and associated facilities of the Participating TOs that have been placed under the CAISO's Operational Control.

* * *

CAISO Tariff

The California Independent System Operator Corporation Operating Agreement and Tariff, dated March 31, 1997, as it may be modified from time to time.

* * *

CAISO Website

The CAISO internet home page at <http://www.caiso.com> / or such other internet address as the CAISO shall publish from time to time.

* * *

CRR Balancing Account

The financial account held by the CAISO for CRRs.

* * *

CRR Charge

The Charge assessed by the CAISO on the holder of a CRR
Obligation when Congestion is in the opposite direction of the CRR
Source to CRR Sink specification.

* * *

CRR Year One

The first period of time for which the CAISO conducts an annual
CRR Allocation, as defined in the Business Practice Manuals.

* * *

**Existing Transmission
Contract (ETC) or Existing
Contracts**

The contracts which grant transmission service rights in existence
on the CAISO Operations Date (including any contracts entered into
pursuant to such contracts) as may be amended in accordance with
their terms or by agreement between the parties thereto from time to
time.

* * *

Fixed CRRs

Congestion Revenue Rights that are used in the running of an SFT
to represent known encumbrances on the transmission system and
which may include some or all of the following: previously allocated
or awarded Monthly, Seasonal, Long Term, and Merchant
Transmission CRRs, Existing Transmission Contracts, and
Converted Rights.

* * *

Inter-SC Trade

A trade between Scheduling Coordinators of Energy or Ancillary
Services in accordance with the CAISO Tariff.

* * *

* * *

Load-Serving Entity (LSE)

Any entity (or the duly designated agent of such an entity, including, e.g. a Scheduling Coordinator), including a load aggregator or power marketer, that (a) (i) serves End Users within the CAISO Control Area and (ii) has been granted authority or has an obligation pursuant to California state or local law, regulation, or franchise to sell electric energy to End Users located within the CAISO Control Area; (b) is a federal power marketing authority that serves End Users; or (c) is the State Water Resources Development System commonly known as the State Water Project of the California Department of Water Resources.

* * *

Merchant Transmission CRRs

Incremental CRRs that are created by the addition of a Merchant Transmission Facility. Merchant Transmission CRRs are effective for thirty (30) years or for the pre-specified intended life of the facility, whichever is less.

* * *

Merchant Transmission Facility

A transmission facility or upgrade that is part of the CAISO Controlled Grid and whose costs are paid by a Project Sponsor that does not recover the cost of the transmission investment through the CAISO's Access Charge or WAC or other regulatory cost recovery mechanism.

* * *

Monthly CRR

A Congestion Revenue Right whose term is one calendar month in length and distributed in the monthly CRR Allocation and monthly CRR Auction.

* * *

Multi-Point CRR

A CRR Obligation specified according to one or more CRR Sources and one or more CRR Sinks and a flow from the CRR Source(s) to the CRR Sink(s), provided that at least the CRR Sink or the CRR Source identifies more than one point.

* * *

Out-of-Control Area Load Serving Entity (OCALSE)

An entity serving end-users located outside the CAISO Control Area and that has been granted authority or has an obligation pursuant to Federal, State or local law, or under contracts to provide electric service to such end-users located outside the CAISO Control Area.

* * *

PMax

The maximum normal capability of the Generating Unit. PMax should not be confused as an emergency rating of the Generating Unit.

* * *

PNP Eligible Quantity

The maximum MW quantity of CRRs an LSE is eligible to nominate in the Priority Nomination Process of the CRR Allocation.

* * *

Point-to-Point CRR

A CRR Option or CRR Obligation with a single CRR Source to a single CRR Sink.

* * *

Priority Nomination Process (PNP)

The step in an annual CRR Allocation in years beyond CRR Year One through which CRR Holders re-nominate (1) Seasonal CRRs they were allocated in the prior year, (2) Long Term CRRs that are expiring, and (3) Existing Transmission Contracts and Converted Rights that are expiring.

* * *

Qualified OCALSE

An OCALSE which the CAISO has certified has met all the requirements for eligibility for CRR Allocation in accordance with Section 36.9 of this Appendix.

* * *

Real-Time Interchange Export Schedule

An agreement to transfer Energy from the CAISO Control Area to a interconnected Control Area at a Scheduling Point based on agreed-upon size (megawatts), start and end time, beginning and ending ramp times and rate, and type required for delivery and receipt of power and Energy between the source and sink Control Areas involved in the transaction.

* * *

Seasonal Available CRR Capacity

The upper limit of network capacity that will be used in the annual CRR Allocation and annual CRR Auction calculated by effectively reducing OTC for Transmission Ownership Rights as if all lines will be in service for the relevant year.

* * *

Sub-LAP

A CAISO defined subset of PNodes within a Default LAP.

* * *

Tier LT

The tier of the annual CRR Allocation process through which the CAISO allocates Long Term CRRs.

* * *

Verified CRR Source Quantity

The MW amount corresponding to a verified CRR Source and the LSE or OCALSE that submitted that verified CRR Source to the CAISO, as described in Section 36.8.3.4 of this Appendix.

* * *

PART H. CONGESTION REVENUE RIGHTS

36 Congestion Revenue Rights.

36.1 Overview of CRRs and Procurement of CRRs.

The CAISO distributes CRRs through an allocation and auction process as described in this Section 36. CRR Holders and Market Participants eligible to become CRR Holders can also buy, sell, or trade CRRs bilaterally as described in Section 36.7 of this Appendix.

36.2 Types of CRR Instruments.

CRRs can be CRR Obligations or CRR Options. Each CRR is fully specified by its type (CRR Obligation or CRR Option), its CRR Source(s), its CRR Sink(s), its MW quantity, and the Trading Hours for which it is valid. The CRR Source(s) and CRR Sink(s) determine the direction of the CRR, which is from CRR Source(s) to CRR Sink(s).

36.2.1 CRR Obligations.

A CRR Obligation entitles its holder to receive a CRR Payment if the Congestion in a given Trading Hour is in the same direction as the CRR Obligation, and requires the CRR Holder to pay a CRR Obligation charge if the Congestion in a given Trading Hour is in the opposite direction of the CRR. The CRR Payment or CRR Obligation charge is equal to the per-MWh cost of Congestion (which equals the MCC at the CRR Sink minus the MCC at the CRR Source) multiplied by the MW quantity of the CRR.

36.2.2 CRR Options.

A CRR Option entitles its CRR Holder to a CRR Payment if the Congestion is in the same direction as the CRR Option, but requires no CRR Obligation charge if the Congestion is in the opposite direction of the CRR. The CRR Payment is equal to the per-MWh cost of Congestion (which equals the MCC at the CRR Sink minus the MCC at the CRR Source, when this quantity is positive and zero otherwise) multiplied by the MW quantity of the CRR.

36.2.3 Point-to-Point CRRs.

A Point-to-Point CRR is a CRR Option or CRR Obligation defined from a single CRR Source to a single CRR Sink.

36.2.4 Multi-Point CRRs.

A Multi-Point CRR is a CRR Obligation defined by more than one CRR Source and/or more than one CRR Sink, plus a specified distribution of the total MW value of the CRR over the multiple CRR Sources and/or multiple CRR Sinks such that the total MW assigned to all CRR Sources equals the total MW assigned to all CRR Sinks equals the MW value of the CRR. For the allocation of CRRs under this Section 36, an LSE seeking to be allocated a Multi-Point CRR must specify a single CRR Sink in its nomination.

36.2.5 Monthly CRRs.

Monthly CRRs have a term of one month, are differentiated by time of use periods (on-peak and off-peak), and are available through the monthly CRR Allocation and CRR Auction processes in advance of each month.

36.2.6 Seasonal CRRs.

Seasonal CRRs have a term of three months, and are differentiated by the different time of use periods (on-peak and off-peak) for each day within a season. Seasonal CRRs are made available through the annual CRR Allocation and CRR Auction processes conducted each year prior to the year in which the Seasonal CRR applies.

36.2.7 Long Term CRRs.

Long Term CRRs have a term of ten years. Long Term CRRs are seasonal and are differentiated by the different time of use periods (on-peak and off-peak) for each day within a season. When Long Term CRRs are nominated and allocated they apply to the same season and time of use period for each year of the ten-year term and represent binding ten-year commitments by the CRR Holders that hold Long Term CRRs. Long Term CRRs are nominated and allocated to LSEs in Tier LT that is one tier in the sequence of tiers in the annual CRR Allocation process. Long Term CRRs are not available through the CRR Auction.

36.2.8 Full Funding of CRRs.

All CRRs will be fully funded; provided however, that full funding of CRRs will be suspended if a System Emergency as described in Section 7.7.4, an Uncontrollable Force as described in Section 14, or a

Participating TO's withdrawal of facilities or Entitlements from the CAISO Controlled Grid as described in Section 36.8.7 of this Appendix leaves the CAISO with inadequate revenues.

36.3 CRR Specifications.

36.3.1 Quantity.

CRRs are distributed and settled in no less than one-tenth of a MW denomination.

36.3.2 Term.

CRRs are Monthly CRRs, Seasonal CRRs, Long Term CRRs or Merchant Transmission CRRs. For CRR purposes, the applicable seasons are conventional calendar quarters as defined in the Business Practice Manual.

36.3.3 On-Peak and Off-Peak Specifications.

CRRs are defined either for on-peak or off-peak hours as specified by the CAISO in the applicable Business Practice Manuals consistent with the WECC standards at the time of the relevant CRR Allocation or CRR Auction.

36.4 FNM for CRR Allocation and CRR Auction.

When the CAISO conducts its CRR Allocation and CRR Auction, the CAISO shall use the most up-to-date DC FNM which is based on the AC FNM used in the Day-Ahead Market. The Seasonal Available CRR Capacity shall be based on the DC FNM, taking into consideration: (i) any long-term scheduled transmission Outages, (ii) OTC adjusted for any long-term scheduled derates, and (iii) a downward adjustment due to TOR as determined by the CAISO. The Monthly Available CRR Capacity shall be based on the DC FNM, taking into consideration: (i) any scheduled transmission Outages known at least thirty (30) days in advance of the start of that month, adjustments to compensate for the expected impact of Outages that are not required to be scheduled thirty (30) days in advance or are planned, and adjustments to restore Outages or derates that were applied for use in calculating Seasonal Available CRR Capacity but are not applicable for the current month; (ii) any new transmission facilities added to the CAISO Controlled Grid that were not part of the DC FNM used to determine the prior Seasonal Available CRR Capacity and that have already been placed in-service and energized at the time the

CAISO starts the applicable monthly process, (iii) OTC adjusted for any scheduled derates or Outages for that month, and (iv) a downward adjustment due to TOR as determined by the CAISO.

36.4.1 Transmission Capacity Available for CRR Allocation and CRR Auction.

With the exception of the Tier LT, the CAISO makes available seventy-five percent (75%) of Seasonal Available CRR Capacity for the annual CRR Allocation and CRR Auction processes, and one hundred percent (100%) of Monthly Available CRR Capacity for the monthly CRR Allocation and CRR Auction processes. The CAISO makes available sixty percent (60%) of Seasonal Available CRR Capacity in the Tier LT. Available capacity at Scheduling Points shall be determined in accordance with Section 36.8.4.2 of this Appendix for the purposes of CRR Allocation and CRR Auction of CRRs that have a CRR Source identified at a Scheduling Point. Before commencing with the annual or monthly CRR Allocation and CRR Auction processes, the CAISO may distribute Merchant Transmission CRRs and will model those as fixed injections and withdrawals on the DC FNM to be used in the allocation and auction. These fixed injections and withdrawals are not modified by the Simultaneous Feasibility Test. Similarly, before commencing the annual or monthly CRR Allocation and CRR Auction processes, the CAISO will model any previously allocated Long Term CRRs as fixed injections and withdrawals on the DC FNM to be used in the CRR Allocation and CRR Auction. These fixed injections and withdrawals are not modified by the Simultaneous Feasibility Test, which will ensure no degradation of previously allocated and outstanding Long Term CRRs due to the CRR Allocation and CRR Auction processes. Maintaining the feasibility of allocated Long Term CRRs over the length of their terms also is accomplished through the transmission planning process in Section 24.1.3.

36.4.2 Simultaneous Feasibility.

The annual and monthly CRR Allocation processes release CRRs to fulfill CRR nominations as fully as possible subject to a Simultaneous Feasibility Test. To the extent that nominations are not simultaneously feasible, the nominations are reduced in accordance with the CRR Allocation optimization formulation until simultaneous feasibility is achieved. The CRR Allocation optimization formulation, detailed in the Business Practice Manuals, reduces nominated CRRs based on effectiveness in relieving overloaded constraints in order to minimize the total MW volume reduction of nominations while achieving simultaneous feasibility. In the event that there are two or more identical nominations for a specific

combination of CRR Source and CRR Sink that affect an overloaded constraint, the CRR Allocation optimization formulation cannot distinguish these nominations based on effectiveness and, therefore, the CRR Allocation optimization formulation will award each such Candidate CRR Holder a pro rata share of the CRRs that can be awarded based on each Candidate CRR Holder's nominated MW amount. In addition to the adjustments in Section 36.4.1, the SFT for each CRR Allocation considers:

a. CRRs representing ETCs, Converted Rights and any TOR capacity that was not captured in the adjustments described in Section 36.4 of this Appendix, which the CAISO deems necessary to prevent the Congestion Settlement of ETCs, Converted Rights, and TORs from causing revenue inadequacy of allocated and auctioned CRRs;

b. In the case of the monthly CRR Allocation, the CRRs already released for that month in the annual CRR Allocation and Auction; and,

c. The CRRs allocated in previous CRR Allocation tiers as described in Sections 36.8.3.1 through 36.8.3.6 of this Appendix.

In the event that transmission Outages and derates modeled for the monthly CRR Allocation and CRR Auction render previously issued Seasonal CRRs infeasible, the CAISO will increase the transfer capacity on the overloaded facilities just enough to render all Seasonal CRRs issued for the month feasible without creating any additional capacity beyond what is needed for the feasibility of the Seasonal CRRs. The CAISO will announce these adjustments to the market prior to conducting the monthly CRR Allocation and CRR Auction so that Candidate CRR Holders can take these facts into consideration in preparing their nominations and bids.

36.5 Candidate CRR Holder and CRR Holder Requirements.

Any entity that holds or intends to hold CRRs must register and qualify with the CAISO and comply with the other terms of this Section, regardless of whether they acquire CRRs by CRR Allocation, CRR Auction, or the Secondary Registration System.

36.5.1 Creditworthiness Requirements.

All CRR Holders and Candidate CRR Holders must comply fully with all creditworthiness requirements as provided in Section 12 of the CAISO Tariff and Section 12.6 of this Appendix and as further developed in

the applicable Business Practice Manuals. The amount of available credit for participating in a CRR Auction cannot exceed the entity's Aggregate Credit Limit as provided in Section 12.

36.5.2 Required Training.

CRR Holders and Candidate CRR Holders must attend a training class at least once prior to participating in the CRR Allocations or CRR Auctions. The CAISO may update training requirements annually or on an as-needed basis. Unless granted a waiver by the CAISO, Candidate CRR Holders and CRR Holders shall at all times have in their employment a person that has attended the CAISO's CRR training class and shall notify the CAISO as soon as practicable of a change in such status.

36.6 [NOT USED]

36.7 Bilateral CRR Transactions.

36.7.1 Transfer of CRRs.

36.7.1.1 General Provisions of CRR Transfers.

A CRR Holder may sell or otherwise transfer CRRs in increments of at least a tenth of a MW. Sales or other such transfers must be for at least a full day term consistent with the on-peak or off-peak specification of the CRR. The transferee may be any entity that is a Candidate CRR Holder or a CRR Holder consistent with the CAISO Tariff and the applicable Business Practice Manuals. All CRRs that are so sold or otherwise transferred by the CRR Holder continue to be subject to the relevant terms and conditions set forth in the CAISO Tariff and the applicable Business Practice Manuals.

36.7.1.2 Specific Provisions for Transfer of Long Term CRRs.

A CRR Holder that holds Long Term CRRs may sell or transfer through the Secondary Registration System MW portions and temporal segments of a Long Term CRR corresponding to the current calendar year as well as the calendar year covered by the most recently completed annual CRR Allocation. For such sales or transfers the Long Term CRR will be subject to the same limits on granularity that apply to Seasonal CRRs and Monthly CRRs, as specified in Section 36.7.1 of this Appendix. A CRR Holder that holds Long Term CRRs may not transfer or sell through the Secondary Registration System any temporal segment of a Long Term CRR beyond the calendar year covered by the most recently completed annual CRR Allocation. For temporal segments beyond the year covered by the most recently completed annual

CRR Allocation, the CRR Holder to whom a Long Term CRR was originally allocated remains the holder of record of the entire Long Term CRR for CAISO Settlement purposes, unless and until such segments of the Long Term CRR or MW portion thereof are transferred to another LSE due to Load migration as described in Section 36.8.5 of this Appendix. Allocated Long Term CRRs represent binding ten-year commitments by a CRR Holder that holds Long Term CRRs and may not be terminated or otherwise modified by the CRR Holder prior to the end of the Long Term CRR's ten-year term.

36.7.2 Responsibility of the CAISO.

The CAISO provides Market Participants a Secondary Registration System to facilitate and track CRR bilateral transactions. The bulletin board of the Secondary Registration System enables any entity that wishes to purchase or sell CRRs to post that information.

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. 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 of the CAISO Tariff and Section 12.6 of this Appendix. 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 of this Appendix.

36.8 CRR Allocation.

The CAISO allocates CRRs to Load Serving Entities serving Load internal to CAISO Control Area, including MSS Operators as described in Section 36.10 of this Appendix, as well as Qualified OCALSEs. All CRRs allocated under the terms of this Section 36.8 will be CRR Obligations.

36.8.1 Structure of the CRR Allocation Process.

The CAISO conducts an annual CRR Allocation: (i) once a year for the entire year for Seasonal CRRs; and (ii) once a year for the ten-year term of Long Term CRRs. The annual CRR Allocation releases Seasonal CRRs and Long Term CRRs for four seasonal periods. The CAISO also conducts monthly CRR Allocations twelve times a year in advance of each month. Within each annual and monthly CRR Allocation process the CAISO performs distinct allocation processes for each on-peak and off-peak time of use specification. The CRR Allocation process for CRR Year One is a distinct process that differs from subsequent CRR Allocations as described in Sections 36.8.3.1 and 36.8.3.2 of this Appendix. Each CRR Allocation procedure is based on nominations to the CAISO by LSEs or Qualified OCALSEs eligible to receive CRRs. A timeline of the CRR Allocation and CRR Auction processes is contained in the BPMs.

36.8.2 Load Eligible for CRRs and Eligible CRR Sinks.

Any entity that wishes to participate in the CRR Allocation process must provide information that demonstrates that it has an obligation to serve load. An LSE's eligibility for allocation of CRRs is measured by the quantity of Load that it serves that is exposed to Congestion Charges for the use of the CAISO Controlled Grid as determined in Sections 36.8.2.1 and 36.8.2.2 of this Appendix. An OCALSE's eligibility for allocation of CRRs is also measured by the quantity of load that it serves that is exposed to Congestion Charges for the use of the CAISO Controlled Grid as determined in Section 36.9.3 of this Appendix. For LSEs, the information necessary may include, but is not limited to, Settlement Quality Meter Data or relevant documents filed with the California Energy Commission. For OCALSEs, the necessary information may include, but is not limited to, historical tagged Real-Time Interchange Export Schedules and historical load data reflecting the load they serve that is exposed to Congestion Charges for the use of the CAISO Controlled Grid. In addition, each such OCALSE shall support its data submission with a written sworn affidavit by an executive authorized to represent the OCALSE attesting to the accuracy of the data, and the CAISO will have the right to audit the raw data and calculations used to develop the submitted data set. An LSE serving internal Load is eligible for CRRs up to its Seasonal or

Monthly CRR Eligible Quantity, which is derived from its Seasonal or Monthly CRR Load Metric as described in Sections 36.8.2.1 and 36.8.2.2 of this Appendix, respectively. Seasonal and Monthly CRR Eligible Quantities for Qualified OCALSEs are determined as provided in Section 36.9.3 of this Appendix. These quantities are calculated for each LSE or Qualified OCALSE separately for each combination of season and time of use period for the annual CRR Allocation process, and for each time of use period for each monthly CRR Allocation process, and for each CRR Sink at which the eligible LSE serves Load or the Qualified OCALSE exports Energy from the CAISO Control Area. MSS eligibility for CRRs will account for net or gross MSS Settlement in accordance with Section 4.9.13.1 of this Appendix. If the MSS Operator elects net Settlement, LSEs for such MSS Load Operator shall submit CRR Sink nominations at the MSS LAP. If the MSS elects for gross Settlement, LSEs for such MSS Load shall submit CRRs Sink nominations at the applicable Default LAP. Load that is Pumped-Storage Hydro Units but is not Participating Load may be scheduled and settled at a PNode or Custom Load Aggregation Point and therefore LSEs for such Load shall submit CRR Sink nominations at the applicable PNode or Custom Load Aggregation Point. Load that is a Participating Load that is also aggregated is scheduled and settled at a Custom Load Aggregation Point that is customized specifically for such Load and, therefore, LSEs for such Participating Load shall submit CRR Sink nominations at the Custom Load Aggregation Point. Load that is Participating Load is scheduled and settled at an individual PNode, and therefore LSEs for such Load shall submit CRR Sink nominations at the applicable PNode. Load that is non-Participating Load, is not Pumped-Storage Hydro Units, and is not Load associated with ETCs, TORs, or MSS Operators that elect net Settlement, is scheduled and settled at the Default LAP. Therefore, LSEs for such Load shall submit CRR Sink nominations at their assigned Default LAP or Default LAPs if the Load they serve is located in more than one Default LAP. In tier 3 of the annual process and tier 2 of the monthly process, such LSEs may also submit CRR Sink nominations at a Sub-LAP of their assigned Default LAP. The CAISO will make available, prior to the beginning of the CRR Allocation process, a list of allowable CRR Sinks to be used in the allocation.

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. 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 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 subtracting from that LSE's Seasonal CRR Load Metric 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.

36.8.2.2 Monthly CRR Eligible Quantity.

Each month the CAISO uses the LSE's submitted monthly load forecast to calculate two load duration curves (one on-peak and one off-peak load duration curve for the applicable month) to form the basis for monthly allocations for each LAP in which the LSE serves Load. The Monthly CRR Load Metric is the MW level of Load that is exceeded only in 0.5% of the hours based on the LSE's submitted load forecast. The CAISO will calculate an LSE's Monthly CRR Eligible Quantity by subtracting from that LSE's Monthly CRR Load Metric the quantity of Load served by its TORs, ETCs, and Converted Rights.

36.8.3 CRR Allocation Process.

36.8.3.1 Annual CRR Allocation for CRR Year One.

The annual CRR Allocation process for CRR Year One consists of a sequence of four (4) tiers for each season and time of use period (on-peak and off-peak). Each tier will feature a SFT applied to the CRR nominations submitted by eligible LSEs or Qualified OCALSEs, the results of which are provided by the CAISO to the respective LSEs or Qualified OCALSEs prior to the LSEs or Qualified OCALSEs submitting their nominations to the next tier. Allocations of CRRs in each tier are considered final once they are provided by the CAISO to the respective LSEs or Qualified OCALSEs. After each tier, LSEs or Qualified OCALSEs will have an amount of time as specified in the Business Practice Manual after their receipt of the results of each tier to submit their nominations for the next tier, if there is one. The annual CRR Allocation allows LSEs or Qualified OCALSEs to submit nominations for Seasonal CRRs up to their Seasonal CRR Eligible Quantities for each season of the relevant year, each time of use period and each LAP, and nominations for Long Term CRRs up to fifty percent (50%) of their Adjusted Load Metric for

each season, time of use period and each LAP. The annual CRR Allocation for CRR Year One will be conducted in the following sequence of tiers:

36.8.3.1.1 Tier 1. In tier 1, LSEs or Qualified OCALSEs may nominate and the CAISO will allocate to the LSEs or Qualified OCALSEs Seasonal CRRs up to 50% of their Seasonal CRR Eligible Quantity for each season. An LSE can nominate Seasonal CRRs sourced at Trading Hubs in accordance with the LSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1 of this Appendix.

36.8.3.1.2 Tier 2. In tier 2, LSEs or Qualified OCALSEs may nominate and the CAISO will allocate to the LSEs or Qualified OCALSEs Seasonal CRRs up to 75% of their Seasonal CRR Eligible Quantity for each season minus the quantity of CRRs allocated to that LSE or Qualified OCALSEs in tier 1. An LSE can nominate Seasonal CRRs sourced at Trading Hubs in accordance with the LSE's verified CRR Sources. In running the SFT for Seasonal CRR nominations sourced at Trading Hubs the CAISO will disaggregate the nominations into Point-to-Point CRRs. In tier 2 an LSE with a verified Trading Hub CRR Source may nominate up to 75% of the Adjusted Verified CRR Source Quantity for that Trading Hub minus the total MW quantity of Point-to-Point CRRs the LSE was allocated in tier 1 as a result of its tier 1 nomination of CRRs sourced at that Trading Hub.

36.8.3.1.3 Tier LT. Tier LT will follow tier 2 for CRR Year One. In Tier LT, LSEs or Qualified OCALSEs may nominate Long Term CRRs from the Seasonal CRRs allocated in tiers 1 and 2, except that Point-to-Point CRRs awarded as disaggregated CRR nominations sources at a Trading Hub must be nominated as Trading Hub CRRs as described in this Section 36.8.3.1.3. The quantity of Seasonal CRRs that can be nominated as Long Term CRRs is limited to fifty percent (50%) of the eligible entity's Adjusted Load Metric. An LSE can nominate Seasonal CRRs sourced at a Trading Hub in Tier LT up to the total MW amount of the Point-to-Point CRRs the LSE was allocated in tiers 1 and 2 as a result of its tier 1 and 2 nominations of CRRs sourced at that Trading Hub. The cleared Point-to-Point CRRs from the tier 1 and tier 2 that resulted from disaggregated CRR nominations sourced at a Trading Hub may not be nominated as Point-to-Point CRRs in Tier LT in CRR Year One. Qualified OCALSEs may not nominate as a Long Term CRR a Seasonal CRR that has a Scheduling Point as a CRR Source. After receiving nominations for Long Term CRRs, the CAISO will run SFTs to ensure the feasibility of the nominated Long Term

CRRs for the remaining nine years of the ten-year term of the Long Term CRR. In running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1. The SFT run in Tier LT will test the feasibility of only the Long Term CRR nominations and will not include in the analysis those Seasonal CRRs allocated in tiers 1 and 2 that are not nominated as Long Term CRRs. The quantity of Long Term CRRs that can be allocated for any season and time of use period must be feasible for the entire ten-year term of the Long Term CRR. As a result of the Tier LT SFT runs, Long Term CRR nominations may not be fully allocated; however, such a result will not affect the CRR Year One validity of the Seasonal CRR allocated in tiers 1 and 2. The CAISO will inform the nominating entity of the results of the Tier LT SFTs before the deadline for submission of the tier 3 nominations. All allocated Long Term CRRs will be Point-to-Point CRRs.

36.8.3.1.4 Tier 3. In tier 3, LSEs or Qualified OCALSEs may nominate and the CAISO will allocate to the LSEs Seasonal CRRs up to 100% of their Seasonal CRR Eligible Quantity for each season minus the quantity of CRRs allocated to that LSE in tiers 1 and 2. In tier 3, Sub-LAPs will be eligible CRR Sinks provided that the Sub-LAP is within the nominating LSE's Default LAP. An LSE 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 of this Appendix. Qualified OCALSEs can only nominate CRRs from their verified CRR Sources.

36.8.3.2 **Monthly CRR Allocation for CRR Year One.**

The monthly CRR Allocation in CRR Year One shall consist of a sequence of two (2) tiers for each time of use period (on-peak and off-peak). The monthly CRR Allocation will distribute Monthly CRRs to each LSE up to one hundred percent (100%) of its Monthly CRR Eligible Quantity minus CRRs allocated to that LSE in the annual CRR Allocation for the relevant month and time of use period. The monthly CRR Allocation for CRR Year One will be conducted as follows:

a. Tier 1. In tier 1 of the monthly CRR Allocations, LSEs or Qualified OCALSEs may nominate and the CAISO will allocate to the LSEs or Qualified OCALSEs Monthly CRRs up to 50% of the difference between their Monthly CRR Eligible Quantities and the quantity of Seasonal CRRs and Long Term CRRs they were allocated that apply to that month. An LSE can nominate Monthly CRRs sourced at Trading Hubs in accordance with the LSE's verified CRR Sources. In running the SFT the CAISO shall

disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1 of this Appendix.

b. Tier 2. In tier 2 of the monthly CRR Allocations, LSEs or Qualified OCALSEs may nominate and the CAISO will allocate to the LSEs or Qualified OCALSEs Monthly CRRs up to 100% of the difference between their CRR Eligible Quantities and the quantity of Seasonal CRRs and Long Term CRRs they were allocated that apply to that month, minus the quantity of CRRs they were allocated in tier 1 of the CRR Year One monthly CRR Allocation. An LSE can nominate Monthly CRRs sourced at Trading Hubs in accordance with the LSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1 of this Appendix. In tier 2 of the monthly CRR Allocation, Sub-LAPs will be eligible CRR Sinks provided that the Sub-LAP is within the nominating LSE's Default LAP. Qualified OCALSEs can only nominate CRRs from their verified CRR Sources.

36.8.3.3 [NOT USED]

36.8.3.4 Source Verification.

In CRR Year One, nominations for tier 1 and tier 2 of the annual CRR Allocation and tier 1 of the monthly CRR Allocations must be source verified. The CAISO will make available, prior to the beginning of the allocation process, a list of allowable CRR Sources to be used in the allocation. An LSE must demonstrate that it could actually submit Bids, including Self-Schedules and Inter-SC Trades, for Energy from the locations to be nominated as CRR Sources to serve its Load either through ownership of, or contractual rights to receive Energy from, the relevant Generating Units, or a contract to take ownership of power at the relevant source such as a Trading Hub or a Scheduling Point. Source verification will use data for the period beginning January 1, 2006 and ending December 31, 2006 as the basis for verification. Such demonstrations shall be provided by the requesting LSE to the CAISO through the submission of a written sworn declaration by an executive employee authorized to represent the LSE and attest to the accuracy of the data demonstration. As necessary, the CAISO may request, and such LSE must produce in a timely manner, documents in support of such declaration. The provisions on source verification requirements based on legitimate need in Section 36.9.1 apply for Qualified OCALSEs. The Verified CRR Source Quantity associated with each verified CRR Source for a particular LSE or Qualified

OCALSE will be: (i) for an owned generation resource the PMax of the unit multiplied by the LSE's or Qualified OCALE's ownership share; (ii) for a contract with a generation resource, the hourly MWh of Energy specified in the contract averaged over all hours of the relevant time of use period, but no greater than the PMax of the unit; or (iii) for a contract that delivers Energy to a Trading Hub or Scheduling Point, the hourly MWh of energy specified in the contract for delivery from the supplier to the LSE or Qualified OCALE at the Trading Hub or Scheduling Point, averaged over all hours of the relevant time of use period. Energy contracts submitted by LSEs to demonstrate that the LSE can submit Bids, including Self-Schedules and Inter-SC Trades, for Energy from the nominated CRR Sources to serve its Load must be at least one month in duration. Nominations of CRRs whose CRR Source is a Scheduling Point must be source verified in accordance with Section 36.8.4.2. The CAISO will consider a contract that covers a portion of a season (but not less than one month) to be acceptable verification, with the adjustment described below, for the entire season for which a CRR is nominated. The CAISO will also consider a contract not less than one month in duration that covers portions of two consecutive months to be acceptable verification, with the adjustment described below, for both of the months that are partially covered. In such cases, for a contract that covers only a portion of the season or month for which the LSE or Qualified OCALE wishes to nominate source-verified CRRs, the CAISO will calculate an Adjusted Verified CRR Source Quantity, which equals the Verified CRR Source Quantity times the ratio of the number of days covered by the contract for a particular month or season to the total number of days in that month or season, consistent with the time of use period of the CRRs being nominated.

36.8.3.5 Annual CRR Allocation Beyond CRR Year One.

The annual CRR Allocation for years beyond CRR Year One consists of a sequence of four (4) tiers for each season and time of use period (on-peak and off-peak). Allocations of CRRs in each tier are considered final once they are provided by the CAISO to the respective LSEs or Qualified OCALEs. After each tier, LSEs or Qualified OCALEs will have an amount of time as specified in the Business Practice Manual after their receipt of the results of each tier to submit their nominations for the next tier, if there is one. The annual CRR Allocation will allow LSEs or Qualified OCALEs to submit nominations up to their Seasonal CRR Eligible Quantities minus the quantity of previously allocated Long Term CRRs for each season of the relevant year, each time of use period and each CRR Sink at which they serve Load.

Annual CRR Allocations for years beyond CRR Year One will be conducted in the following sequence of tiers:

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 year. In all annual CRR Allocations after CRR Year One, an LSE or Qualified OCALSEs may make PNP nominations 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 through retail Load migration as described in Section 36.8.5.1. In addition, an LSE's or Qualified OCALSE's nomination of any particular CRR Source-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 OCALSE was allocated in the previous annual CRR Allocation for the same season and time of use period, adjusted for net Load loss resulting from Load migration. An LSE or Qualified OCALSE may not nominate CRRs sourced at Trading Hubs in the PNP. CRRs whose CRR Sink is a Sub-LAP are not eligible for nomination in the PNP. PNP Eligible Quantities are not affected by secondary transfers of CRRs. That is: (i) an LSE or a Qualified OCALSE 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 OCALSE 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. The maximum quantity of CRRs that such an eligible entity may nominate in the PNP is fifty percent (50%) of the eligible entity's 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.

36.8.3.5.2 Tier LT. In Tier LT, eligible entities may nominate Long Term CRRs from any of the Seasonal CRRs allocated in the PNP so long as the amount of the nominated Long Term CRRs is less than or equal to fifty percent (50%) of the eligible entity's Adjusted Load Metric minus the quantity of previously allocated Long Term CRRs that are valid for the term of the CRRs being nominated. An LSE or a Qualified OCALSE may not nominate CRRs sourced at Trading Hubs in Tier LT. A Qualified OCALSE may not nominate as a Long Term CRR a Seasonal CRR where the CRR Source is a Scheduling Point.

After receiving nominations for Long Term CRRs, the CAISO will run SFTs to ensure the feasibility of the nominated Long Term CRRs for the remaining nine years of the ten-year term of the Long Term CRR. The SFT run in Tier LT will test the feasibility of only the Long Term CRR nominations and will not include in the analysis those Seasonal CRRs allocated in the PNP that were not nominated as Long Term CRRs. The quantity of Long Term CRRs that can be allocated for any season and time of use period must be feasible for the entire ten-year term of the Long Term CRR. As a result of the Tier LT SFT runs, Long Term CRR nominations may not be fully allocated; however, such a result will not affect the validity of: (i) the Long Term CRRs allocated in previous years, or (ii) the Seasonal CRRs allocated in the PNP. The CAISO will inform nominating eligible entities of the results of the Tier LT SFTs before the deadline for submission of the tier 2 nominations.

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 OCALSE up to two-thirds of its Seasonal CRR Eligible Quantity for each season, time of use period and CRR Sink, plus 50% of the net Load gained by the LSE through Load migration during the year, minus the quantity of: (i) CRRs allocated to that LSE or Qualified OCALSE in tier 1, and (ii) Long Term CRRs previously allocated to that eligible entity that are valid for the CRR term currently being allocated. An LSE 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 of this Appendix.

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 OCALSE up to 100% of its Seasonal CRR Eligible Quantity for each season, time of use period and LAP, minus the quantity of: (i) CRRs allocated to that LSE or Qualified OCALSE 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. 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 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 of this Appendix.

36.8.3.5 Alternatives for Renewal of Long Term CRRs and for the Transition of Expiring ETCs and Converted Rights to Long Term CRRs.

Eligible entities may, in the final year of a Long Term CRR, nominate the identical CRR Source, CRR Sink, and MW terms of the expiring Long Term CRR in the PNP conducted that year, subject to any applicable quantity limitations specified in this Section 36. An eligible entity with an Existing Transmission Contract or Converted Rights that expire by the start of the year for which the CRR Allocation process is conducted may participate in the PNP as if its Existing Transmission Contract or Converted Rights sources and sinks were previously allocated Seasonal CRRs, subject to any applicable quantity limitations specified in this Section 36. In either case, if Seasonal CRRs are awarded to an LSE or Qualified OCALSE in the PNP based on its nomination of its expiring rights, such entity may then nominate those Seasonal CRRs in Tier LT of the same year's annual CRR Allocation process, subject to any applicable quantity limitations specified in this Section 36. Alternatively, CRR Holders of expiring LT CRRs, expiring Existing Transmission Contracts or expiring Converted Rights may bypass the tier 1 Priority Nomination Process and nominate their expiring rights as Long Term CRRs in Tier LT one year prior to the year of expiration, subject to any applicable quantity limitations specified in this Section 36. This alternative allows the holder of the expiring rights to nominate Long Term CRRs in the first Tier LT SFT in which the capacity corresponding to the expiring rights becomes available for the full nine year period of the Tier LT SFT. For any entity who elects this alternative and obtains an allocated Long Term CRR, the length of the renewed Long Term CRR (or initial Long Term CRR in the case of expiring Existing Transmission Contracts or expiring Converted Rights) will be nine years, corresponding to the years included in the Tier LT SFT.

36.8.3.6 Monthly CRR Allocation Beyond CRR Year One.

The monthly CRR Allocation shall consist of a sequence of two (2) tiers of allocations for each time of use period (on-peak and off-peak). The monthly CRR Allocation will distribute Monthly CRRs and will allow LSEs and Qualified OCALSEs to nominate up to one hundred percent (100%) of their Monthly CRR Eligible Quantities minus the total of any Seasonal CRRs allocated in the annual CRR Allocation and minus any holdings of Long Term CRRs that are valid for the month and time of use of the CRRs being nominated.

a. Tier 1. In tier 1 of the monthly CRR Allocations, each LSE or Qualified OCALSE may nominate Monthly CRRs up to 50% of the difference between its Monthly CRR Eligible Quantity and the total of any Seasonal CRRs allocated in the annual CRR Allocation and any holdings of Long Term CRRs that are valid for the month and time of use of the CRRs being nominated. An LSE can nominate Monthly CRRs where the CRR Source is a Trading Hub in accordance with the LSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1 of this Appendix.

b. Tier 2. In tier 2 of the monthly CRR Allocations, each LSE or Qualified OCALSE may nominate Monthly CRRs up to 100% of the difference between its Monthly CRR Eligible Quantity and the total of any Seasonal CRRs allocated in the annual CRR Allocation and any holdings of Long Term CRRs that are valid for the month and time of use of the CRRs being nominated, minus the quantity of CRRs allocated to that LSE or Qualified OCALSE in tier 1 of the current monthly CRR Allocation. In tier 2 of the monthly CRR Allocation, Sub-LAPs will be eligible CRR Sinks, provided that the Sub-LAP is within the nominating LSE's Default LAP. An LSE can nominate Monthly CRRs sourced at Trading Hubs in accordance with the LSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in section 36.8.4.1 of this Appendix.

36.8.4 Eligible Sources for CRR Allocation.

LSEs or Qualified OCALSEs may nominate up to one hundred percent (100%) of their Adjusted Verified CRR Source Quantities for their Seasonal or Monthly CRRs in all relevant tiers except as provided in this Section. In the CRR Allocation processes for Seasonal CRRs, Monthly CRRs, and Long Term CRRs, sources of CRR nominations can be either PNodes (including Scheduling Points) or Trading Hubs. For tiers 1 and 2 of the annual CRR Allocation in CRR Year One, an LSE may nominate CRRs from each of

its verified CRR Sources in a quantity no greater than seventy-five (75) percent of the Adjusted Verified CRR Source Quantity corresponding to each CRR Source. For tiers 1, 2 and 3 of the annual CRR Allocation in CRR Year One, a Qualified OCALSE may nominate CRRs from each of its verified CRR Sources in a quantity no greater than seventy-five (75) percent of the Adjusted Verified CRR Source Quantity corresponding to each CRR Source. A Scheduling Point can be a CRR Source for the annual, monthly, and long term CRR Allocation to the extent the requirements of Section 36.8.4.2 of this Appendix are satisfied.

36.8.4.1 CRRs with Trading Hub Sources.

For purposes of the CRR Allocation processes the CAISO shall disaggregate CRR nominations with Trading Hub CRR Sources into Point-to-Point CRR nominations each of whose CRR Source is a Generating Unit PNode that is an element of the Trading Hub. In performing this disaggregation the MW quantity of each Point-to-Point CRR nomination will equal the MW quantity of the CRR nomination multiplied by the weighting factor of the corresponding Generating Unit PNode in the defined Trading Hub. The disaggregated, individual Point-to-Point CRRs will be used by the CAISO in conducting the SFTs for the nominated CRRs. In CRR years other than CRR Year One, any allocated Point-to-Point CRRs that are the result of Seasonal CRR nominations with Trading Hubs as CRR Sources can be nominated in the PNP tier and, if awarded in the PNP, may be nominated as Long Term CRRs. The allocated Point-to-Point CRRs that are Seasonal CRRs will be used to conduct the SFTs for Tier LT. Any Long Term CRRs allocated by the CAISO will be Point-to-Point CRRs.

36.8.4.2 Import CRRs.

LSEs may nominate CRRs whose CRR Source is a Scheduling Point in the annual, monthly, and long term CRR Allocation in accordance with this Section.

36.8.4.2.1 Scheduling Points as CRR Sources in CRR Year One.

In CRR Year One, in tiers 1 and 2 of the annual CRR Allocation process an LSE may nominate such CRRs to the extent that it can demonstrate to the CAISO that, for the verification period stated in Section 36.8.3.4 of this Appendix, it owned or was a party to a contract with a System Resource, and that it or the counter-party to the contract had procured appropriate transmission from the applicable transmission

provider outside the CAISO to the Scheduling Point. In addition, also in tiers 1 and 2 of the annual CRR Allocation in CRR Year One, all LSEs eligible to nominate CRRs under this Section 36.8 may nominate as CRR Sources, without any verification, shares of the residual import CRR capacity at each Scheduling Point that remains after the completion of the CRR Source verification process. Each LSE's share of the residual import CRR capacity will be calculated as follows. Starting with the total capacity at each Scheduling Point that is available in the DC FNM for the annual CRR Allocation and Auction process, the CAISO will calculate the residual amount of capacity that remains at each Scheduling Point after subtracting the capacity accounted for by those Scheduling Point CRR Sources submitted by LSEs for verification that have been verified. The CAISO will then set aside 50 percent of this residual amount at each Scheduling Point for the annual CRR Auction, and will allow LSEs to nominate pro rata shares of the other 50 percent in proportion to their Seasonal CRR Eligible Quantities. In each monthly CRR Allocation during CRR Year One, CRR Source verification will be required in tier 1 as in the annual CRR Allocation process. Following the verification process, the CAISO will calculate and set aside for the monthly CRR Auction 50 percent of the import capacity that remains at each Scheduling Point after accounting for the verified Scheduling Point CRR Source submissions to the monthly process and the annual CRR Allocation and Auction results for that month, and will allow LSEs to nominate in tier 1 Monthly CRRs with CRR Sources at each Scheduling Point in quantities up to their pro rata shares of the other 50 percent in proportion to their Monthly CRR Eligible Quantities.

36.8.4.2.2 Scheduling Points as CRR Sources Beyond CRR Year One.

In the annual CRR Allocation processes subsequent to CRR Year One, there will be no special provisions regarding CRR Sources at Scheduling Points in tiers 1 and 2. For tier 3 the CAISO will calculate and set aside for the annual CRR Auction 50 percent of the import capacity at each Scheduling Point that remains after the tier 1 and tier 2 CRR Allocations and after considering any previously allocated Long Term CRRs that are valid for that month as described in Section 36.4.1 of this Appendix. In the monthly CRR Allocation processes subsequent to CRR Year One there will be no special provisions regarding CRR Sources at Scheduling Points in tier 1. For tier 2 the CAISO will calculate and set aside for the monthly CRR Auction 50 percent of the import capacity that remains at each Scheduling Point after accounting for

the annual CRR Allocation and Auction results for that month, any previously allocated Long Term CRRs that are valid for that month, and the results of tier 1 of the monthly CRR Allocation.

36.8.5 Load Migration Between LSEs.

Load migration between LSEs will be reflected in the hourly Load data and load forecasts used by the CAISO to calculate the CRR Load Metrics and Seasonal and Monthly CRR Eligible Quantities for each LSE, in accordance with procedures set forth in the applicable BPM. When Load migration occurs during an annual CRR cycle, such migration will be reflected in appropriate adjustments to each affected LSE's Seasonal and Monthly CRR Eligible Quantities in subsequent annual and monthly CRR Allocations, as well as its PNP Eligible Quantities in the next annual CRR Allocation. LSEs with Seasonal CRRs that lose Load through Load migration must comply with Section 36.8.5.2 of this Appendix.

36.8.5.1 Adjustments Reflected in the Annual CRR Allocation Process Due To Load Migration.

An LSE who loses or gains net Load through Load migration in a given year will have its Seasonal CRR Eligible Quantities in the next annual CRR Allocation reduced or increased, respectively, in proportion to the net Load lost or gained through Load migration. In addition, an LSE that loses Load through Load migration in a given year will have its PNP Eligible Quantities reduced in proportion to the gross amount of Load lost through Load migration. The reduction in PNP Eligible Quantities will be applied as a constant percentage to all CRRs allocated to that LSE in the prior annual CRR Allocation. There is no increase in an LSE's PNP Eligible Quantities due to an increase in Load due to Load migration. Such an LSE may acquire additional CRRs for net Load gained in tiers 2 and 3 of the subsequent annual CRR Allocation. The CAISO will reserve CRRs in the annual PNP corresponding to the CRRs released by LSEs whose PNP Eligible Quantities were reduced, and will then release these CRRs for tiers 2 and 3. This mechanism will ensure, in the event that changes to the DC FNM prevent the full allocation of PNP Eligible Quantities, the CRRs nominated in the PNP undergo the same proportional reduction as CRRs released by the LSEs who lose Load due to Load migration, so as not to unfairly disadvantage those LSEs who gain Load through Load migration. The Load-gaining LSE will not be required to request the precise CRRs released by the relevant Load-losing LSE but will be able to nominate its preferred CRRs in tiers 2 and 3.

36.8.5.2 Transfers of Allocated CRRs to Reflect Load Migration.

LSEs that have been allocated Seasonal CRRs or Long Term CRRs and that lose Load through Load migration must transfer allocated Seasonal CRRs and Long Term CRRs in accordance with this Section

36.8.5.2. An LSE that receives shares of allocated CRRs due to Load migration must meet all requirements applicable to CRR Holders.

36.8.5.2.1 Mid-Year Adjustments in Seasonal CRRs.

If an LSE loses Load through Load migration to another LSE at any time between annual CRR Allocations, the Load-losing LSE must compensate the Load-gaining LSE in one of the following two manners: 1) using the SRS, the Load-losing LSE may transfer a percentage of each of the Seasonal CRR that it was allocated for the remainder of the annual CRR cycle and for both on-peak and off-peak periods to the Load-gaining LSE in a quantity proportionate to the percentage of its Load lost to the other LSE through Load migration; or 2) the LSE who loses Load through Load migration to another LSE may make cash payments to the relevant Load-gaining LSE in a value commensurate with the hourly CRR Payment stream that would have accrued to the CRRs transferred, based on the quantity of CRRs awarded to the Load-losing LSE.

36.8.5.2.2 Load Migration and Allocated Long Term CRRs.

An LSE that is a CRR Holder that holds a Long Term CRR and that loses Load to Load migration must transfer a proportionate share of each of its Long Term CRRs to the Load-gaining LSE, in a quantity proportionate to the percentage of its Load lost to the other LSE through Load migration. After the transfer of the Long Term CRR (or the proportionate share thereof) to the Load-gaining LSE, the Load-gaining LSE is the holder of record for the transferred Long Term CRR for CAISO Settlement purposes.

36.8.5.2.3 Load Migration That Occurs After Completion of the Annual Allocation Process.

If Load migration occurs after the annual CRR Allocation process has been completed for the following year, a CRR Holder that holds Long Term CRRs may transfer the following year's segment of the Long Term CRR using the options set forth in Section 36.8.5.2.1 of this Appendix. For all of the other remaining years of the Long Term CRR, the CRR Holder that holds Long Term CRRs may not use the

options set forth in Section 36.8.5.2.1 of this Appendix to transfer the Long Term CRR (or the proportionate portion thereof) to the Load-gaining LSE.

36.8.5.3 Load Migration Reflected in the Monthly CRR Allocation Process.

An LSE who loses or gains net Load through Load migration must reflect that loss or gain in the monthly Load forecasts it submits to the CAISO for determining its monthly CRR Eligible Quantities for future monthly CRR Allocations.

36.8.5.4 Adjustments for Load Growth.

LSEs who experience Load growth that is not due to Load migration will reflect such Load growth in the data submitted to the CAISO for determining Seasonal and Monthly CRR Eligible Quantities for the CRR Allocation processes.

36.8.6 Load Forecasts Used to Calculate CRR MW Eligibility.

The CAISO will work closely with appropriate state and Local Regulatory Authorities and agencies to ensure that historical Load data and load forecasts used to establish Seasonal and Monthly CRR Eligible Quantities are consistent with the data and forecasts used to establish resource adequacy requirements.

36.8.7 Long Term CRRs and Participating TO Withdrawals from the CAISO Controlled Grid.

In the event a Participating TO gives the required notice and withdraws facilities or Entitlements from the CAISO Controlled Grid, the CAISO will reconfigure Long Term CRRs as necessary to reflect the CAISO Controlled Grid after the withdrawal. After reconfiguration, the CAISO will run SFTs on the reconfigured Long Term CRRs and, if necessary, reduce some of the reconfigured Long Term CRRs to ensure their feasibility. If the CRR Source and CRR Sink for an allocated Long Term CRR both are located within a departing Participating TO Service Territory, the Long Term CRR would expire on the effective date of the Participating TO's withdrawal.

36.9 CRR Allocation to OCALSEs.

OCALSEs who wish to nominate and be allocated CRR Obligations in the same annual and monthly CRR Allocation processes described in Section 36.8 of this Appendix may do so subject to the provisions of this Section 36.9 and if such OCALSEs are qualified and registered as Candidate CRR Holders or CRR

Holders. An OCALSE may participate in the CRR Allocation processes and be allocated CRRs to the extent that: (1) such OCALSE makes a showing of legitimate need for the CRRs nominated as provided by Section 36.9.1 of this Appendix; (2) such OCALSE pre-pays the appropriate Wheeling Access Charge in the amount of MWs of CRRs nominated as provided in Section 36.9.2 of this Appendix; (3) the nominated CRRs clear the relevant SFTs; (4) the external load for which CRRs are nominated is not served through an ETC, TOR or Converted Rights which has been designated as eligible to receive the reversal of Congestion Charges; and (5) such OCALSE complies with the verification requirements in Section 36.9.4 of this Appendix. Such OCALSEs that participate in the CRR Allocation processes will be subject to the applicable rules governing the tiered structure of these processes. All CRRs allocated under the terms of this Section 36.9 will be CRR Obligations.

36.9.1 Showing of Legitimate Need.

An OCALSE must make a showing to the CAISO of legitimate need for the CRRs requested. The showing of legitimate need for OCALSEs will have different requirements depending on whether the generation source to be used to verify the CRR Source to be nominated is internal or external to the CAISO Control Area. For internal Generating Units to be used to verify the CRR Sources the determination of legitimate need will be based on demonstration by the OCALSE of an Energy contract from a Generating Unit that covers the time period of the CRRs nominated, or ownership of such Generating Unit. For such CRR Sources the showing of legitimate need must be made for each year that the OCALSE wants to nominate such CRRs in a timely manner prior to the start of the annual CRR Allocation process. For CRR Sources that will be verified based on an Energy contract from or ownership of a generating resource located outside of the CAISO Control Area, source verification rules in Section 36.8.3.4 of this Appendix will apply. For CRR Sources that will be verified based on generating resources located outside the CAISO Control Area, a Scheduling Point must be nominated as the corresponding CRR Source. Generating resources located outside of the CAISO Control Area to be used by the OCALSE to verify a Scheduling Point as a CRR Source must not be located within the OCALSE's own Control Area. Nominations by OCALSEs of Scheduling Points as CRR Sources shall be subject to the same verification and showing requirements as described in Section 36.8.4.2 of this Appendix. The Verified CRR Source Quantity and Adjusted Verified CRR Source Quantity corresponding to any CRR

Source nominated by an OCALSE will be calculated in accordance with Section 36.8.3.4 of this Appendix, with the modification that the Verified CRR Source Quantities and Adjusted Verified CRR Source Quantities corresponding to CRR Sources that are based on an internal Generating Unit and not a Scheduling Point will be calculated annually in conjunction with the OCALSE's annual showing of legitimate need. The annual legitimate need showing for all OCALSEs will include a showing that the OCALSE has firm transmission rights pursuant to the tariffs of intervening transmission providers between the CAISO Control Area and their designated end-users. Such demonstrations shall be provided by the requesting OCALSE to the CAISO through the submission of a written sworn declaration by an executive employee authorized to represent the OCALSE and attest to the accuracy of the data demonstration. As necessary, the CAISO may request, and such OCALSE must produce in a timely manner, documents in support of such declaration.

36.9.2 Prepayment of Wheeling Access Charges.

An OCALSE will be required to prepay relevant Wheeling Access Charges for the term of the CRR it intends to nominate in order to participate in the CRR Allocation processes and be allocated CRRs. For each MW of CRR nominated the nominating OCALSE must prepay one MW of the relevant Wheeling Access Charge, which equals the per-MWh WAC that is expected at the time the CRR Allocation process is conducted to be applicable for the period of the CRR nominated, times the number of hours comprising the period of the CRR nominated. An OCALSE deemed creditworthy pursuant to the requirements of Section 12 may elect to prepay the determined WAC responsibility on a monthly basis for the Seasonal CRRs that they seek to be allocated, provided that such OCALSE has demonstrated a commitment to pay for the entire term of the CRRs sought by submitting to the CAISO a written sworn statement by an executive that can bind the entity. Allocated CRRs represent binding commitments by a CRR Holder that holds the CRRs and may not be terminated or otherwise modified by the CRR Holder prior to the end of the CRR's term. An OCALSE choosing to pay on a monthly basis shall make its prepayment for the first month of the applicable term prior to submitting nominations in the annual CRR Allocation. Monthly prepayments for subsequent months of the applicable CRR term of allocated Seasonal CRRs or for participation in a monthly CRR Allocation shall be made prior to the start of the monthly CRR Allocation process for the applicable month. To the extent that an OCALSE prepays a quantity of the WAC and is

not allocated the full amount of CRRs nominated, WAC prepayment for CRRs not allocated will be refunded by the CAISO within a reasonable time following the completion of the relevant CRR Allocation process.

36.9.2.1 Prepayment of Wheeling Access Charges for Long Term CRRs.

An OCALSE will be required to prepay for the full ten year term of the CRR to be nominated as a LT CRR the relevant Wheeling Access Charges in order to participate in the CRR Allocation process to be allocated such LT CRRs. An OCALSE deemed creditworthy pursuant to the requirements of Section 12 may elect to prepay its determined WAC responsibility on an annual basis, provided that such OCALSE has demonstrated a commitment to pay for the entire term of the LT CRRs sought by submitting to the CAISO a written sworn statement by an executive that can bind the entity. An OCALSE choosing to pay such WAC obligation on an annual basis shall make its prepayment each year at the beginning of the annual CRR Allocation process for the following year.

36.9.3 CRR Eligible Quantities.

The CAISO will calculate the Seasonal and Monthly CRR Eligible Quantities for OCALSEs as described in Section 36.8.2 of this Appendix with the following modifications. The OCALSE must submit two sets of hourly data from which the CAISO will construct load duration curves for determining the Seasonal and Monthly CRR Eligible Quantities. One set of hourly data must reflect the OCALSE's historical hourly exports at the Scheduling Point that is the CRR Sink of the nominated CRRs. The historical hourly exports shall be based on the tagged Real-Time Interchange Export Schedules for the OCALSE. An OCALSE that wishes to nominate multiple Scheduling Points as CRR Sinks in the CRR Allocation process will have distinct CRR Eligible Quantities for each nominated Scheduling Point, and prior to each annual CRR Allocation process must submit historical hourly export data at each such Scheduling Point from which the CAISO will calculate the associated CRR Eligible Quantities. The second set of hourly data must reflect the prior year's hourly metered load for the end-use customers the OCALSE served outside the CAISO Control Area that were exposed to Congestion Charges for use of the CAISO Controlled Grid. The OCALSE's Seasonal and Monthly CRR Eligible Quantities will be based on the lesser of (1) the total historical hourly export data for all Scheduling Points submitted as CRR Sinks, and

(2) the hourly metered load for the external end-use customers served by the OCALSE that were exposed to CAISO Congestion Charges. An OCALSE also must demonstrate that it has firm transmission rights pursuant to the tariffs of intervening transmission providers from its Scheduling Point sink to the end-use customers in the OCALSE's Control Area. The OCALSE shall support its data submission and the demonstration of transmission rights to its end-use customers with a sworn affidavit by an executive employee authorized to represent the OCALSE and attest the accuracy of the data and demonstration. As necessary, the CAISO may request, and such OCALSE must produce in a timely manner, the raw data and calculations used to develop the submitted data set and the demonstration of transmission rights to its end-use customers.

36.9.4 Eligible CRR Sources and Sinks.

Eligible CRR Sources will be the PNodes of the Generating Units or Scheduling Points for which the OCALSE has made a legitimate need showing as described above in Section 36.9.1 of this Appendix.

Eligible CRR Sinks will be the Scheduling Points for which the CAISO has established Seasonal and Monthly CRR Eligible Quantities as described in Section 36.9.3 of this Appendix. An OCALSE nominating CRRs having CRR Sources internal to the CAISO Control Area will be limited to seventy-five percent (75%) of each of its corresponding Adjusted Verified CRR Source Quantities in all tiers of the annual CRR Allocation process in CRR Year One and in subsequent years. An OCALSE nominating CRRs having CRR Sources external to the CAISO Control Area will be limited to seventy-five percent (75%) of each of its corresponding Adjusted Verified CRR Source Quantities in all tiers of the annual CRR Allocation process in CRR Year One. In CRR years subsequent to CRR Year One, the OCALSE may renew previously allocated CRRs having external CRR Sources, subject to the applicable quantity limitations and other requirements specified in this Section 36.

36.9.5 Priority Nomination Process.

CRRs allocated pursuant to this Section 36.9 shall be eligible for nomination in the Priority Nomination Process to the extent that the requirements of this Section 36.9 are met at the time of the relevant CRR Allocation.

36.10 CRR Allocation to Metered Subsystems.

An MSS Operator that elects gross Settlement may participate in the CRR Allocation processes and be allocated CRR Obligations. An MSS Operator that elects net Settlement may participate in the CRR Allocation processes and be allocated CRRs, except that its Seasonal and Monthly CRR Eligible Quantities will reflect its net Load and its allocated CRRs will use MSS-LAPs as CRR Sinks. The MSS Operator will be required to submit to the CAISO the appropriate hourly historical net Load data and net Load forecast data from which the CAISO will construct net Load duration curves to determine the Seasonal and Monthly CRR Eligible Quantities.

36.11 CRR Allocation to Merchant Transmission Facilities.

Project Sponsors of Merchant Transmission Facilities who turn such facilities over to CAISO Operational Control and do not recover the cost of the transmission investment through the CAISO's Access Charge or WAC or other regulatory cost recovery mechanism may be allocated, at the Project Sponsor's election, either CRR Options or Obligations that reflect the contribution of the facility to grid transfer capacity as determined below.

36.11.1 Eligibility for Merchant Transmission CRRs.

The Project Sponsor of a Merchant Transmission Facility shall be entitled to receive Merchant Transmission CRRs as determined in accordance with this Section 36.11. A Merchant Transmission CRR allocated through this process is effective for thirty (30) years or for the pre-specified intended life of the Merchant Transmission Facility, whichever is less. Merchant Transmission CRRs represent binding commitments for thirty (30) years or for the pre-specified intended life of the Merchant Transmission Facility, whichever is less. The binding commitment by a CRR Holder that holds Merchant Transmission CRRs may not be terminated or otherwise modified by the CRR Holder prior to the end of the term of the Merchant Transmission CRR.

36.11.2 Procedure for Allocating Merchant Transmission CRRs.

No less than forty-five (45) days prior to the in-service date of a Merchant Transmission Facility, the Project Sponsor of the facility will inform the CAISO of the in-service date of the facility and that the Project Sponsor will be requesting Merchant Transmission CRRs associated with the Merchant Transmission Facility. The CAISO will complete the Merchant CRR Allocation after the in-service date of

the facility and will allocate Merchant Transmission CRRs whose payment stream will be retroactive back to the in-service date.

36.11.3 Determination of Merchant Transmission CRRs to be Allocated to a Project Sponsor of a Merchant Transmission Facility.

36.11.3.1 Nominations of Merchant Transmission CRRs.

The Project Sponsor of a Merchant Transmission Facility must submit nominations for Merchant Transmission CRRs at least twenty-one (21) days prior to the in-service date of the facility. The Project Sponsor may nominate up to five individual, Point-to-Point CRRs for each of the two on-peak and off-peak time of use periods. Each of the individual, point-to-point nominations must specify: (i) a single CRR Source location; (ii) a single CRR Sink location, (iii) a MW quantity; (iv) a time of use period (on-peak or off-peak); and (v) a CRR type, either CRR Options or CRR Obligations.

36.11.3.2 Methodology to Determine Merchant Transmission CRRs.

The CAISO shall determine the incremental Merchant Transmission CRRs associated with a Merchant Transmission Facility pursuant to this Section 36.11.3.2. The determination will include an assessment of the simultaneous feasibility of the incremental Merchant Transmission CRRs and all other outstanding CRRs. The CAISO will determine the feasible incremental Merchant Transmission CRRs using a three-step process.

36.11.3.2.1 Step One: the Capability of the Existing Transmission System.

In step one the CAISO will determine the base CRR capability of the system using a Simultaneous Feasibility Test that incorporates as Fixed CRRs all existing encumbrances through the end of the CRR year for which the annual CRR Allocation and Auction process has already been conducted, including encumbrances for the month covered by the most recently conducted monthly CRR Allocation and Auction process. This analysis will determine the extent to which the nominated Merchant Transmission CRRs are feasible on the existing transmission system absent the Merchant Transmission Facility. As a result of this analysis, the CAISO will create temporary test CRR Options to reserve grid capacity that the Project Sponsor of the Merchant Transmission Facility is not eligible to receive. The temporary test CRR Options will have the same CRR Source and CRR Sink pairs as the Merchant Transmission CRR nominations submitted by the Project Sponsor.

36.11.3.2.2 Step Two: Mitigation of Impacts on Existing Encumbrances.

In the second step, the CAISO will add the proposed Merchant Transmission Facility to the DC FNM and run a SFT using the Fixed CRRs. The second step will ensure that the addition of a Merchant Transmission Facility does not negatively impact any existing encumbrances through the end of the CRR year for which the annual CRR Allocation and Auction process for Annual CRRs has already been conducted, including encumbrances for the month covered by the most recently conducted monthly CRR Allocation and Auction process. For any impacts identified in this step the Project Sponsor of the Merchant Transmission Facility will be required to mitigate the impacts for the same period. The mitigation can include having the Project Sponsor of the Merchant Transmission Facility hold counterflow CRRs that maintain the feasibility of the existing encumbrances over the same period.

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. For each time of use period, the CAISO will perform a multi-period SFT that simultaneously evaluates two sets of grid conditions. The first set of grid conditions includes all existing encumbrances for the month covered by the most recently conducted CRR Allocation and Auction process 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 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.

36.12 [NOT USED]

36.13 CRR Auction.

The CAISO shall conduct CRR Auctions on an annual and monthly basis subsequent to each annual and monthly CRR Allocation process. Candidate CRR Holders may bid to purchase and may acquire CRR

Obligations through the CAISO's annual and monthly CRR Auctions in accordance with the provisions of this Section 36.13. CRR Auction results shall be settled as provided in Section 11.2.4.3 of this Appendix.

36.13.1 Scope of the CRR Auctions.

The CAISO will conduct a CRR Auction corresponding to and subsequent to the completion of each CRR Allocation process, and prior to the start of the period to which the auctioned CRRs will apply. Each CRR Auction will release CRRs having the same seasons, months and time of use specifications as the CRRs released in the corresponding CRR Allocation. Each CRR Auction will utilize the same DC FNM that was utilized in the corresponding CRR Allocation. For each CRR Auction, the CRRs allocated in the corresponding CRR Allocation will be modeled as fixed injections and withdrawals on the DC FNM and will not be adjusted by the SFT in the CRR Auction process. Thus the CRR Auction will release only those CRRs that are feasible given the results of the corresponding CRR Allocation. CRRs released in a CRR Auction will be indistinguishable from CRRs released in the corresponding CRR Allocation for purposes of settlement and secondary trading. The following additional provisions apply. First, participants in the CRR Auctions will have more choices regarding CRR Sources and CRR Sinks than are eligible for nomination in the CRR Allocations, as described in Section 36.13.5 of this Appendix. Second, to the extent a Market Participant receives CRRs in both a CRR Allocation and the corresponding CRR Auction, the CRRs obtained in the CRR Auction will not be eligible for nomination in the PNP. Third, in CRR Year One the CRR Auction cannot be used by CRR Holders to offer for sale CRRs they acquired in a prior CRR Allocation, CRR Auction or through the Secondary Registration System. In the annual and monthly CRR Auction processes for years following CRR Year One, CRR Holders may offer for sale any CRRs held by such holders, subject to the limitations on sale and transfer of Long Term CRRs specified in Section 36.7.1.2 of this Appendix. Merchant Transmission CRRs that are CRR Options may be offered for sale in the annual and monthly CRR Auctions for years following CRR Year One, subject to the same temporal limitations that apply to Long Term CRRs as specified in Section 36.7.1.2 of this Appendix.

36.13.2 Responsibilities of the CAISO Prior to Each CRR Auction.

The CAISO shall publish on the CAISO Website a notice of upcoming CRR Auctions at least seven (7) days prior to the CRR Auction. The CAISO will also provide additional information needed by CRR Auction participants in accordance with the provisions of Section 6.5.1 of this Appendix.

36.13.3 CRR Holder Creditworthiness.

All Market Participants are eligible to acquire CRRs by participating in the CRR Auction, provided that the Market Participant has met all the CRR Holder requirements described in Section 36.5, the creditworthiness provisions in Section 12 of the CAISO Tariff and Section 12.6 of this Appendix and the relevant Business Practice Manual.

36.13.4 Bids in the CRR Auctions.

Bids to purchase CRRs shall be submitted in accordance with the requirements set out in this Section 36.13.4 and as further specified in the applicable Business Practice Manuals. Once submitted to the CAISO, CRR bids may not be cancelled or rescinded by the Market Participant after the CRR Auction is closed. Market Participants may bid for Point-to-Point CRRs and Multi-Point CRRs. Each bid for a Point-to-Point CRR shall specify:

- _____ a) The associated month or season and time of use period;
- _____ b) The associated CRR Source and CRR Sink;
- _____ c) A monotonically non-increasing piecewise linear bid curve in quantities (denominated in tenths of MW) and prices (\$/MW).

Each bid for a Multi-Point CRR shall specify:

- d) The associated month or season and time of use period;
- e) The associated CRR Sources and CRR Sinks;
- f) For each CRR Source, a monotonically non-decreasing piecewise linear bid curve in quantities (denominated in tenths of MW) and prices (\$/MW).
- g) For each CRR Sink, a monotonically non-increasing piecewise linear bid curve in quantities (denominated in tenths of MW) and prices (\$/MW).

Bid prices in all CRR bids may be negative.

36.13.5 Eligible Sources and Sinks for CRR Auction.

Allowable CRR Sources for CRRs acquired in the CRR Auction will be PNodes, Scheduling Points, Trading Hubs, LAPs, MSS-LAPs and Sub-LAPs. Allowable CRR Sinks for CRRs acquired in the CRR Auction will be PNodes, Scheduling Points, Trading Hubs, LAPs, MSS-LAPs and Sub-LAPs.

36.13.6 Clearing of the CRR Auction.

The SFT used to clear the CRR Auction will utilize the same DC FNM and optimization algorithm as the corresponding CRR Allocation, except that nominations to the CRR Auction will have associated price-quantity bid curves. The CRR Auction SFT will use the bid prices in determining which CRRs to award when not all nominations are simultaneously feasible, will select the set of simultaneously feasible CRRs with the highest total auction value as determined by the CRR bids, and will calculate nodal prices at each PNode of the DC FNM. In the event that there are two or more identical bids for a specific combination of CRR Source and CRR Sink that affect an overloaded constraint, the CRR Auction optimization cannot distinguish these bids based on either effectiveness or price and therefore the CRR Auction optimization will award each CRR bidder a pro rata share of the CRRs that can be awarded based on the bid MW amounts. Based on the nodal prices calculated by the CRR Auction SFT, the CRR Market Clearing Price per MW for a specific CRR will equal the nodal price at the CRR Sink minus the nodal price at the CRR Source. For a Multi-Point CRR the CRR Market Clearing Price will equal the sum over all relevant CRR Sinks of the nodal price at each CRR Sink times that CRR Sink's share of the total MW of the CRR, minus the sum over all relevant CRR Sources of the nodal price at each CRR Source times that CRR Source's share of the total MW of the CRR Market Participants shall pay the associated CRR Market Clearing Prices for all CRRs bought through the CRR Auction.

36.13.7 Announcement of CRR Auction Results.

Within five (5) Business Days after the close of a CRR Auction, the CAISO shall post the results. The results shall include but are not limited to the MW quantity, the CRR Source and CRR Sink for each CRR awarded, the nodal prices calculated by the CRR Auction SFT, and the parties to whom the CRRs were awarded. The CAISO shall not disclose prices specified in any CRR bid.

* * *

PART I. MISCELLANEOUS SECTIONS

11.2.4.3 Payments and Charges for Monthly and Annual Auctions.

The CAISO shall charge CRR Holders for the market clearing price for CRRs obtained through the clearing of the CRR Auction as described in Section 36.13.6 of this Appendix. To the extent the CRR Holder purchases a CRR through a CRR Auction that has a negative value, the CAISO shall pay the CRR Holder for taking the applicable CRR. The CAISO shall net all revenue received and payments made through this process and shall add the net remaining seasonal and monthly CRR Auction revenue amounts (either negative or positive amounts) to the CRR Balancing Account for the appropriate month. CRR Auction revenues for each season are allocated uniformly across the three monthly accounts comprising each season.

24.7.3 Provided that the CAISO has Operational Control of the Merchant Transmission Facility, a Project Sponsor that does not recover the investment cost under a FERC-approved rate through the Access Charge or a reimbursement or direct payment from a Participating TO shall be entitled to receive Merchant CRRs as provided in Section 36.11 of this Appendix. The full amount of capacity added to the system by such transmission upgrades or additions will be as determined through the regional reliability council process of the Western Electricity Coordinating Council or its successor. Pursuant to its Project Sponsor status as specified in Section 4.3.1.3, consistent with FERC's findings in Docket Nos. EL04-133-001, ER04-1198-000, and ER04-1198-001, issued on May 16, 2006 (115 FERC ¶ 61,178), Western Path 15 shall receive compensation associated with transmission usage rights modeled for Western Path 15. In the event that Western Path 15 has an approved rate schedule that returns excess revenue from any compensation obtained from the CAISO associated with the transmission usage rights for Western Path 15, such revenue shall be returned to the CAISO through a procedure established by the CAISO and the Western Area Power Administration for that purpose.

* * *

ATTACHMENT C

Blacklines to MRTU Tariff - Informational

Congestion Revenue Rights Amendment Filing

6.5.1.1 Market Participants With Non-Disclosure Agreements.

6.5.1.1.1 Annually, the CAISO shall provide information that will include, but is not limited to, the following:

- (a) CRR Full Network Model;
- (b) Constraints and interface definitions; ~~and~~
- (c) Load Distribution Factors for each CRR Allocation and CRR Auction that are published prior to the CRR Allocation and CCR Auction-; ~~and~~
- (d) Nominations and/or parameters to be used for modeling in each annual CRR Allocation and CRR Auction processes: Transmission Ownership Rights, Existing Contracts and Converted Rights expected usage, and Merchant Transmission CRRs.

6.5.1.1.2 Monthly, the CAISO shall provide information that will include, but is not limited to, the following:

- (a) CRR Full Network Model;
- (b) Constraints and interface definitions; ~~and~~
- (c) Load Distribution Factors for each CRR Allocation and CRR Auction that are published prior to the CRR Allocation and CRR Auction-; ~~and~~
- (d) Nominations and/or parameters to be used for modeling in each monthly CRR Allocation and CRR Auction processes: Transmission Ownership Rights, Existing Contracts and Converted Rights expected usage, and Merchant Transmission CRRs.

* * *

11.2.4.3 Payments and Charges for Monthly and Annual Auctions.

The CAISO shall charge CRR Holders for the market clearing price for CRRs obtained through the clearing of the CRR Auction as described in Section 36.13.6 of this Appendix. To the extent the CRR Holder purchases a CRR through a CRR Auction that has a negative value, the CAISO shall pay the CRR Holder for taking the applicable CRR. The CAISO shall net all revenue received and payments made through this process and shall add the net remaining seasonal and monthly CRR Auction revenue amounts (either negative or positive amounts) to the CRR Balancing Account for the appropriate month. CRR Auction revenues for each season are allocated uniformly across the three monthly accounts comprising each season.

* * *

24.7.3 Provided that the CAISO has Operational Control of the Merchant Transmission Facility upgrade or addition, a Project Sponsor that does not recover the investment cost under a FERC-approved rate through the Access Charge or a reimbursement or direct payment from a Participating TO shall be entitled to receive Merchant CRRs as provided in Section 36.11 of this Appendix. The full amount of capacity added to the system by such transmission upgrades or additions will be as determined through the regional reliability council process of the Western Electricity Coordinating Council or its successor. Pursuant to its Project Sponsor status as specified in Section 4.3.1.3, consistent with FERC's findings in Docket Nos. EL04-133-001, ER04-1198-000, and ER04-1198-001, issued on May 16, 2006 (115 FERC ¶ 61,178), Western Path 15 shall receive compensation associated with transmission usage rights modeled for Western Path 15. In the event that Western Path 15 has an approved rate schedule that returns excess revenue from any compensation obtained from the CAISO associated with the transmission usage rights for Western Path 15, such revenue shall be returned to the CAISO through a procedure established by the CAISO and the Western Area Power Administration for that purpose.~~a compensation package based on a negotiation between the Project Sponsor, CAISO and the relevant Participating Transmission Owner. The compensation for the Project Sponsor shall be commensurate with the amount of additional transmission capacity that results from the upgrade determined by~~

~~subtracting the rating of the transmission facility before the upgrade or addition from the new rating for the upgraded or additional transmission facility. The full amount of capacity added to the system will be as determined through the regional reliability council process of the Western Electricity Coordinating Council or its successor. If the parties agree to a compensation package, the CAISO will provide notice of agreement on the CAISO Website. The CAISO will file a proposed compensation package with the Commission.~~

* * *

36 Congestion Revenue Rights.

36.1 Overview of CRRs and Procurement of CRRs.

The CAISO distributes CRRs through an allocation and auction process as described in this Section 36. CRR Holders and Market Participants eligible to become CRR Holders can also buy, sell, or trade CRRs bilaterally as described in Section 36.7 of this Appendix. ~~CRRs are Day Ahead instruments and provide their holders with a hedge against Congestion Charges from the Day Ahead Market and not against Congestion Charges associated with HASP Intertie LMPs or Real Time LMPs.~~

36.2 Types of CRR Instruments.

CRRs can be CRR Obligations or CRR Options. Each CRR is fully specified by its type (CRR Obligation or CRR Option), its CRR Source(s), its CRR Sink(s), its MW quantity, and the Trading Hours for which it is valid. The CRR Source(s) and CRR Sink(s) determine the direction of the CRR, which is from CRR Source(s) to CRR Sink(s).

36.2.1 CRR Obligations.

A CRR Obligation entitles its holder to receive a CRR Payment if the Congestion in a given Trading Hour is in the same direction as the CRR Obligation, and requires the CRR Holder to pay a CRR Obligation ~~C~~harge if the Congestion in a given Trading Hour is in the opposite direction of the CRR. The CRR Payment or CRR Obligation ~~C~~harge is equal to the per-MWh cost of Congestion (which equals the MCC at the CRR Sink minus the MCC at the CRR Source) multiplied by the MW quantity of the CRR. ~~CRR Obligations are settled pursuant to Section 11.2.4.2.2.~~

36.2.2 CRR Options.

A CRR Option entitles its CRR Holder to a CRR Payment if the Congestion is in the same direction as the CRR Option, but requires no CRR Obligation Charge if the Congestion is in the opposite direction of the CRR. The CRR Payment is equal to the per-MWh cost of Congestion (which equals the MCC at the CRR Sink minus the MCC at the CRR Source, when this quantity is positive and zero otherwise) multiplied by the MW quantity of the CRR. ~~CRR Options are settled pursuant to Section 11.2.4.2.1.~~

36.2.3 Point-to-Point CRRs.

A Point-to-Point CRR is a CRR Option or CRR Obligation defined from a single CRR Source to a single CRR Sink.

36.2.4 Multi-Point CRRs.

A Multi-Point CRR ("~~MPT-CRR~~") is a CRR Obligation defined by more than one CRR Source and/or more than one CRR Sink, plus a specified distribution of the total MW value of the CRR over the multiple CRR Sources and/or multiple CRR Sinks such that the total MW assigned to all CRR Sources equals the total MW assigned to all CRR Sinks equals the MW value of the CRR. For the allocation of CRRs under this Section 36, an LSE seeking to be allocated a Multi-Point CRR must specify a single CRR Sink in its nomination.

36.2.5 Monthly CRRs.

Monthly CRRs have a term of one month, are differentiated by time of use periods (on-peak and off-peak), and are available through the monthly CRR Allocation and CRR Auction processes in advance of each month.

36.2.6 Seasonal CRRs.

Seasonal CRRs have a term of three months, and are differentiated by the different time of use periods (on-peak and off-peak) for each day within a season. Seasonal CRRs are made available through the annual CRR Allocation and CRR Auction processes conducted each year prior to the year in which the Seasonal CRR applies.

36.2.7 Long Term CRRs.

Long Term CRRs have a term of ten years. Long Term CRRs are seasonal and are differentiated by the different time of use periods (on-peak and off-peak) for each day within a season. When Long Term

CRRs are nominated and allocated they apply to the same season and time_of_use period for each year of the ten-year term and represent binding ten-year commitments by the CRR Holders that hold Long Term CRRs. Long Term CRRs are nominated and allocated to LSEs in Tier LT that is one tier in the sequence of tiers in the annual CRR Allocation process. Long Term CRRs are not available through the CRR Auction.

36.2.8 Full Funding of CRRs.

~~As set forth in Section 11.2.4, a~~All CRRs will be fully funded; provided however, that full funding of CRRs will be suspended if a System Emergency as described in Section 7.7.4, an Uncontrollable Force as described in Section 14, or a Participating TO's withdrawal of facilities or Entitlements from the CAISO Controlled Grid as described in Section 36.8.7 of this Appendix leaves the CAISO with inadequate revenues.

36.3 CRR Specifications.

36.3.1 Quantity.

CRRs are distributed and settled in no less than one-tenth of a MW denomination.

36.3.2 Term.

CRRs are Monthly CRRs, Seasonal CRRs, Long Term CRRs or Merchant Transmission CRRs ~~allocated to sponsors of merchant transmission as specified in Section 36.11~~. For CRR purposes, the applicable seasons are conventional calendar quarters as defined in the Business Practice Manual.

36.3.3 On-Peak and Off-Peak Specifications.

CRRs are defined either for on-peak or off-peak hours as specified by the CAISO in the applicable Business Practice Manuals consistent with the WECC standards at the time of the relevant CRR Allocation or CRR Auction.

36.4 FNM for CRR Allocation and CRR Auction Available CRR Capacity.

When the CAISO conducts its CRR Allocation and CRR Auction, the CAISO shall use the most up-to-date DC FNM which is based on the AC FNM used in the Day-Ahead Market. The Seasonal Available CRR Capacity shall be based on: ~~(i)~~ the DC FNM, taking into consideration: (i) any long-term scheduled transmission ~~e~~Outages, (ii) OTC adjusted for any long-term scheduled derates, and (iii) a downward

adjustment due to TOR as determined by the CAISO. The Monthly Available CRR Capacity shall be based on: ~~(i)~~ the DC FNM, taking into consideration: (i) any scheduled transmission eOutages for known at least thirty (30) days in advance of the start of that month, adjustments to compensate for the expected impact of Outages that are not required to be scheduled thirty (30) days in advance or are planned, and adjustments to restore Outages or derates that were applied for use in calculating Seasonal Available CRR Capacity but are not applicable for the current month; (ii) any new transmission facilities added to the CAISO Controlled Grid that were not part of the DC FNM used to determine the prior Seasonal Available CRR Capacity and that have already been placed in-service and energized at the time the CAISO starts the applicable monthly process, (iii) OTC adjusted for any scheduled derates or Outages for that month, and (iv) a downward adjustment due to TOR as determined by the CAISO.

36.4.1 Transmission Capacity Available for CRR Allocation and CRR Auction.

With the exception of the Tier LT ~~allocation process~~, the CAISO makes available seventy-five percent (75%) of Seasonal Available CRR Capacity for the annual CRR Allocation and CRR Auction processes, and one hundred percent (100%) of Monthly Available CRR Capacity for the monthly CRR Allocation and CRR Auction processes. The CAISO makes available sixty percent (60%) of Seasonal Available CRR Capacity in the Tier LT ~~allocation process~~. Available capacity at Scheduling Points shall be determined in accordance with Section 36.8.4.24 of this Appendix for the purposes of CRR Allocation and CRR Auction of CRRs that have a CRR Source identified at a Scheduling Point. Before commencing with the annual or monthly CRR Allocation and CRR Auction processes, the CAISO may distribute any Merchant Transmission CRRs ~~to sponsors of merchant transmission projects in accordance with Section 36.11~~ and will model those as fixed injections and withdrawals on the DC FNM to be used in the allocation and auction. These fixed injections and withdrawals are not modified by the Simultaneous Feasibility Test. Similarly, before commencing the annual or monthly CRR Allocation and CRR Auction processes, the CAISO will model any previously allocated Long Term CRRs as fixed injections and withdrawals on the DC FNM to be used in the CRR Allocation and CRR Auction. ~~These fixed injections and withdrawals are not modified by the Simultaneous Feasibility Test, which will ensure no degradation of previously allocated and outstanding Long Term CRRs due to the CRR Allocation and CRR Auction processes.~~

Maintaining the feasibility of allocated Long Term CRRs over the length of their terms also is accomplished through the transmission planning process in Section 24.1.3.

36.4.2 Simultaneous Feasibility.

The annual and monthly CRR Allocation processes release CRRs to fulfill CRR nominations as fully as possible subject to a Simultaneous Feasibility Test (“SFT”). To the extent that nominations are not simultaneously feasible, the nominations are reduced in accordance with the CRR Allocation optimization formulation until simultaneous feasibility is achieved. The CRR Allocation optimization formulation, detailed in the Business Practice Manuals, reduces ~~allocated~~nominated CRRs based on effectiveness in relieving overloaded constraints in order to minimize the total MW volume reduction of nominations while achieving simultaneous feasibility. In the event that there are two or more identical nominations for a specific combination of CRR Source and CRR Sink that affect an overloaded constraint, the CRR Allocation optimization formulation cannot distinguish these nominations based on effectiveness and, therefore, the CRR Allocation optimization will award each such Candidate CRR Holder a pro rata share of the CRRs that can be awarded based on each Candidate CRR Holder’s nominated MW amounts. In addition to the adjustments in Section 36.4.1, The SFT for each CRR Allocation considers:

- a. CRRs representing ETCs, Converted RightsETCs and any TOR capacity that was not captured in the adjustments described in Section 36.4 of this Appendix, which the CAISO deems necessary to prevent the ~~e~~Congestion ~~s~~Settlement of ETCs, Converted RightsETCs, and TORs from causing revenue inadequacy of allocated and auctioned CRRs;
- b. In the case of the monthly CRR Allocation, the CRRs already released for that month in the annual CRR aAllocation and aAuction; and,
- c. The CRRs allocated in previous CRR aAllocation tiers as described in Sections 36.8.3.1 through 36.8.3.6 of this Appendix.

In the event that transmission ~~e~~Outages and derates modeled for the monthly CRR Allocation and CRR Auction render previously issued Seasonal CRRs infeasible, the CAISO will increase the transfer capacity on the overloaded facilities just enough to render all Seasonal CRRs issued for the month feasible without creating any additional capacity beyond what is needed for the feasibility of the Seasonal CRRs. The

CAISO will announce these adjustments to the market prior to conducting the monthly CRR Allocation and CRR Auction so that Candidate CRR Holders can take these facts into consideration in preparing their nominations and bids.

36.5 Candidate CRR Holder and CRR Holder Requirements.

Any entity that holds or intends to hold CRRs must register and qualify with the CAISO and comply with the other terms of this Section, regardless of whether they acquire CRRs by CRR Allocation, CRR Auction, or the Secondary Registration System.

36.5.1 Creditworthiness Requirements.

All CRR Holders and Candidate CRR Holders must comply fully with all ~~C~~creditworthiness requirements as provided in Section 12 of the CAISO Tariff and Section 12.6 of this Appendix and as further developed in the applicable Business Practice Manuals. The amount of available credit for participating in a CRR Auction cannot exceed the entity's Aggregate Credit Limit as provided in Section 12.

36.5.2 Required Training.

CRR Holders and Candidate CRR Holders must attend a training class at least once prior to participating in the CRR Allocations or CRR Auctions. The CAISO may update training requirements annually or on an as-needed basis. Unless granted a waiver by the CAISO, Candidate CRR Holders and CRR Holders shall at all times have in their employment a person that has attended the CAISO's CRR training class and shall notify the CAISO as soon as practicable of a change in such status.

36.6 [NOT USED]

36.7 Bilateral CRR Transactions.

36.7.1 Transfer of CRRs.

36.7.1.1 General Provisions of CRR Transfers.

A CRR Holder may ~~assign, sell,~~ or otherwise transfer CRRs in increments of at least a tenth of a MW. Sales or other such Transfers must be for at least a full day term consistent with the on-peak or off-peak specification of the CRR. The transferee may be any entity that is a Candidate CRR Holder or eligible to ~~be~~ a CRR Holder consistent with the ~~is~~ CAISO Tariff and the applicable Business Practice Manuals. All CRRs that are so ~~assigned, sold,~~ or otherwise transferred by the CRR Holder continue to be subject to

the relevant terms and conditions set forth in the CAISO Tariff and the applicable Business Practice Manuals.

36.7.1.2 Specific Provisions for Transfer of Long Term CRRs.

A CRR Holder that holds Long Term CRRs may sell or transfer through the Secondary Registration System MW portions and temporal segments of a Long Term CRR corresponding to the current calendar year as well as the calendar year covered by the most recently completed annual CRR Allocation. For such sales or transfers the Long Term CRR will be subject to the same limits on granularity that apply to Seasonal CRRs and Monthly CRRs, as specified in Section 36.7.1 [of this Appendix](#). A CRR Holder that holds Long Term CRRs may not transfer or sell through the Secondary Registration System any temporal segment of a Long Term CRR beyond the calendar year covered by the most recently completed annual CRR Allocation. For temporal segments beyond the year covered by the most recently completed annual CRR Allocation, the CRR Holder to whom a Long Term CRR was originally allocated remains the holder of record of the entire Long Term CRR for CAISO Settlement purposes, unless and until such segments of the Long Term CRR or MW portion thereof are transferred to another LSE due to Load migration as described in Section 36.8.5 [of this Appendix](#). Allocated Long Term CRRs represent binding ten-year commitments by a CRR Holder that holds Long Term CRRs and may not be terminated or otherwise modified by the CRR Holder prior to the end of the Long Term CRR's ten-year term.

36.7.2 Responsibility of the CAISO.

The CAISO provides Market Participants a Secondary Registration System to facilitate and track CRR bilateral transactions. ~~The Secondary Registration System automatically posts on the CAISO Website the bilateral transactions entered by Market Participants.~~ The bulletin board of the Secondary Registration System enables any entity that wishes to purchase or sell CRRs to post that information.

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) ~~b~~Business ~~e~~Days prior to the effective date of transfer of

revenues associated with a CRR. 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 of the CAISO Tariff and Section 12.6 of this Appendix](#). 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 of this Appendix](#).

36.8 CRR Allocation ~~to Load Serving Entities for Internal Load~~.

The CAISO allocates CRRs to Load Serving Entities serving ~~the~~ load internal to CAISO Control Area, ~~(including MSS Operator entities as described in Section 36.10 of this Appendix, as well as Qualified OCALSEs)~~. All CRRs allocated under the terms of this Section 36.8 will be CRR Obligations.

36.8.1 Structure of the CRR Allocation Process.

The CAISO conducts an annual CRR Allocation: (i) once a year for the entire year for Seasonal CRRs; and (ii) once a year for the ten-year term of Long Term CRRs. The annual CRR Allocation releases Seasonal CRRs and Long Term CRRs for four seasonal periods. The CAISO also conducts monthly CRR Allocations twelve times a year in advance of each month. Within each annual and monthly CRR Allocation process the CAISO performs distinct allocation processes for each on-peak and off-peak [time of use](#) specification. The CRR Allocation process for CRR Year One is a distinct process that differs from subsequent ~~annual~~-CRR Allocations as described in [Sections 36.8.3.1 and 36.8.3.2 of this Appendix](#). Each ~~CRR a~~CRR allocation procedure is based on nominations to the CAISO by LSEs [or Qualified OCALSEs](#) eligible to receive CRRs. A timeline of the CRR Allocation and CRR Auction processes is contained in the BPMs.

36.8.2 Load Eligible for CRRs and Eligible CRR Sinks.

Any entity that wishes to participate in the CRR Allocation process must provide information that demonstrates that it has an obligation to serve load. An LSE's eligibility for allocation of CRRs is measured by the quantity of Load that it serves that is exposed to Congestion Charges for the use of the CAISO Controlled Grid as determined in Sections 36.8.2.1 and 36.8.2.2 of this Appendix. An OCALSE's eligibility for allocation of CRRs is also measured by the quantity of load that it serves that is exposed to Congestion Charges for the use of the CAISO Controlled Grid as determined in Section 36.9.3 of this Appendix. For LSEs, the information necessary may include, but is not limited to, Settlement Quality Meter Data or relevant documents filed with the California Energy Commission. For OCALSEs, the necessary information may include, but is not limited to, historical tagged Real-Time Interchange Export Schedules and historical load data reflecting the load they serve that is exposed to Congestion Charges for the use of the CAISO Controlled Grid. In addition, each such OCALSE shall support its data submission with a written sworn affidavit by an executive authorized to represent the OCALSE attesting to the accuracy of the data, and the CAISO will have the right to audit the raw data and calculations used to develop the submitted data set. An LSE serving internal Load is eligible for CRRs up to its Seasonal or Monthly CRR Eligible Quantity, which is derived from its Seasonal or Monthly CRR Load Metric as followsdescribed in Sections 36.8.2.1 and 36.8.2.2 of this Appendix, respectively. Seasonal and Monthly CRR Eligible Quantities for Qualified OCALSEs are determined as provided in Section 36.9.3 of this Appendix. These quantities are calculated for each LSE or Qualified OCALSE separately for each combination of season and time of use period for the annual CRR Allocation process, and for each time of use period for each monthly CRR Allocation process, and for each CRR Sink at which the eligible LSE serves Load or the Qualified OCALSE exports Energy from the CAISO Control Area. MSS eligibility for CRRs will account for net or gross MSS sSettlement in accordance with Section 4.9.13.1 of this Appendix. If the MSS Operator elects net sSettlement, LSEs for such MSS Load Operator shall submit CRR Sink nominations at the MSS LAP, ~~and~~ if the MSS elects for gross sSettlement, LSEs for such MSS Load shall submit CRRs Sink nominations at the applicable Default LAP. Load that is Pumped-Storage Hydro Units but is not Participating Load may be scheduled and settled at a PNode or Custom Load Aggregation Point and therefore LSEs for such Load shall submit CRR Sink nominations at the applicable PNode or Custom Load Aggregation Point. Load that is a Participating Load that is also

aggregated is scheduled and settled at a Custom Load Aggregation Point that is customized specifically for such Load and, therefore, LSEs for such Participating Load shall submit CRR Sink nominations at the Custom Load Aggregation Point. Load that is Participating Load is scheduled and settled at an individual PNode, and therefore LSEs for such Load shall submit CRR Sink nominations at the applicable PNode. Load that is non-Participating Load, is not Pumped-Storage Hydro Units, and is not Load associated with ETCs, TORs, or MSS Operators that elects net sSettlement, is scheduled and settled at the Default LAP. Therefore, LSEs for such Load shall submit CRR Sink nominations at their assigned Default LAP or Default LAPs if the Load they serve is located in more than one Default LAP. In tier 3 of the annual process and tier 2 of the monthly process, such LSEs may also submit CRR Sink nominations at a sSub-LAP of their assigned Default LAP. The CAISO will make available, prior to the beginning of the CRR Allocation process, a list of allowable CRR Sinks to be used in the allocation.

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. 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 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 subtracting from that LSE's Seasonal CRR Load Metric 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.

36.8.2.2 Monthly CRR Eligible Quantity.

Each month the CAISO uses the LSE's submitted monthly load forecast to calculate two load duration curves (one on-peak and one off-peak load duration curve for the applicable month) to form the basis for monthly allocations for each LAP in which the LSE serves Load. The Monthly CRR Load Metric is the MW level of Load that is exceeded only in 0.5% of the hours based on the LSE's submitted load forecast.

The CAISO will calculate an LSE's Monthly CRR Eligible Quantity by subtracting from that LSE's Monthly CRR Load Metric the quantity of Load served by its TORs, ETCs, and Converted Rights.

36.8.3 CRR Allocation Process.

36.8.3.1 Annual CRR Allocation for CRR Year One.

The annual CRR Allocation process for CRR Year One consists of a sequence of four (4) tiers for each season and time of use period (on-peak and off-peak). Each tier will feature a SFT applied to the CRR nominations submitted by eligible LSEs or Qualified OCALSEs, the results of which are provided by the CAISO to the respective LSEs or Qualified OCALSEs prior to the LSEs or Qualified OCALSEs submitting their nominations to the next tier. Allocations of CRRs in each tier are considered final once they are provided by the CAISO to the respective LSEs or Qualified OCALSEs. After each tier, LSEs or Qualified OCALSEs will have an amount of time as specified in the Business Practice Manual after their receipt of the results of each tier to submit their nominations for the next tier, if there is one. The annual CRR Allocation allows LSEs or Qualified OCALSEs to submit nominations for Seasonal CRRs up to their Seasonal CRR Eligible Quantities for each season of the relevant year, each time of use period and each LAP, and nominations for Long Term CRRs up to fifty percent (50%) of their Adjusted Load Metric for each season, time of use period and each LAP. The annual CRR Allocation for CRR Year One will be conducted in the following sequence of tiers:

36.8.3.1.1 Tier 1. In tier 1, LSEs or Qualified OCALSEs may nominate and the CAISO will allocate to the LSEs or Qualified OCALSEs Seasonal CRRs up to 50% of their Seasonal CRR Eligible Quantity for each season. An LSE can nominate Seasonal CRRs sourced at Trading Hubs in accordance with the LSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1 of this Appendix.

36.8.3.1.2 Tier 2. In tier 2, LSEs or Qualified OCALSEs may nominate and the CAISO will allocate to the LSEs or Qualified OCALSEs Seasonal CRRs up to 75% of their Seasonal CRR Eligible Quantity for each season minus the quantity of CRRs allocated to that LSE or Qualified OCALSEs in tier 1. An LSE can nominate Seasonal CRRs sourced at Trading Hubs in accordance with the LSE's verified CRR Sources. In running the SFT for Seasonal CRR nominations sourced at Trading Hubs the CAISO will disaggregate the nominations into Point-to-Point CRRs. In tier 2 an LSE with a verified Trading Hub CRR

Source may nominate up to 75% of the Adjusted Verified CRR Source Quantity for that Trading Hub minus the total MW quantity of Point-to-Point CRRs the LSE was allocated in tier 1 as a result of its tier 1 nomination of CRRs sourced at that Trading Hub.

36.8.3.1.3 Tier LT. Tier LT will follow tier 2 for CRR Year One. In Tier LT, ~~eligible entities~~ LSEs or Qualified OCALSEs may nominate Long Term CRRs from the Seasonal CRRs allocated in tiers 1 and 2, except that Point-to-Point CRRs awarded as disaggregated CRR nominations sources at a Trading Hub must be nominated as Trading Hub CRRs as described in this Section 36.8.3.1.3. The ~~amount~~ quantity of Seasonal CRRs that can be nominated as Long Term CRRs is limited to fifty percent (50%) of the eligible entity's Adjusted Load Metric. An LSE can nominate Seasonal CRRs sourced at a Trading Hub in Tier LT up to the total MW amount of the Point-to-Point CRRs the LSE was allocated in tiers 1 and 2 as a result of its tier 1 and 2 nominations of CRRs sourced at that Trading Hub. The cleared Point-to-Point CRRs from the tier 1 and tier 2 that resulted from disaggregated CRR nominations sourced at a Trading Hub may not be nominated as Point-to-Point CRRs in Tier LT in CRR Year One. Qualified OCALSEs may not nominate as a Long Term CRR a Seasonal CRR that has a Scheduling Point as a CRR Source.

After receiving nominations for Long Term CRRs, the CAISO will run SFTs to ensure the feasibility of the nominated Long Term CRRs for the remaining nine years of the ten-year term of the Long Term CRR. In running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1. The SFT run in Tier LT will test the feasibility of only the Long Term CRR nominations and will not include in the analysis those Seasonal CRRs allocated in tiers 1 and 2 that are not nominated as Long Term CRRs. The quantity of Long Term CRRs that can be allocated for any season and time of use period must be feasible for the entire ten-year term of the Long Term CRR. As a result of the Tier LT SFT runs, Long Term CRR nominations may not be fully allocated; however, such a result will not affect the CRR Year One validity of the Seasonal CRR allocated in tiers 1 and 2. The CAISO will inform the nominating entity of the results of the Tier LT SFTs before the deadline for submission of the tier 3 nominations. All allocated Long Term CRRs will be Point-to-Point CRRs.

36.8.3.1.4 Tier 3. In tier 3, LSEs or Qualified OCALSEs may nominate and the CAISO will allocate to the LSEs Seasonal CRRs up to 100% of their Seasonal CRR Eligible Quantity for each season minus the quantity of CRRs allocated to that LSE in tiers 1 and 2. In tier 3, Sub-LAPs will be eligible CRR Sinks

provided that the ~~s~~Sub-LAP is within the nominating LSE's Default LAP. An LSE 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 of this Appendix. Qualified OCALSEs can only nominate CRRs from their verified CRR Sources.

36.8.3.2 Monthly CRR Allocation for CRR Year One.

The monthly CRR Allocation in CRR Year One shall consist of a sequence of two (2) tiers for each time of use period (on-peak and off-peak). The monthly CRR Allocation will distribute Monthly CRRs to each LSE up to one hundred percent (100%) of its Monthly CRR Eligible Quantity minus CRRs allocated to that LSE in the annual CRR Allocation for the relevant month and time of use period. The monthly CRR Allocation for CRR Year One will be conducted as follows:

- a. Tier 1. In ~~T~~tier 1 of the monthly CRR Allocations, LSEs or Qualified OCALSEs may nominate and the CAISO will allocate to the LSEs or Qualified OCALSEs Monthly CRRs up to 50% of the difference between their Monthly CRR Eligible Quantities and the quantity of Seasonal CRRs and Long Term CRRs they were allocated that apply to that month. An LSE can nominate Monthly CRRs sourced at Trading Hubs in accordance with the LSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1 of this Appendix.
- b. Tier 2. In ~~T~~tier 2 of the monthly CRR Allocations, LSEs or Qualified OCALSEs may nominate and the CAISO will allocate to the LSEs or Qualified OCALSEs Monthly CRRs up to 100% of the difference between their CRR Eligible Quantities and the quantity of Seasonal CRRs and Long Term CRRs they were allocated that apply to that month, minus the quantity of CRRs they were allocated ~~to that LSE in~~ ~~T~~tier 1 of the CRR Year One monthly CRR Allocation. An LSE can nominate Monthly CRRs sourced at Trading Hubs in accordance with the LSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1 of this Appendix. In ~~T~~tier 2 of the ~~M~~monthly CRR Allocation, ~~s~~Sub-LAPs will be eligible CRR Sinks provided that the ~~s~~Sub-LAP is within the nominating LSE's Default LAP. Qualified OCALSEs can only nominate CRRs from their verified CRR Sources.

36.8.3.3 [NOT USED]

36.8.3.4 Source Verification.

In CRR Year One, nominations for tier 1 and tier 2 of the annual CRR Allocation and tier 1 of the monthly CRR Allocations must be source verified. The CAISO will make available, prior to the beginning of the allocation process, a list of allowable CRR Sources to be used in the allocation. ~~Through the source verification process described in the Business Practice Manuals, a~~ An LSE must demonstrate that it could actually submit Bids, including Self-Schedules and Inter-SC Trades, for Energy Schedule Energy from the locations to be nominated as CRR Sources to serve its Load either through ownership of, or contractual rights to receive Energy from, the relevant Generating Units, or a contract to take ownership of power at the relevant source such as a Trading Hub or a Scheduling Point. Source verification will use data for the period beginning ~~September~~January 1, 20064 and ending ~~August~~December 31, 20065 as the basis for verification. Such demonstrations shall be provided by the requesting LSE to the CAISO through the submission of a written sworn declaration by an executive employee authorized to represent the LSE and attest to the accuracy of the data demonstration. As necessary, the CAISO may request, and such LSE must produce in a timely manner, documents in support of such declaration. The provisions on source verification requirements based on legitimate need in Section 36.9.1 apply for Qualified OCALSEs. The Verified CRR Source Quantity associated with each verified CRR Source for a particular LSE or Qualified OCALSE will be: (i) for an owned generation resource the PMax of the unit multiplied by the LSE's or Qualified OCALSE's ownership share; (ii) for a contract with a generation resource, the hourly MWh of Energy specified in the contract averaged over all hours of the relevant time of use period, but no greater than the PMax of the unit; or (iii) for a contract that delivers Energy to a Trading Hub or Scheduling Point, the hourly MWh of energy specified in the contract for delivery from the supplier to the LSE or Qualified OCALSE at the Trading Hub or Scheduling Point, averaged over all hours of the relevant time of use period. Energy contracts submitted by LSEs to demonstrate that the LSE can submit Bids, including Self-Schedules and Inter-SC Trades, for Energy from the nominated CRR Sources to serve its Load must be at least one month in duration. Nominations of CRRs whose CRR Source is a Scheduling Point must be source verified in accordance with Section 36.8.4.24. The CAISO will consider a contract that covers a portion of a season (but not less than one month) to be acceptable verification, with the adjustment described below, for the entire season for which a CRR is nominated. The CAISO will also consider a

contract not less than one month in duration that covers portions of two consecutive months to be acceptable verification, with the adjustment described below, for both of the months that are partially covered. In such cases, for a contract that covers only a portion of the season or month for which the LSE or Qualified OCALSE wishes to nominate source-verified CRRs, the CAISO will calculate an Adjusted Verified CRR Source Quantity, which equals the Verified CRR Source Quantity times the ratio of the number of days covered by the contract for a particular month or season to the total number of days in that month or season, consistent with the time of use period of the CRRs being nominated.

36.8.3.5 Annual CRR Allocation Beyond CRR Year One.

The annual CRR Allocation for years beyond CRR Year One consists of a sequence of four (4) tiers for each season and time of use period (on-peak and off-peak). Allocations of CRRs in each tier are considered final once they are provided by the CAISO to the respective LSEs or Qualified OCALSEs. After each tier, LSEs or Qualified OCALSEs will have an amount of time as specified in the Business Practice Manual after their receipt of the results of each tier to submit their nominations for the next tier, if there is one. The annual CRR Allocation will allow LSEs or Qualified OCALSEs to submit nominations up to their Seasonal CRR Eligible Quantities minus the quantity of previously allocated Long Term CRRs for each season of the relevant year, each time of use period and each LAPCRR Sink at in which they serve Load. Annual CRR Allocations for years beyond CRR Year One will be conducted in the following sequence of tiers:

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 (~~“PNP”~~) through which CRR Holders may nominate some of the same CRRs that they were allocated in the immediately previous year. In all A annual CRR Allocations after CRR Year One, an LSE or Qualified OCALSEs may make PNP nominations up to the lesser of: (1) ~~66.7%~~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 LAPCRR 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 ~~that~~each season, time of use period and LAPCRR Sink, and minus any reduction for net loss of Load through retail Load migration as described in Section 36.8.5.1. In addition, an LSE’s or Qualified OCALSE’s nomination of any particular

CRR ~~s~~Source-~~s~~Sink combination in the PNP may not exceed the MW quantity of CRRs having that CRR sSource and CRR sSink that the LSE or Qualified OCALSE was allocated in the previous annual CRR aAllocation for the same season and time of use period, adjusted for net Load loss resulting from Load migration. An LSE or Qualified OCALSE may not nominate CRRs sourced at Trading Hubs in the PNP. CRRs whose CRR Sink is a ~~s~~Sub-LAP are not eligible for nomination in the PNP. PNP Eligible Quantities are not affected by secondary transfers of CRRs. That is: (i) an LSE or a Qualified OCALSE 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 OCALSE 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. ~~Eligible entities may, in the final year of the Long Term CRR, nominate the identical source, sink, and MW terms of the expiring Long Term CRR in this PNP. An eligible entity with an Existing Transmission Contract or Converted Rights that expire by the start of the year for which the CRR Allocation process is conducted may participate in the PNP as if their Existing Transmission Contract or Converted Rights sources and sinks were previously allocated Seasonal CRRs.~~The maximum quantity of CRRs that such an eligible entity may nominate in the PNP is fifty percent (50%) of the eligible entity's 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.

36.8.3.5.2 Tier LT. In Tier LT, eligible entities may nominate Long Term CRRs from any of the Seasonal CRRs allocated in the PNP so long as the amount of the nominated Long Term CRRs is less than or equal to fifty percent (50%) of the eligible entity's Adjusted Load Metric minus the quantity of previously allocated Long Term CRRs that are valid for the term of the CRRs being nominated. An LSE or a Qualified OCALSE may not nominate CRRs sourced at Trading Hubs in Tier LT. A Qualified OCALSE may not nominate as a Long Term CRR a Seasonal CRR where the CRR Source is a Scheduling Point.

After receiving nominations for Long Term CRRs, the CAISO will run SFTs to ensure the feasibility of the nominated Long Term CRRs for the remaining nine years of the ten-year term of the Long Term CRR.

The SFT run in Tier LT will test the feasibility of only the Long Term CRR nominations and will not include in the analysis those Seasonal CRRs allocated in the PNP that were not nominated as Long Term CRRs.

The quantity of Long Term CRRs that can be allocated for any season and time-of-use period must be feasible for the entire ten-year term of the Long Term CRR. As a result of the Tier LT SFT runs, Long Term CRR nominations may not be fully allocated; however, such a result will not affect the validity of: (i) the Long Term CRRs allocated in previous years, or (ii) the Seasonal CRRs allocated in the PNP. The CAISO will inform nominating eligible entities of the results of the Tier LT SFTs before the deadline for submission of the tier 2 nominations.

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 OCALSE up to ~~66.7%~~two-thirds of its Seasonal CRR Eligible Quantity for each season, time of use period and LAPCRR Sink, plus 50% of the net Load gained by the LSE through Load migration during the year, minus the quantity of: (i) CRRs allocated to that LSE or Qualified OCALSE in tier 1, and (ii) Long Term CRRs previously allocated to that eligible entity that are valid for the CRR term currently being allocated. An LSE 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 of this Appendix.

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 OCALSE up to 100% of its Seasonal CRR Eligible Quantity for each season, time of use period and LAP, minus the quantity of: (i) CRRs allocated to that LSE or Qualified OCALSE 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. In tier 3 of the annual CRR Allocation, sSub-LAPs will be eligible CRR Sinks provided that the sSub-LAP is within the nominating LSE's Default LAP. An LSE 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 of this Appendix.

36.8.3.5.5 Alternatives for Renewal of Long Term CRRs and for the Transition of Expiring ETCs and Converted Rights to Long Term CRRs.

Eligible entities may, in the final year of a Long Term CRR, nominate the identical CRR Source, CRR Sink, and MW terms of the expiring Long Term CRR in the PNP conducted that year, subject to any applicable quantity limitations specified in this Section 36. An eligible entity with an Existing Transmission Contract or Converted Rights that expire by the start of the year for which the CRR Allocation process is conducted may participate in the PNP as if its Existing Transmission Contract or Converted Rights sources and sinks were previously allocated Seasonal CRRs, subject to any applicable quantity limitations specified in this Section 36. In either case, if Seasonal CRRs are awarded to an LSE or Qualified OCALSE in the PNP based on its nomination of its expiring rights, such entity may then nominate those Seasonal CRRs in Tier LT of the same year's annual CRR Allocation process, subject to any applicable quantity limitations specified in this Section 36. Alternatively, CRR Holders of expiring LT CRRs, expiring Existing Transmission Contracts or expiring Converted Rights may bypass the tier 1 Priority Nomination Process and nominate their expiring rights as Long Term CRRs in Tier LT one year prior to the year of expiration, subject to any applicable quantity limitations specified in this Section 36. This alternative allows the holder of the expiring rights to nominate Long Term CRRs in the first Tier LT SFT in which the capacity corresponding to the expiring rights becomes available for the full nine year period of the Tier LT SFT. For any entity who elects this alternative and obtains an allocated Long Term CRR, the length of the renewed Long Term CRR (or initial Long Term CRR in the case of expiring Existing Transmission Contracts or expiring Converted Rights) will be nine years, corresponding to the years included in the Tier LT SFT.

36.8.3.6 Monthly CRR Allocation Beyond CRR Year One.

The monthly CRR Allocation shall consist of a sequence of two (2) tiers of allocations for each time of use period (on-peak and off-peak). The monthly CRR Allocation will distribute Monthly CRRs ~~to~~ and will allow LSEs and Qualified OCALSEs to nominate up to one hundred percent (100%) of their Monthly CRR Eligible Quantities ~~minus~~ minus the total of any Seasonal CRRs allocated in the annual CRR Allocation and minus any holdings of Long Term CRRs that are valid for the month and time of use of the CRRs being nominated to that LSE in the annual CRR Allocation.

a. **Tier 1.** In Tier 1 of the monthly CRR Allocations, each LSE or Qualified OCALSE may nominate Monthly CRRs up to 50% of the difference between its Monthly CRR Eligible Quantities; and the total of any Seasonal CRRs allocated in the annual CRR Allocation and any holdings of Long Term CRRs that are valid for the month and time of use of the CRRs being nominated. An LSE can nominate Monthly CRRs where the CRR Source is a Trading Hub in accordance with the LSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1 of this Appendix.

b. **Tier 2.** In Tier 2 of the monthly CRR Allocations, each LSE or Qualified OCALSE may nominate Monthly CRRs up to 100% of the difference between its Monthly CRR Eligible Quantities and the total of any Seasonal CRRs allocated in the annual CRR Allocation and any holdings of Long Term CRRs that are valid for the month and time of use of the CRRs being nominated, minus the quantity of CRRs allocated to that LSE or Qualified OCALSE in Tier 1 of the current monthly CRR Allocation. In Tier 2 of the Monthly CRR Allocation, Sub-LAPs will be eligible CRR Sinks, provided that the Sub-LAP is within the nominating LSE's Default LAP. An LSE can nominate Monthly CRRs sourced at Trading Hubs in accordance with the LSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1 of this Appendix.

36.8.4 Eligible Sources for CRR Allocation.

LSEs or Qualified OCALSEs may nominate up to one hundred percent (100%) of their Adjusted Verified CRR Source Quantities for their Seasonal or Monthly CRRs in all relevant tiers except as provided in this Section. In the CRR Allocation processes for Seasonal CRRs, ~~and~~ Monthly CRRs, and Long Term CRRs, sources of CRR nominations can be either PNodes (including Scheduling Points) or Trading Hubs. ~~For Long Term CRRs, a Trading Hub is not an eligible source.~~ For tiers 1 and 2 of the annual CRR Allocation in CRR Year One, an LSEs may nominate CRRs from each of its verified CRR Sources in a quantity no greater than seventy-five (75) percent of the Adjusted Verified CRR Source Quantity corresponding to each CRR Source. For tiers 1, 2 and 3 of the annual CRR Allocation in CRR Year One, a Qualified OCALSE may nominate CRRs from each of its verified CRR Sources in a quantity no greater than seventy-five (75) percent of the Adjusted Verified CRR Source Quantity corresponding to each CRR Source. ~~requesting CRRs whose CRR Source is a specific Generating Unit will be limited to seventy-five~~

percent (75%) of that Generating Unit's PMax, even if that Generating Unit is owned by or fully contracted to the LSE requesting the CRR. For tiers 1 and 2 of the annual CRR Allocation in CRR Year One, LSEs requesting CRRs whose CRR Source is a Trading Hub will be limited to seventy five percent (75%) of the average hourly quantity of Energy contracted for delivery at that Trading Hub. A Scheduling Point can be a CRR Source for the annual, ~~and~~ monthly, and long term CRR Allocation to the extent the requirements of Section 36.8.4.21 of this Appendix are satisfied.

36.8.4.1 CRRs with Trading Hub Sources.

For purposes of the CRR Allocation processes the CAISO shall disaggregate CRR nominations with Trading Hub CRR Sources into Point-to-Point CRR nominations each of whose CRR Source is a Generating Unit PNode that is an element of the Trading Hub. In performing this disaggregation the MW quantity of each Point-to-Point CRR nomination will equal the MW quantity of the CRR nomination multiplied by the weighting factor of the corresponding Generating Unit PNode in the defined Trading Hub. The disaggregated, individual Point-to-Point CRRs will be used by the CAISO in conducting the SFTs for the nominated CRRs. In CRR years other than CRR Year One, any allocated Point-to-Point CRRs that are the result of Seasonal CRR nominations with Trading Hubs as CRR Sources can be nominated in the PNP tier and, if awarded in the PNP, may be nominated as Long Term CRRs. The allocated Point-to-Point CRRs that are Seasonal CRRs will be used to conduct the SFTs for Tier LT. Any Long Term CRRs allocated by the CAISO will be Point-to-Point CRRs.

36.8.4.21 Import CRRs.

LSEs may nominate CRRs whose CRR Source is a Scheduling Point in the annual, ~~and~~ monthly, and long term CRR Allocation in accordance with this Section.

36.8.4.2.1 Scheduling Points as CRR Sources in CRR Year One.

In CRR Year One, in ~~T~~ tiers 1 and 2 of the annual CRR ~~a~~ allocation process an LSE may nominate such CRRs to the extent that it can demonstrate to the CAISO that, for the verification period stated in Section 36.8.3.45 of this Appendix, it owned or was a party to a contract with a System Resource, and that it or the counter-party to the contract had procured appropriate transmission from the applicable transmission provider outside the CAISO to the Scheduling Point. In addition, also in ~~T~~ tiers 1 and 2 of the annual CRR

aAllocation in CRR Year One, all LSEs eligible to nominate CRRs under this Section 36.8 may nominate as CRR Sources, without any verification, shares of the residual import CRR capacity at each Scheduling Point that remains after the completion of the CRR sSource verification process. Each LSE's share of the residual import CRR capacity will be calculated as follows. Starting with the total capacity at each Scheduling Point that wais available in the DC FNM for the Aannual CRR Allocation and Auction process, the CAISO will calculate the residual amount of capacity that remains at each Scheduling Point after subtracting the capacity accounted for by those Scheduling Point CRR Sources submitted by LSEs for verification that have been verified. The CAISO will then set aside 50 percent of this residual amount at each Scheduling Point for the Aannual CRR Auction, and will allow LSEs to nominate pro rata shares of the other 50 percent in proportion to their Seasonal CRR Eligible Quantities. In each Mmonthly CRR Allocation during CRR Year One, CRR sSource verification will be required in Ttier 1 as in the annual CRR aAllocation process. Following the verification process, the CAISO will calculate and set aside for the Mmonthly CRR Auction 50 percent of the import capacity that remains at each Scheduling Point after accounting for the verified Scheduling Point CRR Source submissions to the monthly process and the Aannual CRR Allocation and Auction results for that month, and will allow LSEs to nominate in tier 1 mMonthly CRRs with CRR Sources at each Scheduling Point in quantities up to their pro rata shares of the other 50 percent in proportion to their Monthly CRR Eligible Quantities.

36.8.4.2.2 Scheduling Points as CRR Sources Beyond CRR Year One.

In the Aannual CRR Allocation processes subsequent to CRR Year One, there will be no special provisions regarding CRR Sources at Scheduling Points in Ttiers 1 and 2. For Ttier 3 the CAISO will calculate and set aside for the Aannual CRR Auction 50 percent of the import capacity at each Scheduling Point that remains after the Ttier 1 and Ttier 2 CRR aAllocations and after considering any previously allocated Long Term CRRs that are valid for that month as described in Section 36.4.1 of this Appendix. In the Mmonthly CRR Allocation processes subsequent to CRR Year One there will be no special provisions regarding CRR Sources at Scheduling Points in Ttier 1. For Ttier 2 the CAISO will calculate and set aside for the Mmonthly CRR Auction 50 percent of the import capacity that remains at each Scheduling Point after accounting for the Aannual CRR aAllocation and aAuction results for that

month, any previously allocated Long Term CRRs that are valid for that month, and the results of Tier 1 of the monthly CRR Allocation.

36.8.5 Load Migration Between LSEs.

Load migration between LSEs will be reflected in the hourly Load data and load forecasts used by the CAISO to calculate the CRR Load Metrics and Seasonal and Monthly CRR Eligible Quantities for each LSE, in accordance with procedures set forth in the applicable BPM. When Load migration occurs during an annual CRR cycle, such migration will be reflected in appropriate adjustments to each affected LSE's Seasonal and Monthly CRR Eligible Quantities in subsequent annual and monthly CRR Allocations, as well as its PNP Eligible Quantities in the next annual CRR aAllocation. LSEs with Seasonal CRRs that lose Load through Load migration must comply with Section 36.8.5.2 of this Appendix.

36.8.5.1 Adjustments Reflected in the Annual CRR Allocation Process Due To Load Migration.

An LSE who loses or gains net Load through Load migration in a given year will have its Seasonal CRR Eligible Quantities in the next Aannual CRR Allocation reduced or increased, respectively, in proportion to the net Load lost or gained through Load migration. In addition, an LSE whethat loses Load through Load migration in a given year will have its PNP Eligible Quantities reduced in proportion to the gross amount of Load lost through Load migration. The reduction in PNP Eligible Quantities will be applied as a constant percentage to all CRRs allocated to that LSE in the prior annual CRR Allocation. There is no increase in an LSE's PNP Eligible Quantities due to an increase in Load due to Load migration. Such an LSE may acquire additional CRRs for net Load gained in tiers 2 and 3 of the subsequent annual CRR Allocation. The CAISO will reserve CRRs in the annual PNP corresponding to the CRRs released by LSEs whose PNP Eligible Quantities were reduced, and will then release these CRRs for tiers 2 and 3. This mechanism will ensure, in the event that changes to the DC FNM prevent the full allocation of PNP Eligible Quantities, theat CRRs nominated in the PNP undergo the same proportional reduction as CRRs released by the LSEs who lose Load due to Load migration, so as not to unfairly disadvantage those LSEs who gain Load through Load migration. The Load-gaining LSE will not be required to request the precise CRRs released by the relevant Load-losing LSE but will be able to nominate its preferred CRRs in tiers 2 and 3.

36.8.5.2 Transfers of Allocated CRRs to Reflect Load Migration.

LSEs that have been allocated Seasonal CRRs or Long Term CRRs and that lose Load through Load migration must transfer allocated Seasonal CRRs and Long Term CRRs in accordance with this Section 36.8.5.2. An LSE that receives shares of allocated CRRs due to Load migration must meet all requirements applicable to CRR Holders.

36.8.5.2.1 Mid-Year Adjustments in Seasonal CRRs.

If an LSE loses Load through Load migration to another LSE at any time between annual CRR Allocations, the Load-losing LSE must compensate the Load-gaining LSE in one of the following two manners: 1) using the SRS, the Load-losing LSE may transfer a percentage of each of the Seasonal CRR that it was allocated for the remainder of the annual CRR cycle and for both on-peak and off-peak periods, to the Load-gaining LSE in a quantity proportionate to the percentage of its Load lost to the other LSE through Load migration; or 2) the LSE who loses Load through Load migration to another LSE may make cash payments to the relevant Load-gaining LSE in a value commensurate with the hourly CRR Payment stream that would have accrued to the CRRs transferred, based on the quantity of CRRs awarded to the Load-losing LSE.

36.8.5.2.2 Load Migration and Allocated Long Term CRRs.

An LSE that is a CRR Holder that holds a Long Term CRR and that loses Load to Load migration must transfer a proportionate share of each of its Long Term CRRs to the Load-gaining LSE, in a quantity proportionate to the percentage of its Load lost to the other LSE through Load migration. After the transfer of the Long Term CRR (or the proportionate share thereof) to the Load-gaining LSE, the Load-gaining LSE is the holder of record for the transferred Long Term CRR for CAISO Settlement purposes.

36.8.5.2.3 Load Migration That Occurs After Completion of the Annual Allocation Process.

If Load migration occurs after the annual CRR Allocation process has been completed for the following year, a CRR Holder that holds Long Term CRRs may transfer the following year's segment of the Long Term CRR using the options set forth in Section 36.8.5.2.1 of this Appendix. For all of the other remaining years of the Long Term CRR, the CRR Holder that holds Long Term CRRs may not use the

options set forth in Section 36.8.5.2.1 [of this Appendix](#) to transfer the Long Term CRR (or the proportionate portion thereof) to the Load-gaining LSE.

36.8.5.3 Load Migration Reflected in the Monthly [CRR](#) Allocation Process.

An LSE who loses or gains net Load through Load migration must reflect that loss or gain in the monthly Load forecasts it submits to the CAISO for determining its monthly CRR Eligible Quantities for future monthly CRR [a](#)Allocations.

36.8.5.4 Adjustments for Load Growth.

LSEs who experience Load growth that is not due to Load migration will reflect such Load growth in the data submitted to the CAISO for determining Seasonal and Monthly CRR Eligible Quantities for the CRR Allocation processes.

36.8.6 Load Forecasts Used to Calculate CRR MW Eligibility.

The CAISO will work closely with appropriate state and Local Regulatory Authorities and agencies to ensure that historical [L](#)oad data and load forecasts used to establish [Seasonal and Monthly](#) CRR Eligible Quantities are consistent with the data and forecasts used to establish resource adequacy requirements.

36.8.7 ~~Long Term CRRs and Participating TO Withdrawals from the CAISO~~ Controlled Grid.

In the event a Participating TO gives the required notice and withdraws facilities or Entitlements from the CAISO Controlled Grid, the CAISO will reconfigure Long Term CRRs as necessary to reflect the CAISO Controlled Grid after the withdrawal. After reconfiguration, the CAISO will run SFTs on the reconfigured Long Term CRRs and, if necessary, reduce some of the reconfigured Long Term CRRs to ensure their feasibility. If the CRR Source and CRR Sink for an allocated Long Term CRR both are located within a departing Participating TO Service Territory, the Long Term CRR would expire on the effective date of the Participating TO's withdrawal.

36.9 CRR Allocation to [OCALSEs](#) ~~serving External Load~~.

[OCALSEs](#) ~~serving Load outside the CAISO Control Area~~ who wish to nominate and be allocated CRR Obligations in the same annual and monthly [CRR a](#)Allocation processes described in Section 36.8-2 of this Appendix may do so subject to the provisions of this Section [36.9 and if such OCALSEs are qualified](#)

~~and registered as Candidate CRR Holders or CRR Holders. An OCALSEs serving load outside the CAISO Control Area~~ may participate in the CRR Allocation processes and be allocated CRRs to the extent that: (1) such ~~OCALSEs~~ makes a showing of legitimate need for the CRRs nominated as provided by Section 36.9.1 of this Appendix; (2) such ~~entities~~OCALSE pre-pays the appropriate Wheeling Access Charge in the amount of MWs of CRRs nominated as provided in Section 36.9.2 of this Appendix; (3) the nominated CRRs clear the relevant SFTs; ~~and~~(4) the external load for which CRRs are nominated is not served through an ETC, TOR or Converted Rights which has been designated as eligible to receive the reversal of Congestion Charges; and (5) such OCALSE complies with the verification requirements in Section 36.9.4 of this Appendix. Such ~~OCALSEs~~ that participate in the CRR Allocation processes will be subject to the applicable rules governing the tiered structure of these processes. All CRRs allocated under the terms of this Section 36.9 will be CRR Obligations.

36.9.1 Showing of Legitimate Need.

~~An OCALSEs serving load outside the CAISO Control Area~~ must make a showing to the CAISO of legitimate need for the CRRs requested. The showing of legitimate need for OCALSEs will have different requirements depending on whether the generation source to be used to verify the CRR Source to be nominated is internal or external to the CAISO Control Area. For internal Generating Units to be used to verify the CRR Sources ~~The~~ the determination of legitimate need will be based on demonstration by the OCALSE of an existing Energy contract for from a Generating Unit internal to the CAISO Control Area that covers the time period of the CRRs nominated, or ownership of a such Generating Unit internal to the CAISO Control Area. For such CRR Sources the showing of legitimate need must be made for each year that the OCALSE wants to nominate such CRRs in a timely manner prior to the start of the annual CRR Allocation process. For CRR Sources that will be verified based on an Energy contract from or ownership of a generating resource located outside of the CAISO Control Area, source verification rules in Section 36.8.3.4 of this Appendix will apply. For CRR Sources that will be verified based on generating resources located outside the CAISO Control Area, a Scheduling Point must be nominated as the corresponding CRR Source. Generating resources located outside of the CAISO Control Area to be used by the OCALSE to verify a Scheduling Point as a CRR Source must not be located within the OCALSE's own Control Area. Nominations by OCALSEs of Scheduling Points as CRR Sources shall be subject to the

same verification and showing requirements as described in Section 36.8.4.2 of this Appendix. The Verified CRR Source Quantity and Adjusted Verified CRR Source Quantity corresponding to any CRR Source nominated by an OCALSE will be calculated in accordance with Section 36.8.3.4 of this Appendix, with the modification that the Verified CRR Source Quantities and Adjusted Verified CRR Source Quantities corresponding to CRR Sources that are based on an internal Generating Unit and not a Scheduling Point will be calculated annually in conjunction with the OCALSE's annual showing of legitimate need. The annual legitimate need showing for all OCALSEs will include a showing that the OCALSE has firm transmission rights pursuant to the tariffs of intervening transmission providers between the CAISO Control Area and their designated end-users. Such demonstrations shall be provided by the requesting OCALSE to the CAISO through the submission of a written sworn declaration by an executive employee authorized to represent the OCALSE and attest to the accuracy of the data demonstration. As necessary, the CAISO may request, and such OCALSE must produce in a timely manner, documents in support of such declaration.

36.9.2 Prepayment of Wheeling Access Charges.

An OCALSEs serving load outside the CAISO Control Area will be required to prepay relevant Wheeling Access Charges for the term of the CRR it intends to nominate in order to participate in the CRR Allocation processes and be allocated CRRs. For each MW of CRR nominated the nominating OCALSE must prepay one MW of the relevant Wheeling Access Charge, which equals the per-MWh WAC that is expected at the time the CRR Allocation process is conducted to be applicable for the period of the CRR nominated, times the number of hours comprising the period of the CRR nominated. An OCALSE deemed creditworthy pursuant to the requirements of Section 12 may elect to prepay the determined WAC responsibility on a monthly basis for the Seasonal CRRs that they seek to be allocated, provided that such OCALSE has demonstrated a commitment to pay for the entire term of the CRRs sought by submitting to the CAISO a written sworn statement by an executive that can bind the entity. Allocated CRRs represent binding commitments by a CRR Holder that holds the CRRs and may not be terminated or otherwise modified by the CRR Holder prior to the end of the CRR's term. An OCALSE choosing to pay on a monthly basis shall make its prepayment for the first month of the applicable term prior to submitting nominations in the annual CRR Allocation. Monthly prepayments for subsequent months of

the applicable CRR term of allocated Seasonal CRRs or for participation in a monthly CRR Allocation shall be made prior to the start of the monthly CRR Allocation process for the applicable month. To the extent that an OCALSE prepays a quantity of the WAC and is not allocated the full amount of CRRs nominated, WAC prepayment for CRRs not allocated will be refunded by the CAISO within a reasonable time following the completion of the relevant CRR Allocation process.

36.9.2.1 Prepayment of Wheeling Access Charges for Long Term CRRs.

An OCALSE will be required to prepay for the full ten year term of the CRR to be nominated as a LT CRR the relevant Wheeling Access Charges in order to participate in the CRR Allocation process to be allocated such LT CRRs. An OCALSE deemed creditworthy pursuant to the requirements of Section 12 may elect to prepay its determined WAC responsibility on an annual basis, provided that such OCALSE has demonstrated a commitment to pay for the entire term of the LT CRRs sought by submitting to the CAISO a written sworn statement by an executive that can bind the entity. ~~An entity serving load outside the CAISO Control Area that wants to nominate an allocated Seasonal CRR as a Long Term CRR must execute a contract with the CAISO committing the entity to make annual Wheeling Access Charge payments for each year of the term of a Long Term CRR. An OCALSE choosing to pay such WAC obligation on an annual basis shall make its prepayment~~ ~~Each year's payment will be made~~ at the beginning of the annual CRR Allocation process for the following year.

36.9.3 CRR Eligible Quantities.

The CAISO will calculate the Seasonal and Monthly CRR Eligible Quantities for OCALSEs serving external Load as described in Section 36.8.2 of this Appendix with the following modifications. The OCALSE load must submit two sets of hourly data submitted by the load-serving entity serving external load from which the CAISO will construct load duration curves for determining the Seasonal and Monthly CRR Eligible Quantities. One set of hourly data must reflect the OCALSE load-serving entity's historical hourly exports at the Scheduling Point that is the CRR Sink of the nominated CRRs. The historical hourly exports shall be based on the tagged Real-Time Interchange Export Schedules for the OCALSE. An OCALSE Load-serving entities serving external load that wishes es to nominate multiple Scheduling Points as CRR Sinks in the CRR aA allocation process will have distinct CRR Eligible Quantities for each

nominated Scheduling Point, and prior to each annual CRR Allocation process must submit historical hourly export data at each such Scheduling Point from which the CAISO will calculate the associated CRR Eligible Quantities. The second set of hourly data must reflect the prior year's hourly metered load for the end-use customers the OCALSE served outside the CAISO Control Area that were exposed to Congestion Charges for use of the CAISO Controlled Grid. The OCALSE's Seasonal and Monthly CRR Eligible Quantities will be based on the lesser of (1) the total historical hourly export data for all Scheduling Points submitted as CRR Sinks, and (2) the hourly metered load for the external end-use customers served by the OCALSE that were exposed to CAISO Congestion Charges. An OCALSE also must demonstrate that it has firm transmission rights pursuant to the tariffs of intervening transmission providers from its Scheduling Point sink to the end-use customers in the OCALSE's Control Area. The OCALSE shall support its data submission and the demonstration of transmission rights to its end-use customers with a sworn affidavit by an executive employee authorized to represent the OCALSE and attest the accuracy of the data and demonstration. As necessary, the CAISO may request, and such OCALSE must produce in a timely manner, the raw data and calculations used to develop the submitted data set and the demonstration of transmission rights to its end-use customers.

36.9.4 Eligible CRR Sources and Sinks.

Eligible CRR Sources will be the PNodes of the Generating Units or Scheduling Points for which the ~~OCALSE load serving entity serving external load~~ has made a legitimate need showing as described above in Section 36.9.1 of this Appendix. Eligible CRR Sinks will be the Scheduling Points for which the CAISO has established Seasonal and Monthly CRR Eligible Quantities as described in Section 36.9.3 of this Appendix, based on the LSE's submitted historical hourly export data. An OCALSE Entities serving load external to the CAISO Control Area requesting nominating CRRs having CRR Sources internal to the CAISO Control Area whose CRR Source is a specific Generating Unit will be limited to seventy-five percent (75%) of each of its corresponding Adjusted Verified CRR Source Quantities that Generating Unit's PMax in all Tiers 1 and 2 of the annual CRR Allocation process in CRR Year One and in subsequent years. An OCALSE nominating CRRs having CRR Sources external to the CAISO Control Area will be limited to seventy-five percent (75%) of each of its corresponding Adjusted Verified CRR Source Quantities in all tiers of the annual CRR Allocation process in CRR Year One. In CRR years

subsequent to CRR Year One, the OCALSE may renew previously allocated CRRs having external CRR Sources, subject to the applicable quantity limitations and other requirements specified in this Section 36.

36.9.5 Priority Nomination Process.

CRRs allocated pursuant to this Section 36.9 shall be eligible for nomination in the Priority Nomination Process to the extent that the requirements of this Section 36.9 are met at the time of the relevant CRR Allocation.

36.10 CRR Allocation to Metered Subsystems.

An MSS Operator that elects gross sSettlement may participate in the CRR aAllocation processes and be allocated CRR Obligations. An MSS Operator that elects net sSettlement may participate in the CRR aAllocation processes and be allocated CRRs, except that its Seasonal and Monthly CRR Eligible Quantities will reflect its net Load and its allocated CRRs will use MSS-LAPs as CRR Sinks. The MSS Operator will be required to submit to the CAISO the appropriate hourly historical net Load data and net Load forecast data from which the CAISO will construct net Load duration curves to determine the Seasonal and Monthly CRR Eligible Quantities.

36.11 CRR Allocation to Merchant Transmission FacilitiesUpgrades.

Project Sponsors of mMerchant transmission Facilitiesupgrades who turn such facilities over to CAISO eOperational eControl and do not recover the cost of the transmission investment through the CAISO's TAG-Access Charge or WAC or other regulatory cost recovery mechanism may be allocated, at the Project Sponsor's election, either CRR Options or Obligations that reflect the contribution of the facilityupgrade to grid transfer capacity as determined belowin accordance with Section 24.7.3.

36.11.1 Eligibility for Merchant Transmission CRRs.

The Project Sponsor of a Merchant Transmission Facility shall be entitled to receive Merchant Transmission CRRs as determined in accordance with this Section 36.11. A Merchant Transmission CRR allocated through this process is effective for thirty (30) years or for the pre-specified intended life of the Merchant Transmission Facility, whichever is less. Merchant Transmission CRRs represent binding commitments for thirty (30) years or for the pre-specified intended life of the Merchant Transmission Facility, whichever is less. The binding commitment by a CRR Holder that holds Merchant Transmission

CRRs may not be terminated or otherwise modified by the CRR Holder prior to the end of the term of the Merchant Transmission CRR.

36.11.2 Procedure for Allocating Merchant Transmission CRRs.

No less than forty-five (45) days prior to the in-service date of a Merchant Transmission Facility, the Project Sponsor of the facility will inform the CAISO of the in-service date of the facility and that the Project Sponsor will be requesting Merchant Transmission CRRs associated with the Merchant Transmission Facility. The CAISO will complete the Merchant CRR Allocation after the in-service date of the facility and will allocate Merchant Transmission CRRs whose payment stream will be retroactive back to the in-service date.

36.11.3 Determination of Merchant Transmission CRRs to be Allocated to a Project Sponsor of a Merchant Transmission Facility.

36.11.3.1 Nominations of Merchant Transmission CRRs.

The Project Sponsor of a Merchant Transmission Facility must submit nominations for Merchant Transmission CRRs at least twenty-one (21) days prior to the in-service date of the facility. The Project Sponsor may nominate up to five individual, Point-to-Point CRRs for each of the two on-peak and off-peak time of use periods. Each of the individual, point-to-point nominations must specify: (i) a single CRR Source location; (ii) a single CRR Sink location, (iii) a MW quantity; (iv) a time of use period (on-peak or off-peak); and (v) a CRR type, either CRR Options or CRR Obligations.

36.11.3.2 Methodology to Determine Merchant Transmission CRRs.

The CAISO shall determine the incremental Merchant Transmission CRRs associated with a Merchant Transmission Facility pursuant to this Section 36.11.3.2. The determination will include an assessment of the simultaneous feasibility of the incremental Merchant Transmission CRRs and all other outstanding CRRs. The CAISO will determine the feasible incremental Merchant Transmission CRRs using a three-step process.

36.11.3.2.1 Step One: the Capability of the Existing Transmission System.

In step one the CAISO will determine the base CRR capability of the system using a Simultaneous Feasibility Test that incorporates as Fixed CRRs all existing encumbrances through the end of the CRR year for which the annual CRR Allocation and Auction process has already been conducted, including

encumbrances for the month covered by the most recently conducted monthly CRR Allocation and Auction process. This analysis will determine the extent to which the nominated Merchant Transmission CRRs are feasible on the existing transmission system absent the Merchant Transmission Facility. As a result of this analysis, the CAISO will create temporary test CRR Options to reserve grid capacity that the Project Sponsor of the Merchant Transmission Facility is not eligible to receive. The temporary test CRR Options will have the same CRR Source and CRR Sink pairs as the Merchant Transmission CRR nominations submitted by the Project Sponsor.

36.11.3.2.2 Step Two: Mitigation of Impacts on Existing Encumbrances.

In the second step, the CAISO will add the proposed Merchant Transmission Facility to the DC FNM and run a SFT using the Fixed CRRs. The second step will ensure that the addition of a Merchant Transmission Facility does not negatively impact any existing encumbrances through the end of the CRR year for which the annual CRR Allocation and Auction process for Annual CRRs has already been conducted, including encumbrances for the month covered by the most recently conducted monthly CRR Allocation and Auction process. For any impacts identified in this step the Project Sponsor of the Merchant Transmission Facility will be required to mitigate the impacts for the same period. The mitigation can include having the Project Sponsor of the Merchant Transmission Facility hold counterflow CRRs that maintain the feasibility of the existing encumbrances over the same period.

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. For each time of use period, the CAISO will perform a multi-period SFT that simultaneously evaluates two sets of grid conditions. The first set of grid conditions includes all existing encumbrances for the month covered by the most recently conducted CRR Allocation and Auction process 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

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.

36.12 [NOT USED]

36.13 CRR Auction.

The CAISO shall conduct CRR Auctions on an annual and monthly basis subsequent to each annual and monthly CRR Allocation process. Candidate CRR Holders may bid to purchase and may acquire CRRs Obligations through the CAISO's annual and monthly CRR Auctions in accordance with the provisions of this Section 36.13. CRR Auction results shall be settled as provided in Section 11.2.4.3 of this Appendix.

36.13.1 Scope of the CRR Auctions.

The CAISO will conduct a CRR Auction corresponding to and subsequent to the completion of each CRR Allocation process, and prior to the start of the period to which the auctioned CRRs will apply. Each CRR Auction will release CRRs having the same seasons, months and time of use specifications as the CRRs released in the corresponding CRR Allocation. Each CRR Auction will utilize the same DC FNM that was utilized in the corresponding CRR Allocation. For each CRR Auction, the CRRs allocated in the corresponding CRR Allocation will be modeled as fixed injections and withdrawals on the DC FNM and will not be adjusted by the SFT in the CRR Auction process. Thus the CRR Auction will release only those CRRs that are feasible given the results of the corresponding CRR Allocation. CRRs released in a CRR Auction will be indistinguishable from CRRs released in the corresponding CRR Allocation for purposes of settlement and secondary trading. The following ~~limitations~~additional provisions apply. First, participants in the CRR Auctions will have more choices regarding CRR Sources and CRR Sinks than are eligible for nomination in the CRR Allocations, as described in Section 36.13.5 of this Appendix. Second, to the extent a Market Participant receives CRRs in both a CRR Allocation and the corresponding CRR Auction, the CRRs obtained in the CRR Auction will not be eligible for nomination in the PNP. Third, in CRR Year One the CRR Auction cannot be used by CRR Holders to offer for sale CRRs they acquired in a prior CRR Allocation, ~~or CRR Auction~~ or through the Secondary Registration System. In the annual and monthly CRR Auction processes for years following CRR Year One, ~~the CRR Holders, including the CRR~~

~~Holder holding Long Term CRRs, may offer for sale any CRRs held by such holders, subject to the limitations on sale and transfer of Long Term CRRs specified in Section 36.7.1.2 of this Appendix. Merchant Transmission CRRs that are CRR Options may be offered for sale in the annual and monthly CRR Auctions for years following CRR Year One, subject to the same temporal limitations that apply to Long Term CRRs as specified in Section 36.7.1.2 of this Appendix, that portion of the CRR corresponding to the CRR Auction process.~~

36.13.2 Responsibilities of the CAISO Prior to Each CRR Auction.

The CAISO shall publish on the CAISO Website a notice of upcoming CRR Auctions at least seven (7) days prior to the CRR ~~a~~Auction. The CAISO will also provide additional information needed by CRR Auction participants in accordance with the provisions of Section 6.5.1 of this Appendix.

36.13.3 CRR Holder Creditworthiness.

All Market Participants are eligible to acquire CRRs by participating in the CRR Auction, provided that the Market Participant has met all the CRR Holder requirements described in Section 36.5, the creditworthiness provisions in Section 12 of the CAISO Tariff and Section 12.6 of this Appendix and the relevant Business Practice Manual.

36.13.4 Bids in the CRR Auctions.

Bids to purchase CRRs shall be submitted in accordance with the requirements set out in this Section 36.13.4 and as further specified in the applicable Business Practice Manuals. Once submitted to the CAISO, CRR bids may not be cancelled or rescinded by the Market Participant after the CRR aAuction is closed. Market Participants may bid for Point-to-Point CRRs and Multi-Point CRRs. Each bid for a Point-to-Point CRR shall specify:

- a) The associated month or season and time -of-use period;
- b) The associated CRR Source and CRR Sink;
- c) A monotonically non-increasing piecewise linear bid curve in quantities (denominated in tenths of MW) and prices (\$/MW).

Each bid for a Multi-Point CRR shall specify:

- d) The associated month or season and time -of-use period;

- e) The associated CRR Sources and CRR Sinks;
- f) For each CRR Source, a monotonically non-decreasing piecewise linear bid curve in quantities (denominated in tenths of MW) and prices (\$/MW).
- g) For each CRR Sink, a monotonically non-increasing piecewise linear bid curve in quantities (denominated in tenths of MW) and prices (\$/MW).

Bid prices in all CRR bids may be negative.

36.13.5 Eligible Sources and Sinks for CRR Auction.

Allowable CRR Sources for CRRs acquired in the CRR Auction will be ~~Generator~~ PNodes, Scheduling Points, Trading Hubs, LAPs, MSS-LAPs and ~~s~~Sub-LAPs. Allowable CRR Sinks for CRRs acquired in the CRR Auction will be ~~Generator~~ PNodes, Scheduling Points, Trading Hubs, LAPs, MSS-LAPs and Sub-LAPs.

36.13.6 Clearing of the CRR Auction.

The SFT used to clear the CRR Auction will utilize the same DC FNM and optimization algorithm as the corresponding CRR Allocation, except that nominations to the CRR Auction will have associated price-quantity bid curves. The CRR Auction SFT will use the bid prices in determining which CRRs to award when not all nominations are simultaneously feasible, will select the set of simultaneously feasible CRRs with the highest total auction value as determined by the CRR bids, and will calculate nodal prices at each PNode of the DC FNM. In the event that there are two or more identical bids for a specific combination of CRR Source and CRR Sink that affect an overloaded constraint, the CRR Auction optimization cannot distinguish these bids based on either effectiveness or price and therefore the CRR Auction optimization will award each CRR bidder, and there is insufficient network capacity to accommodate all of the identical bids, each such CRR bidder will receive a pro rata share of the CRRs that can be awarded based on the bid MW amounts. Based on the nodal prices calculated by the CRR Auction SFT, the CRR Market Clearing Price per MW for a specific CRR will equal the nodal price at the CRR Sink minus the nodal price at the CRR Source. For a Multi-Point CRR the CRR Market Clearing Price will equal the sum over all relevant CRR Sinks of the nodal price at each CRR Sink times that CRR Sink's share of the total MW of the CRR, minus the sum over all relevant CRR Sources of the nodal price

at each CRR Source times that CRR Source's share of the total MW of the CRR Market Participants shall pay the associated CRR Market Clearing Prices for all CRRs bought through the CRR Auction.

36.13.7 Announcement of CRR Auction Results.

Within five (5) ~~b~~Business ~~d~~Days after the close of a CRR Auction, the CAISO shall post the results. The results shall include but are not limited to the MW quantity, the CRR Source and CRR Sink for each CRR awarded, the nodal prices calculated by the CRR Auction SFT, and the parties to whom the CRRs were awarded. The CAISO shall not disclose prices specified in any CRR bid.

* * *

Attachment D

Exhibit ISO-1 - Direct Testimony of Dr. Lorenzo Kristov

1 **I. INTRODUCTION**

2

3

4 **Q. Please identify yourself, your position at the CAISO, and describe your role**

5 **in the CAISO's market redesign.**

6 **A.** My name is Lorenzo Kristov. My business address is 151 Blue Ravine Road,

7 Folsom, California 95630. I am the Principal Market Architect, within the

8 Department of Market and Product Development at the California ISO

9 ("CAISO"). Since 2002, the majority of my work effort at the CAISO has been to

10 develop market design components and resolve policy issues related to the

11 comprehensive Market Redesign and Technology Upgrade ("MRTU") project. In

12 this capacity I have been working with internal experts in all departments of the

13 CAISO, outside consultants such as LECG and members of the Market

14 Surveillance Committee ("MSC"), and the diverse stakeholder community in

15 formal open working sessions as well as individual meetings with different

16 stakeholder sectors. I have a Ph.D. in Economics from the University of

17 California at Davis and have been working in the electricity industry for 16 years

18 and been involved with California's restructured electricity markets since 1995.

19 **II. PURPOSE OF TESTIMONY**

20 **Q. Please describe the scope of your testimony.**

21 **A.** In this testimony I discuss the following topics related to the implementation of

22 Congestion Revenue Rights ("CRRs") in conjunction with MRTU. The topics are:

23 1. Treatment of CRR allocation nominations whose CRR Source is a Trading

24 Hub;

- 1 2. Renewal of expiring Long Term CRRs and transition of expiring Existing
- 2 Transmission Contracts and Converted Rights to Long Term CRRs;
- 3 3. Allocation of CRRs in conjunction with Merchant Transmission Upgrades;
- 4 4. Allocation of wheel-through CRRs to LSEs serving load outside the
- 5 CAISO Control Area;
- 6 5. Expansion of the eligible set of verified sources in conjunction with the
- 7 2006 historical reference year for CRR Year One allocation to LSEs; and
- 8 6. Potential changes to the filed rules for setting aside import capacity on the
- 9 interties for the CRR auctions.

10 In items 1 through 3 the CAISO is proposing changes to its filed MRTU tariff
11 and/or its filed Long Term CRR proposal as a result of stakeholder discussions
12 over the past few months.¹ Item 4 represents proposed changes to the filed
13 MRTU tariff to comply with the Commission’s April 20, 2007 Order on
14 Rehearing. Items V.1 and V.2 are areas where the CAISO has discussed potential
15 tariff changes with stakeholders over the past few months but ultimately decided
16 not to propose any changes.

17 In addition to the substantive issues, I will also describe the stakeholder process
18 the CAISO conducted since February of this year to address these topics.

19
20 **III. BACKGROUND AND REVIEW OF STAKEHOLDER PROCESS**

21

¹ The CAISO’s Long Term CRR proposal was filing in compliance with the Commission’s Final Rule regarding long term firm transmission rights. *See Long-Term Firm Transmission Rights in Organized Electricity Markets*, Order No. 681, 71 FR 43564 (Aug. 1, 2006), FERC Stats. & Regs. ¶ 31,226 (2006) (“Order No. 681”); and Order No. 681-A, 117 FERC ¶ 61,201 (2006) (“Order No. 681-A” or “Rehearing Order”).

1 **Q. Please discuss the context of these changes in the CAISO's market redesign**
2 **effort.**

3 **A.** An integral component of the redesign of the CAISO's markets to utilize
4 Locational Marginal Pricing ("LMP") in place of the zonal design the CAISO
5 started with has been the design of a new financial instrument for managing
6 congestion costs. The CRR component of the CAISO's February 2006 MRTU
7 Tariff filing was developed through an extensive stakeholder process that began
8 in the spring of 2005 and featured regular meetings, CAISO white papers with
9 detailed examples, written comments by the parties, and an in-depth simulation
10 study in which the interested parties participated. The development of the CRR
11 structure also benefited from the full participation and review by consultants from
12 the firm LECG who have been involved in developing or advising on the
13 transmission right models used by the eastern ISOs and the Midwest ISO, as well
14 as participation and advice from members of the MSC.

15 **Q. Do you consider the policy and tariff improvements that are the focus of this**
16 **filing to be major reforms to the CRR release process?**

17 **A.** No, the foundational structure for allocating and auctioning CRRs within the new
18 CAISO markets, which was established with extensive stakeholder input and
19 conditionally approved by FERC in September, 2006, remains intact with this
20 filing. Market participants should be reasonably assured that all the key features
21 of this structure will be in place when the CAISO begins the first CRR release
22 process, including the tiered CRR allocation process, source verification for the
23 first-year allocation of CRRs, a priority process for renewing CRRs from year to

1 year, flexibility to nominate new CRRs for allocation, yearly and monthly CRR
2 auctions, and the ability to transfer CRRs through the Secondary Registration
3 System for CRRs traded in a secondary market. Nonetheless, the tariff
4 amendments proposed in this filing are important enhancements to the CRR
5 release process which will significantly improve the efficiency of the MRTU
6 markets to the benefit of all participants.

7 **Q. Why did the CAISO undertake a stakeholder process to develop these**
8 **improvements to the CRR structure?**

9 A. Since the February 2006 MRTU Filing, the CAISO has continued to work
10 extensively with market participants to identify, discuss and resolve CRR-related
11 issues. For example, the development of the Long Term CRR proposal that
12 comprised the CAISO's January 29, 2007 compliance filing for Long-Term Firm
13 Transmission Rights involved extensive stakeholder engagement over a five
14 month period that reviewed many aspects of the CRR allocation process, and led
15 to the creation of the Tier LT that is integrated with the three tiers of the CRR
16 Allocation process. In addition, the CRR Dry Run that was conducted between
17 July 2006 and January 2007 involved almost daily interaction between the CAISO
18 and market participants, and contributed significantly to the participants'
19 familiarity with and confidence in the working of the filed CRR proposal, and
20 also helped to identify areas where modifications were needed to improve the
21 established CRR rules, especially the way that CRR nominations sourced at
22 Trading Hubs interact with nominations sourced at individual generator nodes
23 within the Simultaneous Feasibility Test ("SFT"). Overall the CRR Dry Run has

1 provided valuable practical experience in the mechanics of submitting
2 nominations and bids within the multi-tiered CRR allocation and auction process,
3 which I believe has fostered broader understanding of the flexibility available,
4 especially to Load-Serving Entities, for acquiring CRRs that meet the needs of
5 each entity.

6 Along with these two significant undertakings since the filing of the MRTU tariff
7 in February 2006, the CAISO also has been directed by FERC to make several
8 tariff changes and additions related to CRRs. Upon the completion of the CRR
9 Dry Run, the CAISO organized these mandated CRR compliance matters,
10 stakeholder suggestions and CRR Dry Run observations into a framework of
11 potential CRR issues for review and development. The CAISO then initiated a
12 stakeholder process in February to tap the expertise and understand the
13 preferences of market participants on these various CRR-related issues.

14 **Q. How did the CAISO prioritize the issues reviewed by stakeholders?**

15 **A.** The parameters for each CRR-related issue were initially reviewed in a White
16 Paper that was posted on February 21, 2007 and further explained in a stakeholder
17 meeting on February 27. The CAISO proposed a schedule for reviewing and
18 resolving each issue based upon the anticipated time when FERC approval would
19 be needed to allow the initial CRR release process to proceed and be completed in
20 a timely manner prior to the startup of the complete MRTU market structure on
21 February 1, 2008. This staging of issues permitted the CAISO and stakeholders
22 to manage the workload in an orderly way over a period of months, allowing a

1 reasonable time to analyze and debate options without being overwhelmed by
2 having one deadline for resolving everything at once.

3 Thus, the most urgent matter involving the registration process for Candidate
4 CRR Holders and the template for the CRR Entity Agreement was reviewed first
5 by stakeholders, and then filed at FERC on March 9th to enable entities to qualify
6 to hold CRRs well before the CRR allocation begins. In the same filing the
7 CAISO presented the rules and process for obtaining necessary data on pre-
8 existing transmission rights, which will be fully accommodated through special
9 provisions under MRTU and must therefore be appropriately modeled in the CRR
10 network model prior to the start of the CRR release process.

11 The next group of issues was targeted for resolution and FERC approval by the
12 time the CAISO expects to begin accepting nominations for the first tier of the
13 first annual allocation process. These issues are the focus of the present filing and
14 were considered by stakeholders over the past two months with the expectation
15 that FERC approval could be obtained by mid-July. I will summarize the
16 discussion with stakeholders and the CAISO's proposed resolution for each issue
17 in the next sections of this testimony.

18 A final batch of CRR-related issues is still being resolved with stakeholder input,
19 and the CAISO anticipates additional FERC filings within the next three months
20 on those issues that do not require FERC approval until after the initial annual
21 allocation process is begun. These include: 1) CRR credit requirements; 2) more
22 detailed rules for transferring CRRs due to load migration between LSEs; 3) the
23 modeling of transmission outages in the CRR network model used in the monthly

1 CRR release process; and 4) details for the process for developing and verifying
2 LSEs' monthly load forecasts that are utilized in the monthly CRR allocation
3 process.

4 **Q. Please describe the stakeholder process culminating in this filing.**

5 **A.** The itemized proposals were developed in the course of a stakeholder process
6 conducted during February and March, but it should be noted that this two-month
7 process was really an extension of a much longer stakeholder process that
8 included the CRR Dry Run and Long Term CRR processes conducted over the
9 second half of 2006.

10 This stakeholder process generally followed a pattern where the CAISO would
11 post a White Paper providing an analysis of the issue to be resolved and offering
12 one or more options for resolving each issue, followed by extensive discussion
13 within all-day stakeholder meetings or two-hour conference calls, followed by
14 written comments submitted to the CAISO by the stakeholders. This interaction
15 led to the decision to discard some of the options, identification of new options,
16 revisions in others and development of some degree of consensus on all the issues
17 that are discussed below. The CAISO also asked stakeholders to submit two sets
18 of written comments at different stages of the process, which were posted on
19 March 9 and April 6.

20 Stakeholders also engaged in considerable discussion with the CAISO Board of
21 Governors at their public meetings on April 19 and April 30.

22 **Q. How did the CRR Dry Run inform stakeholders' review and consideration of**
23 **these CRR issues?**

1 A. The CRR Dry Run allowed load-serving entities to submit hypothetical CRR
2 nominations to give them experience with the CRR allocation process and the
3 methodology used to process nominations and award CRRs. The CRR Dry Run
4 encompassed several months of interaction, practice and regular feedback
5 between the CAISO and market participants, including entities that might
6 participate in the auctions. On March 30, the CAISO reported the results of this
7 Dry Run to the Commission. This report included the CAISO's financial analysis
8 of the Dry Run results that demonstrated the potential that, under the filed CRR
9 allocation rules, the portfolios of CRRs allocated to eligible LSEs would be
10 sufficient to enable them to manage the congestion exposure they would face at
11 the start-up of the MRTU markets. The CAISO and its market participants
12 learned a great deal from that process and used the results as the basis to
13 contemplate possible improvements to the filed CRR allocation rules.
14 Consideration of the CRR Dry Run results figures prominently in the discussion
15 of items 1, V.1 and V.2 later in this testimony.

16

17 **IV. ITEMS FOR WHICH TARIFF CHANGES ARE PROPOSED**

18

19 **1. Use of Trading Hubs as Sources for CRR Allocation Nominations**

20

21 **Q. Why is the CAISO proposing to revise its rules governing the use of Trading**
22 **Hubs as sources for allocated CRRs?**

22

23 **A.** During the CRR Dry Run a significant number of Tier 2 and 3 nominations did
24 not clear the Simultaneous Feasibility Test ("SFT") because of the infeasibility of
25 CRR nominations from Trading Hubs in combination with CRR nominations

1 from individual generator network nodes or “PNodes” when constraints become
2 binding.

3 In the first tier of the three-tier CRR allocation process, CRR nominations from
4 Trading Hubs have an inherent advantage over CRR nominations from generator
5 PNodes because, by definition, Trading Hubs comprise a bundle of PNodes and
6 only a relatively small percentage of the megawatts of each Trading Hub
7 nomination is located at each component PNode, in proportion to the weights
8 used to define the Trading Hub. When a constraint binds in the SFT, reduction of
9 a Trading Hub nomination can relieve the constraint only to the extent that the
10 Trading Hub weight has placed generation at the relevant PNode. As a
11 consequence, a given megawatt reduction in a Trading Hub nomination is far less
12 effective in relieving a constraint than the same megawatt reduction in the
13 nomination at a single generator PNode. This gives Trading Hub nominations an
14 inherent advantage over CRR nominations from generation nodes within an
15 objective function that seeks to maximize megawatts of CRRs allocated.
16 The story changes, however, in the second and third tiers of the process when
17 there were one or more binding constraints in tier 1 associated with specific
18 generator PNodes that are contained in the bundle of PNodes that make up the
19 Trading Hub. In the CRR Dry Run, when enough CRR nominations were
20 submitted to create a binding constraint within the SFT prior to tier 2 or tier 3, and
21 when the binding constraint was associated with a PNode that is part of the
22 Trading Hub bundle, it became highly unlikely that any additional CRR
23 nominations from Trading Hubs would clear. That’s because the individual

1 PNodes making up the Trading Hub must all clear in fixed proportions in order
2 for each MW of a Trading Hub CRR to clear, and if even one of those PNodes
3 cannot clear due to a previously binding constraint, then none of the Trading Hub
4 nominations can clear. Thus, the CRR Dry Run results included a significant
5 number of infeasible nominations with Trading Hub sources in the second and
6 third tiers.

7 The CAISO recognized immediately that these types of results would be
8 problematic if not corrected. For LSEs whose portfolio of verified CRR sources
9 is diverse enough to include reasonable quantities of both Trading Hubs and
10 individual generators and imports, these results might be manageable – the LSE
11 could nominate Trading Hub CRRs in the first tier and take advantage of that bias,
12 then nominate individual generator CRRs in the later tiers when few Trading Hub
13 CRRs might be expected to clear. But for LSEs who do not have such diverse
14 portfolios these results could adversely affect their ability to obtain sufficient
15 CRRs. Moreover, the observed effects if not remedied would create incentives
16 for LSEs to distort their CRR nominations and seek more or fewer Trading Hub
17 CRRs than they might otherwise want in order to maximize their expected overall
18 quantity of allocated CRRs. Finally, fixed proportions inherent in the definition
19 of each Trading Hub based on fixed weighting factors causes binding constraints
20 to have very large impacts on the feasibility of Trading Hub CRRs even when
21 those constraints are associated with generator PNodes with very small weights.
22 This is clearly not supportive of an optimally efficient release of grid capacity for
23 CRRs.

1 The CAISO first discussed these observations concerning Trading Hubs with
2 stakeholders in November 2006, during an all-day stakeholder meeting on the
3 Long Term CRR proposal while the CRR Dry Run was still being conducted, and
4 provided further analysis based on the final results of the CRR Dry Run.
5 Stakeholders expressed a strong interest in resolving this issue so they could
6 continue to have flexibility to nominate CRRs sourced at the Trading Hubs in all
7 the tiers of the allocation process without any inherent slant for or against Trading
8 Hub CRRs as compared to individual generator CRRs.

9 **Q. How were Long-Term CRRs affected by the identification of this potential**
10 **problem with CRR sources at Trading Hubs?**

11 **A.** Because this matter could not be thoroughly assessed and remedied by the time of
12 the January 2007 Long Term CRR filing, the CAISO's proposal on Long Term
13 CRRs stipulated that Trading Hubs could not be used as sources for these CRRs,
14 but at the same time also committed to study the problem further to find a solution
15 that would allow Trading Hub CRRs to be released as Long Term CRRs. Not
16 surprisingly the CAISO's filed stipulation received numerous objections in
17 parties' comments filed in that proceeding, so in the consideration of options for
18 resolving this matter the CAISO focused on possible remedies that would allow
19 Trading Hub nominations to participate in the Long Term CRR allocation without
20 adverse impacts.

21 **Q. What options were considered to allow LSEs to nominate CRRs from**
22 **Trading Hubs?**

1 A. The CAISO and its stakeholders investigated three different options for
2 addressing the “Trading Hub issue.” As I will describe, the so-called “Option 2”
3 is what the CAISO has decided to propose, which is to disaggregate CRR
4 nominations sourced at Trading Hubs for CRR allocation purposes into the
5 individual generator CRRs that comprise each Trading Hub. Not only was this
6 option the overwhelming favorite among stakeholders and the MSC, it really is
7 the most efficient and effective approach for allowing Trading Hub CRR
8 nominations to participate in the CRR Allocation process. In order to provide
9 context to the decision the CAISO has made, I will describe the three primary
10 options that the CAISO and the stakeholders entertained.

11 **Q. Please describe the CAISO’s first option for addressing the Trading Hub**
12 **issue.**

13 A. Option 1, which was the CAISO’s initial preference largely for implementation
14 reasons, involved setting limits on Trading Hub nominations without
15 disaggregating or otherwise redefining the Trading Hub for the purposes of CRR
16 allocation. Under this approach, for CRR Year One, this option would limit tier 1
17 nominations from each verified source, including each Trading Hub, to 50 percent
18 of the seasonal verified quantities (equivalent to 37.5 percent of the total verified
19 quantities). Then in tier 2, the CAISO would allow LSEs to nominate the 100
20 percent of seasonal verified quantities. The idea behind this option was that by
21 limiting the quantity of tier 1 nominations from all CRR sources while making
22 available the full 75 percent of grid capacity, the likelihood of a binding constraint
23 in tier 1 would be substantially reduced, thus avoiding the advantage that Trading

1 Hub nominations had in tier 1 of the CRR Dry Run as well as the drastic
2 reduction in Trading Hub awards in the later tiers.
3 For CRR Year Two and subsequently, Option 1 would continue to include
4 nomination limits in the Priority Nomination Process (Priority Nomination Tier -
5 tier 1 in years subsequent to CRR Year One). Although LSEs would be able to
6 nominate Long Term CRRs at Trading Hubs, additional nomination limits would
7 have been needed in Tier LT as well to minimize the Trading Hub bias in the
8 single-tier Long Term CRR allocation. Option 1 basically would spread out both
9 Trading Hub nominations and individual generator nominations over the multiple
10 tiers of the process for allocating one-year Seasonal CRRs, thereby reducing the
11 likelihood that binding constraints would cause a bias toward one or the other in
12 the first tier and possibly the second tier. At the same time, although Option 1
13 would have provided some mitigation of the effects observed in the CRR Dry Run,
14 it would still maintain the fixed weighting factors among the component PNodes
15 of each Trading Hub, thus maintaining the resulting inefficiency in the release of
16 grid capacity for CRRs. Still, the CAISO initially endorsed this approach because
17 it was simple to understand and feasible to implement without adversely affecting
18 the MRTU implementation timetable, while the other options were both thought
19 to be virtually impossible to implement in time to start the first-year CRR
20 allocation process on schedule.

21 **Q. Please describe the CAISO's second option for addressing the Trading Hub**
22 **issue.**

1 A. Option 2, which is the policy proposed by this filing, approaches the treatment of
2 Trading Hub CRRs in a vastly different manner. Under the CAISO's proposal,
3 Trading Hub CRR nominations in the allocation tiers will be disaggregated or
4 "unbundled" into individual Point-to-Point CRRs from all generator PNodes
5 making up the Trading Hub, based on the Trading Hub weighting factors. As a
6 result, the nominating LSEs will receive cleared bundles of Point-to-Point CRRs
7 rather than Trading Hub CRRs, and these bundles will generally be quite similar –
8 but not identical – in composition to the Trading Hub CRRs the LSEs nominated.
9 Most likely, the MW shares of only a few of the Trading Hub component PNodes
10 would be reduced relative to the Trading Hub weighting factors to maintain
11 simultaneous feasibility, while the majority of PNodes would not be reduced.

12 **Q. Under this proposal, will LSEs be able to nominate CRRs sourced at Trading**
13 **Hubs in Tier LT of the Year One CRR allocation?**

14 A. Yes, absolutely. This proposal completely eliminates the adverse effects we
15 observed in the CRR Dry Run because in the allocation SFTs there are no Trading
16 Hub nominations, just individual Point-to-Point CRR nominations sourced at
17 either generator PNodes or Scheduling Points (interties). Under this proposal
18 LSEs who have Trading Hubs as verified CRR sources would nominate CRRs
19 with Trading Hub sources in Tiers 1 and 2 and Tier LT of the first year annual
20 allocation process and Tier 1 of the first year monthly allocation processes. Of
21 course, the LSEs who nominate such CRRs would not receive Trading Hub CRRs
22 as a result, but would instead receive these bundles of individual generator PNode
23 CRRs as I explained above.

1 **Q. How will the nomination of Trading Hub CRRs for Long Term CRRs work**
2 **under the present proposal?**

3 **A.** In Tier LT of the first year allocation, an LSE with verified Trading Hub sources
4 would be able to submit nominations of Trading Hub CRRs up to the total MW
5 amount of the point-to-point CRRs the LSE was allocated in tiers 1 and 2 as a
6 result of its tier 1 and 2 nominations of CRRs sourced at that Trading Hub. The
7 cleared Point-to-Point CRRs from tier 1 and tier 2 that result from disaggregated
8 CRR nominations sourced at a Trading Hub may not be nominated as Point-to-
9 Point CRRs in Tier LT in CRR Year One, however. Let me offer an example.
10 For the sake of the example ignore the eligible quantity limits and other factors
11 that affect how many CRRs an LSE can nominate and just focus on the Trading
12 Hub portion of the LSE's portfolio. Suppose LSE-A has a verified CRR source
13 quantity of 100 MW at a particular Trading Hub, nominates 50 MW in tier 1 and
14 receives a bundle of point-to-point CRRs that add up to 48 MW as a result. The
15 result of 48 MW instead of 50 MW might result due to a binding constraint
16 affecting one or more component PNodes of the Trading Hub, or might be due to
17 rounding off of fractional CRR MW that are less than 0.05 MW to zero. I will
18 say more about this round-off below. Now LSE-A would be eligible to nominate
19 52 MW of Trading Hub CRRs in Tier 2, which is calculated by subtracting the
20 total MW of their tier 1 awarded bundle from the 100 MW verified source
21 quantity. Suppose LSE-A nominates 52 MW and receives a bundle that adds up
22 to 47 MW in Tier 2. Then when we add up the tier 1 and 2 results LSE-A has
23 been awarded a total of 95 MW of Point-to-Point CRRs as a result of its

1 nominations of Trading Hub CRRs. For the purpose of Tier LT the proposed
2 rules would allow LSE-A to nominate 95 MW of Trading Hub CRRs, assuming
3 the other applicable eligibility limits allow that amount.

4 **Q. This does not seem consistent with the filed Long Term CRR proposal, which**
5 **stated that in the first year an LSE can nominate for Long Term CRRs only**
6 **CRRs it was awarded in Tiers 1 and 2. In your example LSE-A receives**
7 **Point-to-Point CRRs as a result of its tier 1 and tier 2 Hub nominations, but**
8 **in Tier LT it cannot nominate those Point-to-Point CRRs; rather, it must**
9 **submit Trading Hub nominations for Tier LT if the Trading Hub was its**
10 **verified CRR source. Please explain.**

11 **A.** That is correct. In the first year the CAISO had to make a choice in crafting the
12 rules whether to maintain the principle that only CRRs awarded in tiers 1 and 2
13 can be nominated in Tier LT, or to maintain the principle of source verification.
14 The impossibility of maintaining both principles is one of the drawbacks of the
15 disaggregation option, but I believe it is not a large drawback. The CAISO opted
16 to maintain source verification because source verification is so fundamental to
17 the first year allocation approach
18 Maintaining the principle that only CRRs awarded in tiers 1 and 2 can be
19 nominated in Tier LT would require the LSE, if it wants to obtain Long Term
20 CRRs, to nominate from among the Point-to-Point CRRs it received as a result of
21 its Trading Hub nominations in tiers 1 and 2. Under this approach, LSEs would
22 be able to nominate and receive Long Term CRRs from individual generator
23 PNodes for which they had no verified sources since the verified source was the

1 Trading Hub, essentially “cherry-picking” the most valuable CRRs out of the
2 bundle of Point-to-Point CRRs they were awarded based on their source verified
3 Trading Hub nominations in tiers 1 and 2. Alternatively, under the proposed
4 approach, maintaining the principle of source verification requires LSEs to submit
5 Trading Hub nominations in Tier LT corresponding to their verified Trading Hub
6 sources. In this approach the point-to-point CRRs they obtained from Trading
7 Hub nominations in tiers 1 and 2 are used only for counting purposes to determine
8 an upper bound on how many Trading Hub CRRs the LSE may nominate in Tier
9 LT. Again, in running the SFT for Tier LT, the CAISO will disaggregate the
10 Trading Hub nominations into individual Point-to-Point CRRs from all generator
11 PNodes making up the Trading Hub. The set of Point-to-Point Long Term CRRs
12 the LSE receives will generally be pretty similar to the composition of the
13 Trading Hub because the disaggregation process utilizes all the same weighting
14 factors that define the Trading Hub. Thus the set of resulting Point-to-Point CRR
15 awards will contain the less valuable point-to-point rights as well as the more
16 valuable ones, which is appropriate given the fact that the Trading Hub was the
17 verified source.

18 **Q. Would LSEs be able to nominate Trading Hub CRRs in CRR Year Two and**
19 **beyond?**

20 **A.** Although in CRR Year One the CAISO decided to relax the principle that
21 nominations in Tier LT must come from CRRs awarded in tiers 1 and 2 in order
22 to preserve the linkage to source verification, when we get to CRR Year Two the
23 proposal now enforces that principle. This means that in the Priority Nomination

1 Process or “PNP” LSEs can nominate only CRRs they were awarded in the
2 previous year’s annual allocation process. Since no Trading Hub CRRs were
3 actually awarded in that process, LSEs would not be able to submit CRR
4 nominations with sources at Trading Hubs in the PNP. LSEs would, however, be
5 able to make new Trading Hub nominations in tiers 2 and 3 of the annual and tiers
6 1 and 2 of the monthly allocation process for CRR Year Two and beyond,
7 because these are free choice tiers and are not limited to previous CRR awards.
8 Of course the disaggregation of Hub nominations into the constituent point-to-
9 point CRRs would still be performed in order to avoid the adverse effects
10 observed in the CRR Dry Run. This procedure is described in proposed tariff
11 section 36.8.4.1.

12 **Q. How would CRRs sourced at Trading Hubs be treated in the annual and**
13 **monthly auctions?**

14 **A.** In the auctions participants can bid for Trading Hub CRRs and there will be no
15 unbundling or disaggregation of these bids into constituent Point-to-Point CRRs.
16 It is important to realize that the concern observed in the CRR Dry Run which this
17 proposal addresses through unbundling of Trading Hub nominations is really only
18 a concern with respect to CRR allocation, where there are no economic bids to
19 express the strength of participants’ desire to obtain – that is, their willingness to
20 pay for – CRRs. In the CRR allocation process it is critical that the rules and the
21 functioning of the optimization do not favor one type of LSE supply portfolio at
22 the expense of another type of portfolio. The auction is a completely different

1 situation, however, due to the fact that parties submit economic bids and pay
2 market-clearing prices for the CRRs they want to obtain.

3 **Q. What are the potential drawbacks to the disaggregation of CRR nominations**
4 **at Trading Hubs in the allocation process?**

5 **A.** There are three drawbacks that were identified and discussed in the stakeholder
6 process. First, a bundle of Point-to-Point CRRs will generally not perfectly match
7 the composition of the Trading Hub and therefore the settlement of the bundle
8 will not exactly offset the day-ahead market congestion charges for an energy
9 schedule of the same number of MW from the Trading Hub to the load location,
10 although we expect that the settlement of the disaggregated CRR bundle would
11 come close to matching the actual day-ahead congestion costs.

12 A second potential drawback derives from a design feature of the system that
13 tracks CRR awards and holdings, which limits the MW granularity of CRRs to
14 tenths of a MW. Thus, while the SFT carries out the calculations to ample
15 decimal places, the tracking system will round off to zero any results that are less
16 than 0.05 MW. This limitation can be eliminated by the time the second year
17 CRR allocation is run but cannot be changed for the first year. The system was
18 designed this way at a time when there was no expectation that such small MW
19 quantities would need to be tracked. But with the unbundling of Trading Hub
20 CRR nominations we can easily get into hundredths or even thousandths of a MW.
21 The large Existing Zone Generation Trading Hubs (“EZGen Hubs”) NP15 and
22 SP15 have roughly 400 and 200 constituent nodes respectively, and fractional
23 non-negative weighting factors that must add up to 1.0 for each Trading Hub. As

1 it turns out, the largest weighting factors for these Trading Hubs are no greater
2 than 0.1 MW, and beyond the largest dozen or so the sizes of the weighting
3 factors fall off rapidly. One impact of this is that when an LSE nominates
4 Trading Hub CRRs it generally will not receive as many CRRs as it nominates
5 even if there are no binding constraints and every component of the unbundled
6 Trading Hub clears the SFT. For example, our calculations indicate that a 50 MW
7 CRR nomination whose source is the NP15 EZGen Hub would return 47.8 MW to
8 the LSE just due to the rounding effect, without any constraints binding in the
9 SFT. The CAISO did discuss this in the stakeholder process and the general
10 sentiment was that it would be an acceptable first-year tradeoff for the other
11 benefits of adopting this option, as long as the CAISO would implement greater
12 granularity in the tracking system for year two. For example, our calculations
13 indicate that a 50 MW CRR nomination whose source is the NP15 EZGen Hub
14 would return 47.8 MW to the LSE just due to the rounding effect, without any
15 constraints binding in the SFT.

16 The third drawback identified is the “cherry-picking” opportunity I mentioned
17 earlier. Starting in year two, LSEs that were allocated point-to-point bundles as a
18 result of verified Trading Hub sources will be able to pick which point-to-point
19 CRRs they want to renew in the PNP, and probably will want to hold the most
20 valuable ones and not renew the others. This is really unavoidable with
21 unbundling however, because it would become extremely cumbersome if not
22 logically impossible to accurately track which CRRs in an LSE’s holdings are
23 linked back to first-year Trading Hub nominations versus its individual generator

1 nominations when the LSE had a mixed portfolio of verified sources in the first
2 year. Again, the stakeholder discussion suggested that this drawback is
3 acceptable given the other advantages of the disaggregation approach.

4 **Q. What are the potential benefits to the disaggregation of CRR nominations at**
5 **Trading Hubs?**

6 **A.** The disaggregation of Trading Hub CRR nominations into bundles of Point-to-
7 Point CRR nominations rather than putting Trading Hub CRRs into the SFT has
8 the important advantage of treating nominations from generation sources and
9 Trading Hubs equivalently if nominations need to be reduced to maintain
10 simultaneous feasibility. Neither has priority and neither is disadvantaged (except
11 for the MW rounding issue that applies to Trading Hub nominations). Another
12 important benefit for many stakeholders is that Trading Hub nominations in the
13 first year Tier LT will be permitted, because the nominations will be
14 disaggregated for purposes of the SFT and CRR awards, eliminating the concern
15 identified in the Dry Run about the bias in favor of Trading Hub nominations
16 within the single-tier structure for allocating LT CRRs. A third major advantage
17 is the greater efficiency that results due to the fact that more grid capacity can be
18 released as CRRs when we don't enforce the fixed Trading Hub weighting factor
19 proportions among the constituent PNodes of the Trading Hub and can allow the
20 SFT to minimize the MW reductions of CRR nominations.

21 **Q. What is the third option the CAISO considered for addressing the Trading**
22 **Hub issue?**

1 A. The CAISO and its stakeholders considered as a third option the creation of so-
2 called alternate or “Alt Hubs” corresponding to the defined Trading Hubs, but
3 comprised of a much smaller set of PNodes compared to the current EZGen Hubs.
4 The intent of this approach would be to reduce substantially the number of
5 potentially binding constraints, thus enabling more Alt-Hub CRRs to clear the
6 SFT when Trading Hub CRRs may be unavailable due to binding constraints.
7 After reviewing this alternative with stakeholders, the CAISO decided it could not
8 be implemented within the necessary time frame because it would take both a
9 considerable stakeholder process and a substantial CAISO human resource
10 allocation to perform analytical studies to arrive at the best specifications for the
11 Alt-Hub design. The complexity of the analytical effort arises from the fact that
12 the Alt Hubs must be comprised of a relatively small set of nodes to reduce the
13 likelihood of binding constraints, and still track the hourly market settlement price
14 of the corresponding EZGen Hubs pretty accurately in order to be useful for
15 managing LSEs’ congestion cost exposure.

16 **Q. Why does the CAISO favor Option 2 within this filing, despite its initial**
17 **support for Option 1?**

18 A. This is basically a matter where stakeholders’ input and preferences have guided
19 and shaped the CAISO’s proposal. In addition, Option 2 was the clear
20 recommendation of the MSC. While the CAISO expressed an early preference
21 for Option 1 because it offered the greatest likelihood of being easily
22 implementable, stakeholders weighed in with a clear preference for disaggregated
23 Trading Hubs even with the known drawbacks I described above. Stakeholders

1 also pointed out that Option 1 – limiting CRR source nominations in tier 1 and
2 Trading Hub nominations in Tier LT – would not solve the underlying problem
3 that gives Trading Hub nominations priority due to the greater effectiveness of
4 generator PNodes for relieving binding constraints. The CAISO then decided to
5 look harder at ways to simplify implementation of this approach and discovered it
6 was not as challenging as originally thought, so Option 2 quickly became the
7 obvious preferred choice.

8 **2. Ability to Renew Expiring Long Term CRRs, and to Transition**
9 **Expiring Existing Transmission Contract Rights and Converted**
10 **Rights to Long Term CRRs**

11
12 **Q. What is the genesis for this modification of the Long Term CRR renewal**
13 **process?**

14 **A.** This proposal was first suggested by an active participant in the CRR stakeholder
15 process, in response to a subtle point in the rules related to renewal of Long Term
16 CRRs and conversion of expiring Existing Transmission Contracts (“ETCs”) and
17 Converted Rights (“CVRs”) as filed in the CAISO’s January 2007 proposal. The
18 subtle point was that the rules actually created somewhat of a disadvantage to the
19 holder of the expiring rights relative to other LSEs with respect to obtaining new
20 Long Term CRRs utilizing the grid capacity that would be freed up by the
21 expiring rights. This change had not been initially identified by the CAISO as a
22 potential amendment to the CRR rules, but after working through some examples
23 the CAISO recognized the benefits to allowing holders of expiring rights the
24 option to nominate them for Long Term CRRs one year earlier, *i.e.*, in the year
25 prior to the year of expiration, thereby avoiding the noted disadvantage.

1 **Q. Please explain this change.**

2 **A.** The CAISO's January 2007 Long Term CRR filing described a mechanism by
3 which the holders of Long Term CRRs would be able to renew Long Term CRRs
4 for a second ten-year term. At the same time, the CAISO proposed to allow the
5 holders of expiring rights under ETCs and CVRs to transition them to Long Term
6 CRRs under the same process by which holders of expiring Long Term CRRs can
7 renew them. Certain parties who supported these provisions also pointed out a
8 detail of their implementation that would reduce their effectiveness by allowing
9 non-holders of the expiring rights a first opportunity to obtain CRRs utilizing the
10 transmission capacity freed up by the expiring rights. The CAISO now proposes
11 a simple rule change that addresses this problem. The new rule allows holders of
12 expiring rights to nominate them for Long Term CRRs one year earlier, *i.e.*, in the
13 year prior to the year of expiration, so that they may compete on an equal basis
14 with non-holders of such rights for Long Term CRRs utilizing the capacity
15 associated with the expiring rights the first time such capacity becomes fully
16 available in the CRR network model. By "fully available" I mean that it is the
17 first time the capacity associated with the expiring right becomes available for all
18 nine (9) years of the SFT run in Tier LT. The CAISO has not received any
19 comments opposing this change. The only additional point to note is that if the
20 LSE exercises this provision and seeks to obtain the Long Term CRRs the year
21 before the expiration of the rights it currently holds, it will actually receive a nine-
22 year extension of its current rights, not a 10-year extension, because nine years is
23 the scope of the SFT that is run for Tier LT at the time this provision is exercised.

1 My sense from the comments is that the option to obtain greater certainty in the
2 ability to renew or extend their rights is more important to the affected LSEs than
3 the difference between nine versus 10 years, but clearly the individual entities can
4 choose for themselves whether to exercise this option.

5 **3. Methodology for Allocating CRRs to Project Sponsors of**
6 **Merchant Transmission Facilities**

7
8 **Q. Please explain the genesis for the CAISO's Merchant Transmission CRR**
9 **proposal.**

10 **A.** The CAISO's MRTU Tariff articulated the fundamental principle – which had
11 already been incorporated in the CAISO's earlier conceptual filings on MRTU –
12 that parties who pay for the construction of transmission upgrades that are turned
13 over to CAISO operational control and do not recover their investment costs
14 through the CAISO's access charges or other regulatory cost-recovery mechanism
15 are entitled to receive CRRs that reflect the incremental transfer capability their
16 upgrade adds to the grid. Such transmission upgrades that do not receive
17 regulatory cost recovery are called “Merchant Transmission” projects. FERC's
18 September 2006 MRTU order approved this principle and directed the CAISO to
19 file additional details on how the Merchant Transmission sponsor's CRR
20 entitlement would be calculated.² FERC's *Order No. 681* on Long Term
21 Financial Transmission Rights also included a requirement to include such

² See *California Independent System Operator Corporation*, 116 FERC ¶ 61,274 at PP 873, and 1357 (2006) (“September 21 Order”).

1 provisions in the CAISO’s Long Term CRR proposal, and thus the proposal
2 embodied in this filing complies with both orders.³

3 **Q. What is the intended scope of this proposed methodology?**

4 A. The scope is very narrow. The methodology assumes that: the upgrade is well
5 defined in terms of the physical facilities being installed or upgraded; any
6 required mitigations for adverse impacts of the project, for example on transfer
7 capacity elsewhere in the grid or on Long Term CRRs, have been identified and
8 incorporated into the project; the upgrade is nearing the point of being energized
9 for operation; the merchant status and entitlement of the sponsor to be allocated
10 CRRs have been established; any operating parameters associated with the project
11 (thermal limits, operating procedures, path ratings where appropriate, etc.) have
12 been determined; and finally, the CAISO’s planning department has developed
13 the appropriate AC FNM incorporating the project for use in the CAISO markets.
14 Then the narrow task of the methodology being proposed here is to utilize the
15 “before” and “after” AC FNMs provided by grid planning to construct
16 corresponding DC FNMs for CRR purposes, and execute the sequence of steps
17 described below to determine the set of CRRs to be allocated to the project
18 sponsor.

19 **Q. Please describe the properties of Merchant Transmission CRRs.**

20 A. Merchant Transmission CRRs will be Point-to-Point CRRs defined by a CRR
21 Source location, CRR Sink location and MW quantity. In addition the project
22 sponsor would be allowed to elect either CRR Options or CRR Obligations, and

³ See, e.g., Order No. 681 at PP 210-216.

1 the term of the CRRs would be the minimum of 30 years or any pre-specified life
2 of the project in the event it is not intended to last 30 years. Also Merchant
3 Transmission CRRs will be differentiated by time of use period, either on-peak or
4 off-peak consistent with all the other CRRs the CAISO will release. The project
5 sponsor would be allowed flexibility to nominate up to five (5) CRR Source and
6 CRR Sink pairs it wants to obtain, and the CAISO's methodology would utilize
7 those nominations to compare their feasibility in the "before upgrade" and "after
8 upgrade" CRR network models to determine how many MW of the nominations
9 are feasible and appropriate to award to the sponsor based on the capacity added
10 by the upgrade.

11 **Q. Please explain the principles that guided the development of the proposed**
12 **Merchant Transmission CRR methodology.**

13 A. The features of Merchant Transmission CRRs and the basis on which such
14 Merchant Transmission CRRs will be made available were included in the
15 CAISO's MRTU Tariff and associated expert testimony as filed on February 9,
16 2006. The following are the basic principles that guided that policy development:

- 17 • An entity will be eligible for Merchant Transmission CRRs only if such entity has
18 not elected to recover costs of its investment through the CAISO's transmission
19 access charges or other regulated return on its investment;
- 20 • Entities may elect Merchant Transmission CRRs in the form of either CRR
21 Options or CRR Obligations;
- 22 • Merchant Transmission CRRs will remain effective for thirty years or the life of
23 the project, whichever is less;
- 24 • The quantity and source-sink pattern of Merchant Transmission CRRs allocated to
25 the entity will be commensurate with the transfer capacity that the project adds to
26 the CAISO Controlled Grid;

- 1 • The developer's entitlement to Merchant Transmission CRRs will begin when the
2 transmission project has been energized and operational control has been turned
3 over to the CAISO.
4

5 **Q. Please explain the process through which the CAISO will allocate Merchant**
6 **Transmission CRRs.**

7 A. The CAISO generally is proposing to follow a three-step process, which is
8 performed for each of the two time-of-use periods, to allocate Merchant
9 Transmission CRRs. The procedure must first determine how many of the Project
10 Sponsor's nominated CRRs would be feasible on the network model before the
11 transmission upgrade and reserve this capacity to prevent the Project Sponsor
12 from utilizing it. Next the procedure must check to see that adding the upgrade
13 into the network model does not adversely affect any of the previously released
14 CRRs or other existing encumbrances on transmission capacity, and address any
15 impacts that may be identified. Third, the procedure will apply the Project
16 Sponsor's nominations onto the network as modified by the first two steps and
17 determine how many of the nominated MW are feasible. The outcome of the third
18 step represents the incremental CRRs attributable to the project and these are
19 awarded to the sponsor.

20 **Q. When will the process for allocating Merchant Transmission CRRs be**
21 **conducted, and how will the CAISO ensure that the qualified Project**
22 **Sponsor receives the full amount of CRR revenues to which it is entitled?**

23 A. It should become apparent in the description below of the steps to be followed
24 that the process cannot be conducted and finalized before the Merchant
25 Transmission Facility is in operation. At the same time, the CAISO

1 acknowledges that the Project Sponsor should be entitled to receive CRR
2 revenues from its allocated CRRs starting on the date the project is energized and
3 turned over to CAISO operational control. Therefore although the process
4 proposed in this filing will occur after the project is energized, once the CRRs to
5 be allocated to the Project Sponsor are determined and are allocated, the sponsor
6 will receive the full revenue stream associated with those CRRs retroactive to the
7 in-service date of the project facilities.

8 To explain the timing a little more fully, the main thing to understand is that part
9 of the determination of the CRRs to be allocated to the Merchant Transmission
10 Facility involved assessing the impact of the project on all outstanding CRRs,
11 including those released in the most recent monthly process. Suppose a project is
12 scheduled to go in service during the month of October. About September 1
13 when the CAISO is preparing the network model for the monthly CRR allocation
14 and auction for October, the actual in-service date is not known for certain and
15 therefore the Merchant Transmission Facility is not included in the model. In fact,
16 even by October 1 when the CAISO is preparing the network model for the
17 November CRR processes the project will probably still not be energized.

18 Therefore the CAISO will conduct both the October and November monthly CRR
19 processes without including the Merchant Transmission Facility in the model.

20 Suppose that the project actually comes on-line on October 20, close to its
21 scheduled date. Then by November 1 when the CAISO is preparing the network
22 model for the December CRR release the Merchant Transmission Facility must be
23 included, which means that the Merchant Transmission CRRs need to be

1 determined and put into the December model as prior encumbrances before
2 running the December process. So during the last part of October the CAISO will
3 run through the steps to determine the Merchant CRRs, and in so doing will have
4 to assess the impact on outstanding CRRs, including the monthly CRRs released
5 for October and November, of adding the Merchant Transmission Facility into the
6 grid. When the process is completed, the December monthly CRR release will
7 correctly include both the Merchant Transmission Facility and the Merchant
8 Transmission CRRs. For November the Merchant Transmission CRRs will
9 already be allocated and therefore will be properly settled, and because the
10 Merchant Transmission Facility is included in the FNM for running the energy
11 markets, that capacity will be used by the market and will appropriately affect the
12 calculation of LMPs. For October, however, the Project Sponsor will have
13 missed the settlement of its CRRs for the period October 20-31 when the project
14 was in the FNM and used by the market but the Merchant Transmission CRRs
15 were not yet determined and obviously could not be settled. The CAISO will
16 therefore retroactively calculate and pay the CRR revenues due to the Merchant
17 Transmission Facility Project Sponsor for the missing October 20-31 period.

18 **Q, How does Step 1 in this methodology work?**

19 A. The CAISO will begin with a DC FNM that does not include the Merchant
20 Transmission Facility, but includes all adjustments for Transmission Ownership
21 Rights (TORs), and any Merchant Transmission Facilities for which Merchant
22 CRRs were previously allocated. The CAISO would apply to this model all
23 previously allocated CRRs (as well as ETCs and CVRs) as “Fixed CRRs,” all of

1 which should be feasible for this CRR model. The project sponsor would submit
2 up to five sets of CRR nominations for each time of use period, with each
3 nomination specifying a source, sink and number of megawatts of incremental
4 CRRs that it would like to receive for its upgrade. The CAISO would add the
5 nominated Merchant Transmission CRRs to the set of Fixed CRRs already
6 modeled on the FNM but, in doing so, would replace the nominated quantity of
7 each Merchant CRR with an extremely large, positive quantity that is large
8 enough to cause infeasibility when these CRRs are applied to the CRR network
9 model.

10 Next the CAISO will perform an SFT to determine the quantity of each
11 nominated CRR, at these inflated nomination quantities, that is feasible on the
12 transmission grid prior to including the transmission upgrade in the FNM. Since
13 the Merchant Transmission CRR nominations are deliberately large enough to
14 cause infeasibility and are the only control variables in this optimization, these
15 CRR nominations will be reduced to obtain feasibility. The CRRs cleared in this
16 fashion are referred to as “temporary test CRRs” in the filed tariff language,
17 because they are only a device used for the purpose of this procedure to reserve
18 capacity that is already available in the grid without the merchant upgrade and
19 thus to prevent the project sponsor from obtaining CRRs utilizing that capacity.
20 The objective function for the SFT in this step will maximize the MW amount of
21 these temporary test CRRs cleared.

22 **Q. Please describe Step 2 of the allocation process.**

1 A. In Step 2, The CAISO utilizes a DC FNM that includes the Merchant
2 Transmission project to assess the impact of the project on existing encumbrances
3 on the transmission system and, if necessary, identify any additional mitigation
4 such as counterflow CRRs the project sponsor may be required to hold. The
5 incorporation of the upgrade may have two impacts on the model. First, the flow
6 pattern of the network model may change because more/less impedance may exist
7 between two locations, thus potentially impacting the set of shift factors derived
8 from the original FNM. Second, the constraint limits within this model may
9 increase or decrease. The CAISO would apply “Fixed CRRs” to the CRR model
10 to represent existing encumbrances, including ETC, CVR and any previously
11 allocated Merchant Transmission CRRs for other projects, plus any previously
12 released CRRs that are still in effect. To the extent these Fixed CRRs are not
13 fully feasible, such infeasibility would be attributable to the merchant project
14 because the Fixed CRRs were all feasible on the network without the merchant
15 project. Thus this step would conclude with a procedure to identify a minimal set
16 of counterflow CRR Obligations that the sponsor would hold to render all the
17 previous encumbrances feasible on the network that includes the merchant project.

18 **Q. What happens in Step 3?**

19 A. Step 3 is where the CAISO finally determines the CRRs that can be allocated to
20 the project sponsor. Due to the term length of Merchant Transmission CRRs it is
21 necessary to ensure their feasibility both in the presence of existing encumbrances
22 on the grid and also in the absence of all such encumbrances, since any or all of
23 the existing encumbrances may expire while the Merchant Transmission CRRs

1 are still valid. Therefore the CAISO will utilize a multi-period SFT to
2 simultaneously optimize the set of awarded Merchant Transmission CRRs for two
3 sets of grid conditions, one set in which all the previous encumbrances are
4 modeled, including any required counterflow CRR Obligations assigned to the
5 project sponsor, and the “temporary test” CRRs created in Step 1, and another set
6 in which none of these previous encumbrances are modeled except for any TORs,
7 the so called “empty grid” conditions. As a result of this process, the nominated
8 Merchant Transmission CRRs that are feasible in the two-period SFT for each
9 time of use period will be allocated to the Project Sponsor.

10 **Q. Does the CAISO’s proposed methodology resemble methods used in other**
11 **ISOs?**

12 **A.** Yes. The methodology is modeled closely on the one approved by FERC and
13 currently in use by PJM, and as such has been successfully tested in practical
14 applications. In addition, CAISO staff had the expert support of a member of the
15 MSC and an LECG consultant who has worked on these matters for other ISOs.

16 **Q. Are there any open stakeholder concerns about the proposal you would like**
17 **to address?**

18 **A.** Overall, the stakeholders are generally supportive of the proposed approach. On
19 the matter of open stakeholder concerns, one of the difficulties the CAISO has
20 had to face in developing the present proposal has been to delineate the narrow
21 scope of this methodology versus other issues related to Merchant Transmission
22 projects that would be addressed in the CAISO’s transmission planning process.
23 At the present time the CAISO is conducting a process with stakeholder

1 participation to develop its compliance filings on the Commission’s Order No.
2 890, one of which will be a detailed filing on transmission planning later this year.
3 Because of the timing of the present CRR filing vis-à-vis the Order No. 890 effort,
4 the CAISO is focusing its efforts here on the narrowly-focused methodology to go
5 forward, leaving open other issues to be addressed later in the more
6 comprehensive transmission planning filing. For example, one element where
7 certain stakeholders have voiced concern is the need to prevent Project Sponsors
8 of Merchant Transmission from getting CRRs that utilize capacity that was
9 already in the network but was previously unusable and then was “awakened” by
10 the merchant project (also known as the “low-hanging fruit” issue). The CAISO
11 believes and has asserted during the stakeholder process that the transmission
12 planning process should and will provide the arena where efficient and beneficial
13 potential upgrades, and in particular opportunities to identify and exploit low-
14 hanging fruit, can be explored and incorporated in the transmission plan if
15 deemed appropriate. Given the fact that any Merchant Transmission upgrades
16 will have to be assessed by the transmission planning department either in the
17 context of comprehensive grid planning or in relation to a generator
18 interconnection, it would be excessively burdensome and complex to require the
19 methodology proposed here to prevent a Project Sponsor from capturing some
20 low-hanging capacity that the planning process missed or chose not to exploit.
21 Delaying the documentation of the details of grid planning to be filed in
22 compliance with Order No. 890, is not unreasonable given the fact that (1) there is
23 no evidence that any merchant transmission projects are in queue to utilize the

1 proposed methodology, and (2) for any merchant transmission already in service
2 the CAISO will file appropriate provisions for transition to MRTU that build upon
3 the arrangements established at the time such transmission was put in place.

4 Therefore, based on the narrow scope of the current proposal described above, the
5 CAISO believes that the proposed methodology will be an effective and robust
6 mechanism for awarding CRRs to Merchant Transmission Sponsors.

7 **4. Allocation of CRRs to Out-of-Control Area Load Serving Entities**

8 **Q. Please explain the motivation for the proposed rules for allocating wheel-
9 through CRRs to entities serving load outside the CAISO control area.**

10 **A.** The CAISO's filed MRTU Tariff provided an opportunity for an "Out of Control
11 Area Load Serving Entity" or "OCALSE" to be allocated CRRs in the same
12 process whereby LSEs serving internal load are allocated CRRs. That proposal
13 required among other things, that the OCALSE nominate a generating resource
14 located inside the CAISO Control Area as the CRR source. The Commission's
15 April 20 Order on Rehearing directed the CAISO to allow such OCALSEs to be
16 allocated CRRs to support their use of generating resources located outside the
17 CAISO Control Area. Such CRRs are considered to be "wheel-through" CRRs
18 because the CRR Source would be the Scheduling Point at which the OCALSE
19 imports energy into the CAISO grid, and the CRR Sink would be the Scheduling
20 Point at which the OCALSE exports energy from the CAISO grid to serve its load.

21 **Q. What principles did the CAISO follow in developing the rules to implement
22 this Commission directive?**

1 **A.** The first and most important principle followed was that LSEs are entitled to
2 participate in the CRR allocation process only to the extent that the load they
3 serve is truly exposed to congestion charges on the CAISO Controlled Grid. This
4 principle applies equally to LSEs serving internal load as well as to LSEs serving
5 external load. With respect to internal load the principle is reflected in the fact
6 that load served under ETCs or CVRs or under the net settlement option for
7 Metered Subsystems (MSS) is not eligible for CRR allocation. As I explain
8 further below, the provisions related to the calculation of CRR eligible quantities
9 for OCALSEs as well as the additional legitimate need showings proposed for
10 entities that want to obtain wheel-through CRRs are necessary to ensure that
11 entities that obtain such CRRs are legitimately using the CAISO transmission grid
12 to serve their load that is exposed to CAISO congestion charges. Another very
13 important and related principle is to make sure the rules for allocating CRRs to
14 OCALSEs would treat those entities effectively the same as internal LSEs,
15 without giving either type of entity an advantage or disadvantage relative to the
16 other with regard to obtaining CRRs through the allocation process that utilize
17 import capacity. On the CRR Source side, this principle requires that the
18 OCALSE demonstrate a verified CRR source according to the same rules that
19 apply to internal LSEs. Specifically, the OCALSE would have to have a supply
20 arrangement that delivered energy to the OCALSE during the 2006 historical
21 reference period, through either ownership of or an energy contract with an
22 external generating resource, plus the transmission arrangements to deliver the
23 energy to the import Scheduling Point on the CAISO grid. These requirements

1 are identical to those for internal LSEs seeking to be allocated import CRRs in
2 CRR Year One. On the CRR Sink side, this principle requires that: (i) the
3 OCALSE have a record of hourly historical exports at the Scheduling Point
4 desired as the CRR Sink, (ii) such exports not exceed the OCALSE's actual
5 hourly load that is exposed to CAISO Congestion Charges, (iii) the OCALSE
6 demonstrate transmission arrangements to deliver the exported energy from the
7 CAISO Controlled Grid to its load location, and (iv) the generating resource that
8 is the supply source not be inside the same control area as the load. These
9 requirements ensure parity between OCALSEs and internal LSEs – two classes of
10 entities whose loads are not identically situated. Note that I did not mention the
11 requirements on OCALSEs for pre-payment of the Wheeling Access Charge or
12 WAC – let me put that aside for the moment and focus first on the more
13 mechanical aspects of the proposal.

14 **Q. What data will the CAISO use to represent hourly historical exports?**

15 **A.** At each Scheduling Point we have tagged Real Time Interchange Export
16 Schedules for each Scheduling Coordinator that uses that Scheduling Point. This
17 data is the equivalent, for Real Time settlement purposes, of the Settlement
18 Quality Meter Data provided for internal loads, and therefore is the appropriate
19 data to use to establish historical exports at any given Scheduling Point by each
20 Scheduling Coordinator. As proposed in the CAISO's original tariff provisions
21 regarding OCALSEs, the eligible CRR quantities established through such
22 historical export data will be specific to each export Scheduling Point the
23 OCALSE uses, this requirement is not changed by the new provisions.

1 **Q. What about the requirement that the OCALSE’s exports from the CAISO**
2 **Control Area not exceed its hourly load exposed to CAISO Congestion**
3 **charges – how will this be verified?**

4 **A.** For this requirement the OCALSE will need to provide hourly historical load data
5 corresponding to the same time period as the hourly export data as well as to the
6 season or month and time of use period of the CRRs being sought. Such historical
7 load data would have to be calculated by the OCALSE in some fashion to reflect
8 actual exposure to CAISO Congestion Charges, for example by starting with the
9 OCALSE’s hourly metered load data and subtracting the amount of that load that
10 was served from other sources including the LSE’s internal generation and any
11 net imports it receives from other control areas. The requirement is spelled out in
12 proposed tariff sections 36.9.1 and 36.9.3. The proposed tariff language does not
13 require the OCALSE to submit all the raw data initially; rather, it requires the
14 OCALSE to submit the resulting hourly quantity of load exposed to CAISO
15 Congestion charges accompanied by a sworn affidavit by an executive authorized
16 to represent the OCALSE attesting to the accuracy of the data and
17 demonstration. Under the proposed tariff provisions the CAISO would have the
18 right to request and OCALSEs would be required to produce the raw data and the
19 calculations used to develop the submitted data set and the demonstration of
20 transmission rights to the OCALSE’s end-use customers.⁴

21 **Q. The required demonstrations that the OCALSE’s historical exports were**
22 **needed to serve load – both in terms of the showing of historical load exposed**

⁴ See Proposed tariff §§ 36.8.2, 36.9.1, and 36.9.3.

1 **to CAISO Congestion charges and the transmission arrangements to bring**
2 **power from the CAISO Scheduling Point to the load – seem like they should**
3 **apply even for the case where the OCALSE is utilizing a generating resource**
4 **inside the CAISO Control Area, as proposed in the original MRTU Tariff.**
5 **Will these requirements now apply to that case as well?**

6 **A.** Yes, definitely. Although the CAISO’s recognition of the need for these
7 additional showings was triggered by the Commission’s April 20 Order on
8 Rehearing to allow OCALSEs to obtain wheel-through CRRs via allocation, there
9 is no question that they should apply to all OCALSE participation in the
10 allocation process. The reason why the recent order triggered this recognition
11 was because it created a situation in which parties who are not serving load inside
12 the CAISO Control Area would have both the incentive and potentially the
13 opportunity to try to obtain as much of the import CRR capacity into the CAISO
14 Controlled Grid as possible, irrespective of their load-serving needs, simply
15 because such CRRs are valuable. Given the CAISO’s dependence on imports for
16 much of its ongoing power needs, it is critically important to ensure that
17 participation in the CRR allocation process is based on genuine exposure of load
18 to CAISO Congestion charges, which the new showing requirements are designed
19 to demonstrate. Any weaker requirements would impose undue risks on end-
20 users inside the CAISO Control Area as well as external end-users that are
21 genuinely exposed to CAISO Congestion charges. Parties who want CRRs for
22 imports into the CAISO or for wheel-through transactions beyond any obligation

1 to serve such load should be required to obtain them through the CRR auctions or
2 through secondary trades.

3 **Q. The source verification rules you described above seem comparable to the**
4 **corresponding rules for internal LSEs for CRR Year One. What are the**
5 **proposed rules for OCALSEs who want to obtain wheel-through CRRs in**
6 **subsequent years?**

7 A. For CRR Year Two and subsequent years, the rules for the load or export side will
8 be the same as for CRR Year One. On the supply or import side, there will be no
9 further requirements for CRR Source verification, just as there are none for
10 internal LSEs. The OCALSE may utilize the PNT of the annual CRR Allocation
11 process to nominate for renewal any wheel-through CRRs it was allocated in the
12 previous annual process, subject to the normal rules regarding eligible quantities
13 and the WAC pre-payment requirements. The OCALSE may also utilize the
14 “free-choice” tiers, Tiers 2 and 3, to nominate other Scheduling Points as CRR
15 Sources.

16 **Q. What about OCALSEs who want to utilize generating resources internal to**
17 **the CAISO Control Area as CRR Sources – is there any change proposed to**
18 **those rules?**

19 A. No. In this case the showing of legitimate need by the OCALSE is forward
20 looking as originally proposed, and must be demonstrated anew each year the
21 OCALSE wishes to be allocated CRRs from internal generating resources to
22 export Scheduling Points. Given such demonstration and pre-payment of the
23 WAC the OCALSE may utilize the PNT to nominate for renewal the CRRs it was

1 allocated the previous year, and may use Tiers 2 and 3 to nominate CRRs from
2 any new CRR Source locations it wishes to obtain.

3 **Q. Why is the CAISO proposing to treat source verification for CRR Sources**
4 **that are Scheduling Points based on a historical showing while retaining the**
5 **forward looking source verification for CRR Sources that are internal**
6 **resources in the CAISO Controlled Grid?**

7 **A.** In my testimony filed with the Commission in ER06-615 on February 9, 2006, I
8 explained that a fundamental principle underlying eligibility for CRR allocation is
9 that parties who support the embedded costs of the CAISO grid are entitled to an
10 allocation of CRRs. This concept is a forward-looking principle and is not based
11 on parties having paid for their past use of the transmission system based on their
12 past access charge payments. Based on this concept, I explained that for
13 OCALSEs the key question for eligibility is therefore the extent to which they
14 will continue to pay access charges during the term of the allocated CRRs.
15 Therefore, the showing of legitimate need for OCALSEs with CRR Sources was
16 appropriately based on having a contract for delivery from or ownership of an
17 internal generating unit for the term of the export CRR sought. With the
18 additional feature required by the Commission that OCALSEs be allowed to be
19 allocated wheel-through CRRs, it is not appropriate to extend such a forward
20 looking legitimate need showing for CRR Sources at Scheduling Points because,
21 as I explained above, awarding wheel-through CRRs through the CRR allocation
22 process creates new incentives and opportunities for parties to try to capture as
23 many valuable import CRRs as possible. A forward-looking showing for wheel-

1 through CRRs would violate a fundamental principle that was emphasized by
2 both the LECG consultants⁵ and the MSC throughout the entire CRR stakeholder
3 process since 2005, namely, to avoid creating situations where parties can
4 construct uneconomic contractual arrangements as a vehicle to obtain CRRs.

5 **Q. What discussion has the CAISO had with stakeholders regarding the rules**
6 **and procedures just described?**

7 A. Stakeholder discussion on how to incorporate the allocation of wheel-through
8 CRRs to OCALSEs into the CRR rules has been very limited, because this item is
9 a matter of compliance with the Commission's April 20 Order on Rehearing,
10 which was issued after the stakeholder process on these CRR matters had
11 concluded and the CAISO proposals on the other items were already finalized for
12 presentation to the Board of Governors. The CAISO did, however, issue draft
13 tariff language on April 27 containing most of the provisions discussed above,
14 and it held a conference call with stakeholders on May 1 during which all of the
15 above provisions were discussed including those provisions relating to sink
16 validation that were not in the April 27 draft. This conference call did enable the
17 CAISO to obtain helpful suggestions from stakeholders to clarify the tariff
18 language in certain areas and to complete the sink verification provisions to
19 ensure parity between OCALSEs and internal LSEs. Comments were received by
20 only two parties and such comments were in support of the additional measures
21 proposed by the CAISO in this filing in implementing the requirement that the
22 CAISO make available wheel-through CRRs.

⁵ See Testimony of Scott Harvey and Susan Pope submitted on February 9, 2006 in Docket No. ER06-615-000, Exh. ISO-2 at p. 110-111.

1 **Q. Please describe the requirements for prepayment of the Wheeling Access**
2 **Charge by OCALSEs.**

3 **A.** For the most part the WAC prepayment requirements for OCALSEs who want to
4 be allocated CRRs remain as they were stated in the previously filed MRTU tariff.
5 One new provision, which was directed by the Commission's April 20 Order on
6 Rehearing, allows an OCALSE to prepay the WAC on a monthly basis instead of
7 in an annual lump sum, provided the OCALSE meets certain basic
8 creditworthiness requirements and makes a binding commitment to pay the
9 monthly amounts over the course of the year.

10 **Q. Will the proposed rule changes enable OCALSEs to obtain Long Term**
11 **wheel-through CRRs?**

12 **A.** The Commission's April 20 Order on Rehearing did not address that matter, nor
13 does this filing. The April 20 Order indicated that the Commission would address
14 that matter in its order on the CAISO's January 29 filing on Long Term CRRs. It
15 is important to note, however, that the rules described above – specifically the
16 ability of OCALSEs to be allocated one-year Seasonal CRRs for wheel-through
17 transactions and to utilize the PNT to renew such rights annually on par with
18 internal LSEs – should be sufficient to meet the needs of OCALSEs for wheel-
19 through CRRs.

20

21 **V. ITEMS FOR WHICH TARIFF CHANGES WERE CONSIDERED BUT**
22 **WERE NOT ADOPTED**

23

24 **Q. Were there other potential changes discussed with stakeholders that are not**
25 **part of the CAISO's filing?**

1 A. Yes. In this section I will discuss two items for which tariff changes were
2 discussed with stakeholders but were not adopted. The two items are: (1)
3 proposed changes that would have expanded the set of resources that LSEs could
4 present for CRR source verification, and (2) potential changes to the set-aside of
5 import capacity on the interties to make the capacity available for the CRR
6 Auction process. The latter item was contained in the February 9, 2006 MRTU
7 Filing but the filed proposal was revisited in connection with the CRR Dry Run
8 results. However, before discussing these two items, it is important to review the
9 aspects of the particular balance between competing objectives that was struck by
10 the CAISO in the design of the CRR provisions in the February 9, 2006 MRTU
11 Filing and in the January 29, 2007 Long Term CRR filing.

12 **Q. Please provide a concise summary of the specific principles of balance you**
13 **will be discussing in the sections to follow.**

14 A. There are two main principles of balance inherent in establishing the rules for
15 releasing CRRs that figured prominently in the CAISO's design process over the
16 past two years. First is the balance between flexibility and certainty. Flexibility
17 refers to the ability of load-serving entities to modify their CRR holdings on a
18 regular basis to reflect changes in how they use the CAISO Controlled Grid to
19 serve their load. Proponents of greater flexibility would argue for provisions that
20 require or at least encourage the turnover of CRRs on a regular basis and limit the
21 amount of grid capacity that can be retained for many years by the initial holders
22 of CRRs. Such provisions would include, for example, relatively low quantity
23 limits or "sunset" provisions on use of the PNP, or a "go slow" or gradual

1 approach to the release of grid capacity for Long Term CRRs. In contrast,
2 proponents of greater certainty would argue for provisions that ensure their ability
3 to renew annually those one-year Seasonal CRRs they want to hold for as long as
4 they want to hold them, and for substantial amounts of grid capacity to be made
5 available as Long Term CRRs at the outset of MRTU.

6 A second principle of balance is the balance between a “high-priority, high-
7 volume allocation of grid capacity as CRRs to LSEs” versus “utilization of a deep
8 and liquid auction process in which CRRs are available to all participants and are
9 valued at market-clearing prices.” Proponents of greater emphasis on the
10 allocation of CRRs to LSEs would argue for processes through which LSEs can
11 be allocated most if not all of the CRRs they need to manage the congestion costs
12 associated with serving their load without having to manage the complication of
13 bidding into an auction and the uncertainty of the auction prices they may have to
14 pay for CRRs. This preference was clearly the dominant one during the 2005
15 stakeholder process in which the CAISO’s original CRR proposal was developed.
16 At that time there was some discussion of adopting an eastern ISO approach
17 whereby LSEs are allocated Auction Revenue Rights (“ARRs”) and then obtain
18 all their CRRs through auctions, but only a minority of stakeholders supported
19 this. In contrast, proponents of greater utilization of deep and liquid auctions for
20 CRRs would likely prefer the ARR approach rather than direct allocation of CRRs
21 to LSEs. In addition these parties would argue for provisions, under the CAISO’s
22 current approach of direct allocation of CRRs, that reserve a pre-determined and
23 significant amount of grid capacity for the auction processes, so that parties not

1 eligible for allocation of CRRs can be assured that reasonable volumes of CRRs
2 can be obtainable through the auctions.

3 **Q. What were the specific items or issues discussed in the recent stakeholder**
4 **process that are related to the principles of balance you just discussed?**

5 A. There are two specific items the CAISO discussed with stakeholders that I will
6 describe in detail below. The first item has to do with proposed changes to the
7 CRR source verification rules that would expand the set of resources that LSEs
8 may present for source verification, which in turn would expand the set of CRR
9 sources they may nominate in the verified tiers of the first-year CRR allocation
10 processes. The second item has to do with the set-aside of import capacity on the
11 interties to make such capacity available in the CRR auction processes. This set-
12 aside was already provided for in the CAISO's original MRTU tariff filing, but
13 pursuant to the Commission's September 2006 order on MRTU the CAISO and
14 stakeholders reviewed the specifics of that provision after observing the results of
15 the CRR Dry Run. I will now discuss each of these items in greater detail.

16
17 **1. Potential Changes to CRR Source Verification Rules**

18
19 **Q. Please provide the relevant background for this item.**

20 A. To begin with, I want to clarify that I will focus first on the CAISO's February
21 2006 filed MRTU Tariff proposal for the allocation and auction of one-year
22 Seasonal CRRs and Monthly CRRs. At the time that proposal was finalized and
23 filed, the FERC NOPR process on long-term transmission rights was just about to
24 begin, there was as yet no FERC rule on long-term rights, and it was the majority
25 view among CAISO stakeholders that we should not release long-term financial

1 transmission rights for the first year of MRTU. The limitation of CRR allocation
2 to these short-term rights for CRR Year One was an important and intended
3 feature of the CRR rules at the time. This is important to note as it was the
4 foundational context of the launch of CRRs in conjunction with the MRTU
5 market redesign in California. Later in this discussion I will come back to this
6 matter and discuss how the addition of long-term transmission rights to the
7 context of CRRs raised some concerns among some stakeholders about the
8 originally filed proposal. It is important to emphasize, however, that in
9 complying with the Commission's final rule on long-term transmission rights, the
10 CAISO and its stakeholders again explicitly considered these balancing principles
11 to arrive to a proposal that carefully weighed the various views on these matters.
12 The second fundamental point I should emphasize is that the February 2006 filed
13 proposal was based on a particular formulation of fairness or equity as applied to
14 CRR allocation. Although this particular formulation was supported by LSEs
15 who serve the vast majority of load within the CAISO Control Area, another also
16 reasonable and defensible formulation of fairness was debated extensively during
17 the 2005 policy resolution process on CRRs. The first formulation was the one
18 ultimately adopted as the basis of the CAISO's filed proposal, namely, that the
19 initial allocation of CRRs should reflect each LSE's exposure to congestion costs
20 at the start-up of the LMP-based MRTU markets. On this basis, it was
21 appropriate to propose allocation rules that consider how each LSE used the
22 CAISO grid – the specific source locations from which they obtained Energy to
23 serve their load – during a “snapshot” time period, as well as rules to allow

1 flexibility for LSEs to revise their CRR holdings over time as their supply sources
2 change. This is what the filed CRR allocation rules are designed to do. The
3 second formulation of fairness discussed in the 2005 process was based on the
4 concept that all LSEs pay the embedded costs of the CAISO grid through the
5 access charges (the transmission Access Charge and Wheeling Access Charge),
6 that these costs are applied on a per-MWh of measured demand basis and thus
7 reflect each LSE's share of the total load served via the CAISO grid, and that
8 CRR allocation should reflect the same "load ratio" shares. There were many
9 arguments presented for and against both formulations during the lengthy
10 stakeholder process, but the formulation based on the historical snapshot of grid
11 use, which the CAISO adopted as the basis for its CRR Allocation rules, was
12 ultimately determined to be the better approach because of its ability to
13 accommodate the diverse preferences of differently situated LSEs, and the
14 balance it offered between flexibility and certainty as I described above.⁶
15 Moreover, as I indicated above, it was the preferred approach of LSEs
16 representing the vast majority of end-users. That said, there is still a minority
17 view within the stakeholder community that was never fully comfortable with the
18 adopted approach and tends to view fairness in terms of load-ratio shares of CRR
19 capacity. That difference in point of view emerged again in the recent discussions
20 related to this filing.

⁶ The testimony of Drs. Scott Harvey and Susan Pope of LECG on the CAISO's CRR proposal, which accompanied the CAISO's February 2006 MRTU Tariff filing, explains in great detail how the formulation of fairness adopted in designing the CAISO's proposed CRR Allocation rules was carefully crafted to balance the diverse interests of LSEs having different approaches to energy procurement to serve their load, and also embodies important long-run economic efficiency properties. *See* Testimony of Scott Harvey and Susan Pope submitted on February 9, 2006 in Docket No. ER06-615-000, Exh. ISO-2 at p. 124-141.

1 **Q. Please explain the key elements of the February 2006 filed proposal that are**
2 **relevant to the current stakeholder discussions and this filing.**

3 Based on the adopted formulation of fairness tied to congestion cost exposure at
4 the startup of LMP, the MRTU Tariff filed in February 2006 proposed to allocate,
5 in the first two tiers of the annual process and the first tier of the monthly process
6 for CRR Year One, CRRs whose sources are “verified” based on supporting
7 information submitted by eligible LSEs demonstrating that the CRR sources they
8 wish to nominate in these tiers reflect actual locations where they received energy
9 to serve their load during a specific historical reference period. To be clear, such
10 source verification is not required for 100 percent of each LSE’s CRR Year One
11 nominations. Rather, the design of the CRR Year One allocation process is to
12 award source verified CRR nominations first, before allowing for “free choice” by
13 LSEs of non-verified source locations. The use of such a historical reference
14 period in this manner is crucial to avoid certain inefficient contracting incentives
15 that can arise when LSEs are allowed to enter new contractual arrangements and
16 then submit them to qualify for preferential CRR allocation. This point has been
17 strongly emphasized by both the MSC⁷ and the LECG consultants⁸ throughout the
18 development of the filed CRR proposal. Of course the filed proposal recognized
19 that LSEs’ supply arrangements and their associated needs for CRRs will change
20 over time, so in order to allow for such change without raising the incentive

⁷ See April 12, 2007 Opinion of the Market Surveillance Committee (MSC) “Recent Changes to the ISO Congestion Revenue Rights Proposal” at p. 1, 3; *see also* January 18, 2007 Opinion of the MSC on “Long-Term Congestion Revenue Rights Proposal” at p. 3, 4.

⁸ See Testimony of Scott Harvey and Susan Pope submitted on February 9, 2006 in Docket No. ER06-615-000, Exh. ISO-2 at p. 109-111.

1 concern noted by the experts the proposal offers ample “free choice”
2 opportunities for LSEs to nominate and be allocated CRRs from source locations
3 without any verification required. The crucial point of such an approach is to
4 allow sufficient opportunity for LSEs to be allocated CRRs from new source
5 locations, but without providing LSEs any priority, advantage, or guarantee of
6 being allocated CRRs based on new contracts they enter.

7 **Q. Does the filed proposal provide for any role for source verification beyond**
8 **CRR Year One, and if not, why not?**

9 A. No, the filed proposal does not provide for a specific source verification process
10 for years beyond CRR Year One.⁹ This rule was adopted because the purpose of
11 source verification in the proposal is to establish a first-year CRR allocation based
12 on the adopted formulation of fairness mentioned above, and then allow LSEs to
13 modify their holdings through the tiered structure of the allocation process in
14 subsequent years. That said, there is some continued impact in subsequent years
15 of the first-year verification-based allocation which comes about through tier 1 of
16 the annual allocation process for CRR Year Two and beyond, which is called the
17 Priority Nomination Tier or PNT. The PNT is an opportunity for LSEs to
18 nominate for renewal a portion of the one-year Seasonal CRRs they were awarded
19 in any of the three tiers of the previous year’s annual process. Thus an LSE could
20 submit to the PNT in CRR Year Two a CRR that was awarded in the source-
21 verified tiers of CRR Year One, or a CRR that was awarded in the free choice tier

⁹ There is one instance where post-Year One source verification is required, in conjunction with the allocation of CRRs to OCALSEs utilizing supply resources inside the CAISO Control Area, which I discussed earlier in this testimony.

1 (tier 3). One obvious implication of the PNT is that LSEs do have the ability to
2 select those Seasonal CRRs of their current holdings that they deem to be most
3 valuable and nominate those for renewal in the PNT before any LSEs can
4 nominate CRRs from sources that are not part of their current holdings. This
5 aspect of the filed CRR proposal was always recognized to be a “two-edge
6 sword.” On the one hand it gives LSEs a reasonably high degree of certainty that
7 they can renew CRRs annually when they need them for terms longer than just
8 one year. On the other hand it can allow an LSE to hold onto or “lock up”
9 valuable CRRs that it obtained via a verified source in CRR Year One but no
10 longer needs in conjunction with the actual supply resources it is using to serve its
11 load. I emphasize, however, that such behavior would depart from an LSE’s
12 primary purpose in being allocated CRRs, namely to enable it to manage the
13 congestion charges associated with using the CAISO grid to serve its load, and
14 would involve the LSE in speculative behavior. Remember that holding these
15 CRR Obligations allocated to LSEs could entail a charge to the CRR Holder if
16 congestion is in the opposite direction of the CRR. If the LSE holds only CRRs
17 that closely resemble its expected use of the grid in terms of sources, sinks and
18 MW quantities, the risk associated with CRR Obligations is minimized because
19 the CRR values and the congestion charges offset each other. Throughout the
20 CRR stakeholder process since 2005 the theme of minimizing LSEs’ congestion
21 risks was a continual topic of discussion, so I would caution against
22 overemphasizing the significance of such “CRR hoarding.” I should also note
23 that there were discussions during 2005 of the idea of continuing source

1 verification beyond CRR Year One, but this was eventually dismissed as (1)
2 unnecessarily cumbersome given the combination of a PNT with reasonable
3 quantity limits on each LSE's priority renewal eligibility, plus free choice
4 opportunities in all allocation tiers after the PNT (Tiers 2-3 of the annual process
5 and both tiers of the monthly process after Year One), and (2) likely to open up
6 the incentive problem mentioned earlier by creating preferential opportunities for
7 LSEs to obtain CRRs for their ongoing contracting decisions. The CAISO
8 recognized all these tradeoffs when we made the February 2006 filing and again
9 in the process leading to the January 29 Long Term CRR filing, and concluded
10 both times that the CRR proposal when viewed comprehensively as a whole
11 package was a proper balance of competing objectives, particularly because it
12 would allow for multi-year certainty for those LSEs who desire it, while requiring
13 a certain amount of each LSE's CRR holdings to turn over annually. Finally, I
14 must point out that through the turnover of CRRs the future allocation of CRRs
15 tends to converge the two different formulations of fairness I mentioned earlier.
16 That is, each LSE can use the free choice tiers to nominate those CRRs it
17 determines would be most effective in managing its expected exposure to
18 congestion, while at the same time each LSE's eligibility for CRRs is based on
19 the magnitude of its load. In other words, subsequent to the running of the PNT
20 all LSEs are competing on an equal basis, in proportion to their loads minus their
21 utilization of the PNT, for CRRs from free choice sources.

22 **Q. What potential changes to the filed CRR proposal did the CAISO identify for**
23 **discussion with stakeholders in the process leading up to the present filing?**

1 A. The CAISO and the stakeholders considered two specific changes to the rules for
2 CRR source verification that would expand the set of supply arrangements
3 eligible to be counted as verified sources for nomination in Tiers 1 and 2 of the
4 annual process and Tier 1 of the monthly process. The first change would relax
5 the requirement that Energy contracts submitted for source verification must have
6 delivered Energy to the LSE during the historical reference period, which the
7 CAISO proposed would be calendar year 2006. In relaxing the requirement, the
8 CAISO would allow LSEs to submit contracts that were signed in 2006 or earlier
9 for delivery of Energy in a future time period. Of the two changes considered this
10 one was by far the more controversial and requires detailed explanation, but allow
11 me first to mention and quickly dispose of the second change we considered.
12 The second change would relax the requirement that Energy contracts submitted
13 for source verification must be at least one month in duration, and would allow
14 LSEs to submit contracts as short as one day in duration. The one-month
15 minimum requirement was relaxed for the CRR Dry Run that the CAISO
16 conducted with stakeholders during 2006, so the question raised in the recent
17 discussions was whether to formally eliminate the one-month minimum or retain
18 it for the upcoming production CRR allocation. As it turned out none of the
19 stakeholders advocated relaxing the one-month minimum while several expressed
20 concern that assembling source verification data on a year's worth of daily
21 contracts would be excessively burdensome, so the CAISO is not proposing to
22 make this change and will retain the one-month minimum for CRR source
23 verification purposes. Before I conclude my discussion of this particular item, I

1 must point out that in preparation of tariff language for this filing we discovered
2 that the one-month minimum had been inadvertently omitted from the original
3 filing. Our intention to include this requirement is clearly documented in the
4 expert testimony of Drs. Scott Harvey and Susan Pope that was submitted in
5 support of the February 2006 CRR proposal,¹⁰ so we are in fact submitting new
6 language to reflect the one-month minimum requirement, but this is submitted as
7 a clean-up item rather than a policy change.

8 **Q. Why did the first issue, the expansion of the set of resources eligible for**
9 **source verification to include contracts for future energy delivery, generate**
10 **significant concern and controversy?**

11 A. There were certain factors and developments that caused this item to be identified
12 for discussion and to elicit great interest and concern. The first main factor was
13 the incorporation of Long Term CRRs into the filed CRR proposal. To backtrack
14 for a moment, the Commission granted conditional approval to the filed CRR
15 proposal in its September 2006 order on the MRTU Tariff, and in that order
16 accepted all of the design aspects discussed above, including the fairness or equity
17 formulation adopted as the basis for CRR allocation, the approach to source
18 verification, and the tiered structure of the allocation process including the
19 verified tiers, the PNT and the free choice tiers. At the time that order was issued,
20 however, the CAISO was partway through a new stakeholder process we had
21 convened to develop a proposal for Long Term CRRs in compliance with the
22 Commission's Order No. 681, its Final Rule on long-term transmission rights.

¹⁰ See Testimony of Scott Harvey and Susan Pope submitted on February 9, 2006 in Docket No. ER06-615-000, Exh. ISO-2 at p. 91-92.

1 Given the fact that the MRTU market redesign was well on the way to
2 implementation and the MRTU Tariff was substantially approved by the
3 Commission, compliance with Order No. 681 required the CAISO to design and
4 integrate an additional market element – Long Term CRRs – in a manner that
5 would both achieve the requirements and intent of the order and fit within the
6 carefully crafted balance of objectives and considerations that went into the
7 proposal for releasing one-year Seasonal and Monthly CRRs. Through an
8 intensive multi-month process and with impressive dedication of effort by the
9 stakeholders, the CAISO completed and filed its proposal on Long Term CRRs by
10 the deadline specified in Order 681.

11 At the same time, the Long Term CRR process did reawaken some issues that had
12 previously arisen in the 2005 CRR design process and probably would have
13 remained dormant absent the introduction of Long Term CRRs, because the
14 resolutions arrived at in the original CRR proposal were at least acceptable to,
15 even if not preferred by, nearly all stakeholders when the duration of CRRs issued
16 in CRR Year One was no longer than one year into the future. But with the
17 realization that CRRs issued in CRR Year One based on the filed source
18 verification rules could be converted, in a fairly substantial quantity, to 10-year
19 CRRs, there was some renewed alarm regarding the possibility that valuable
20 CRRs could be “locked up” for a long time based on the first-year source
21 verification, and that this could make it difficult for other LSEs to obtain CRRs
22 utilizing the same transmission capacity at a later time when their mix of supply

1 resources changes.¹¹ Based on the concerns expressed at the time of the Long
2 Term CRR filing, the CAISO committed to open stakeholder discussions
3 following that filing on ways to expand the set of resources eligible for source
4 verification to enable LSEs to obtain CRRs that will be needed in conjunction
5 with supply sources contracted to deliver energy at a future date based on
6 contracts signed during the 2006 historical reference period. This was one
7 approach suggested at the time to prevent LSEs from being “locked out” of CRR
8 capacity they plan to need in the future.

9 **Q. How did the CRR Dry Run results affect these concerns?**

10 A. On the one hand, the CRR Dry Run demonstrated that the filed CRR rules could
11 provide all LSEs with reasonably effective portfolios of CRRs for managing their
12 congestion costs under LMP. But recognize that “reasonably effective” rests on a
13 particular concept of effectiveness and the adopted formulation of equity. As
14 originally designed, the CRR rules were intended to provide a starting allocation
15 of CRRs that was both fair and effective in the sense that each LSE would receive
16 a set of CRRs whose payment stream would reasonably cover its expected
17 congestion costs under LMP, based on the set of supply resources it was utilizing
18 to serve its load during the historical reference period. On this basis I believe the
19 CRR Dry Run demonstrated that the filed rules are capable of delivering fair and

¹¹ As an aside to the line of argument above, I would suggest that the sudden alarm about CRR capacity being locked up in future years due to the introduction of Long Term CRRs might be as much a matter of perception as a reality. The PNT element of the original filed CRR proposal also allows CRR capacity to be retained by LSEs through annual renewal indefinitely into the future, and since the filed Long Term CRR proposal stipulates that each LSE’s MW eligibility to use the PNT is reduced by the MW of Long Term CRRs it holds, the net effect of introducing Long Term CRRs might not be that great. Indeed, in the original MRTU Tariff filing, before Long Term CRRs were part of the design, the CAISO and the Harvey-Pope CRR testimony clearly explained how the PNT would be an effective mechanism for LSEs who desire long-term certainty regarding their CRR holdings. *See, e.g.*, Testimony of Scott Harvey and Susan Pope submitted on February 9, 2006 in Docket No. ER06-615-000, Exh. ISO-2 at p. 112-116.

1 effective outcomes for LSEs and are therefore just and reasonable. On the other
2 hand, however, some LSEs – in particular San Diego Gas and Electric (“SDG&E”)
3 – looked at the Dry Run results and observed that the CRRs they received were
4 not a good reflection of how they plan to use the grid several years into the future
5 and, moreover, that they might face uncertainty regarding their ability to obtain
6 the needed CRRs in the future, depending on how other LSEs qualified for and
7 nominated CRRs under the first-year source verification rules. This concern
8 quickly led to objections by some LSEs to the historical reference period as a
9 questionable basis for first-year CRR allocation because it might not result in
10 allocations of CRRs that would reflect LSEs’ future perceived needs and could, at
11 the same time, allow some LSEs to lock up valuable CRRs in the first year that
12 they would be able to hold onto in future years even though they might not need
13 them for managing their congestion costs related to specific sources of energy.

14 **Q. Can you provide some more specific details about the concerns expressed**
15 **over the past few months and the situation of the party who expressed the**
16 **greatest concern?**

17 A. The first thing to observe is that these concerns were not new. They had arisen in
18 the original CRR design process in 2005 and were addressed, as described above,
19 through a balance between priority renewal and free choice in CRR Year Two and
20 beyond. As noted, I believe the balance embodied in the filed rules would have
21 put this issue largely to rest had it not been for the introduction of an allocation of
22 a substantial quantity of Long Term CRRs based on the first-year source
23 verification. Therefore, in the context of the Long Term CRR process the CAISO

1 proposed to update the historical reference period to make it more current and
2 bring it closer into alignment with the likely use of the grid by LSEs during 2008,
3 the first year of MRTU. In the Long Term CRR filing the CAISO committed to
4 change the historical reference period to calendar 2006 instead of the period stated
5 in the original filing. The one LSE most concerned about the source verification
6 rules, SDG&E, did not view this as an effective change, however, because in its
7 view all of the past several years provide a distorted representation of LSE
8 procurement practices due to the assignment by the CPUC of certain state-
9 negotiated energy contracts to each of its regulated LSEs. As proof of this
10 distortion SDG&E pointed to its historical use of certain critical transmission
11 facilities in the south to serve its load, which it argues is much closer to its
12 intended future use of the same facilities but is so under-represented in the
13 historical reference year as to prevent SDG&E from being allocated, in the source
14 verified tiers, anything but a small fraction of its expected need for CRRs across
15 these facilities.

16 **Q. How did the CAISO attempt to address this LSE's concerns, and what was**
17 **the result?**

18 A. In accordance with the commitment made in the final month of the Long Term
19 CRR process, the CAISO started a stakeholder process in which we described and
20 assessed the pros and cons of several proposals which were mostly variations on a
21 single theme, the theme being to expand the set of eligible resources for source
22 verification to include contracts signed by the end of 2006. This did not prove to
23 be a fruitful direction, however, because in order to have a large enough impact to

1 address SDG&E's concern it would introduce unintended distortions and side
2 effects into the entire CRR allocation process. To make this explanation more
3 concrete, consider two facts about using a single calendar year for CRR source
4 verification. First, using only a single year there is no double counting of supply
5 capacity by LSEs, because over the course of the year the generation owner
6 cannot sell the output of the same capacity more than once in any given hour.
7 Once the time period expands to multiple years, however, the same supply
8 capacity can be sold multiple times, to different LSEs for the same hours, months
9 and seasons in different years. Therefore any expansion of the historical period to
10 admit energy contracts for multiple years requires detailed rules for allocating pro
11 rata shares of each specific supply resource to the LSEs who have claims to it.
12 Clearly there is no unique or objectively correct way to do this, and most likely
13 there is no one way that would be agreeable to all LSEs. Yet absent such pro
14 rationing rules, the CRR Allocation process would have to deal with a pattern of
15 nominations that bear very little resemblance to the actual dispatch of resources to
16 serve load. Second, by admitting only resources that provided energy during the
17 historical reference period there is no need to incorporate into the CRR network
18 model generating resources that do not yet exist but that will be connected to the
19 grid in the future. A fundamental principle underlying all CRR release by the
20 CAISO, whether by allocation or auction, is that CRRs are released based on the
21 grid facilities that are part of the operational grid at the time the CRR network
22 model is formulated for the annual CRR process. Under the filed rules the
23 CAISO does not issue CRRs utilizing grid capacity that does not yet exist. If the

1 CAISO were then to allow LSEs to nominate CRR Sources corresponding to
2 generating resources that do not yet exist, these resources would have to be
3 interconnected to the grid model of the present. Again, the resulting pattern of
4 CRR nominations would likely depart considerably from a realistic dispatch of
5 supply resources to serve load, in particular by increasing the loading and
6 congestion on grid facilities that were not intended to accommodate the future
7 generating resources, because the new grid facilities that would be built to
8 accommodate the future generating resources would not be in the CRR grid model.
9 The CAISO did recognize that the impacts of both of these problems could be
10 limited by limiting the extension of the time horizon for future energy supply
11 sources, say to 2008 or at most 2009. But such an extension would be of no value
12 to SDG&E, whose supply resources utilizing the transmission capacity they want
13 CRRs for will come on-line mostly later than 2009. In summary, because of (i)
14 the difficulties just described in connection with expanding the source verification
15 period, (ii) the fact that the stated intent of the start-up allocation was never to
16 ensure full congestion coverage for all future expected usage of the grid, and (iii)
17 the potential for adverse contracting incentives if the role of the historical
18 reference period is altered to include more of a forward-looking criterion, in the
19 end the CAISO decided – and most stakeholders agreed – not to adopt any
20 extension to the verification rules.

21 **Q. What additional factors did the CAISO have to consider in completing its**
22 **assessment of potential changes?**

1 A. As discussed by Ms. Devi Le Vine in Exhibit No. ISO-2 and accompanying
2 attachments, the CAISO is about to begin its implementation of the first annual
3 CRR Allocation and CRR Auction process. In committing to a post-CRR Dry
4 Run examination of the need for any CRR rule changes it was never contemplated
5 that addressing issues raised by the Dry Run would entail revising any of the
6 design fundamentals and policy decisions made previously through the
7 stakeholder and FERC processes. It is essential to start the CRR allocation
8 process this summer in order to be ready for the start of the full MRTU market
9 structure in early 2008, and that would be impossible if any of the fundamentals
10 are reopened. Moreover, with great appreciation for the dedication of participants
11 to the CRR Dry Run and to this final review of the rules which led to certain
12 adjustments as proposed in this filing, the CAISO is confident that it has struck
13 the proper balance in the fundamental design features and decisions made
14 previously through the stakeholder process and as guided by the Commission's
15 prior guidance orders and Order Nos. 681 and 681-A.

16 **Q. Are there any aspects of the CRR rules that could be changed and would**
17 **alter the balance you discuss above, but would not affect the MRTU**
18 **implementation schedule?**

19 A. To begin with, it is important to note that as reflected in the timelines and work
20 plan included in Ms. Le Vine's testimony the CAISO has already had to
21 implement many of the preliminary activities to be ready for the start of the
22 allocation process later this summer. So depending on what rule changes are
23 considered, there will be some impact on the MRTU implementation process.

1 Before I consider this question further, I want to go back to the theme of my
2 opening comments in this section, that of the balance struck in the original CRR
3 design between flexibility and certainty. While the CAISO continues to believe
4 that the filed rules strike the right balance, there are certainly ways to change this
5 balance without adversely affecting the MRTU timetable. A couple of
6 suggestions have been mentioned in some of the stakeholder comments that
7 would fall into this category. For example, in the category of the more feasible
8 changes, CRRs allocated based on verified sources associated with certain energy
9 contracts could have a predetermined limit to the number of times they can be
10 renewed through the PNT, what you could call a “sunset” provision to reflect the
11 termination dates of the contracts. This would move the balance point in the
12 direction of greater flexibility by creating greater release of CRRs each year and
13 greater opportunity for LSEs to obtain CRRs from source locations they did not
14 previously hold. It is important that such a provision, if adopted, be applied only
15 at the initial source verification for CRR Year One, however, because as noted
16 earlier any kind of ongoing source verification beyond the first year would carry
17 with it the inefficient contracting incentives the MSC and LECG warned against,
18 not to mention the administrative complexity of conducting annual source
19 verification. The CAISO did not deem it appropriate to propose such a rule
20 change at this time primarily because there are incentives inherent in the
21 “obligation” character of CRRs allocated to LSEs to induce LSEs to release CRRs
22 they do not need for managing their congestion exposure. But if the Commission

1 deems such a change appropriate the CAISO could implement it without
2 jeopardizing the MRTU schedule.

3 Another potential change that would have minimal implementation requirements
4 would be to take a more “go slow” approach to the release of Long Term CRRs
5 by adopting measures that cause less grid capacity to be allocated to these rights
6 in the first year, as has been advocated by the CAISO’s Market Surveillance
7 Committee. Such an approach could be done in a couple of different ways. The
8 most obvious would be simply to reduce the quantities of Long Term CRRs LSEs
9 may nominate in Year One below values the CAISO proposed in its Long Term
10 CRR filing, which were 50 percent of each LSE’s Adjusted Load Metric, with an
11 associated limit of 60 percent on overall grid capacity available for Long Term
12 CRRs. Such an approach may, however, have undesirable impacts on LSEs who
13 have a high degree of reliance on long-term supply arrangements for which they
14 want long-term certainty regarding their CRR holdings. Perhaps the adoption
15 general limits that are lower than the CAISO’s proposed limits could be combined
16 with a provision to allow an LSE to exceed the general eligibility limit based on
17 generation ownership or a showing of long-term contract quantities over and
18 above the limit. Such changes to the rules would require the CAISO to perform
19 some additional manual verification processes and/or adjustments to the CRR
20 network model transfer capacities for Tier LT, but could be accommodated
21 without jeopardizing the implementation timetable.

22 The last potential change I should mention is a suggestion that has been advocated
23 somewhat enthusiastically by at least one stakeholder recently. That suggestion is

1 to reduce the amount of grid capacity available for the allocation processes and
2 reserve some for the auction. The reduction would be across the entire grid, not
3 just on the interties as the CAISO has already adopted in its filed tariff (see Item
4 V.2 below). In the last all-day stakeholder meeting leading up to the present
5 filing the CAISO put out a version of this idea for consideration, suggesting that
6 the capacities of all grid facilities would be lowered to 60 percent of their rated
7 values for the annual CRR allocation process instead of the 75 percent value in
8 the current rules, and then raised back up to 70 or 75 percent for the annual
9 auction process. In conjunction with such a change, the capacity limit for the
10 Long Term CRR allocation would need to be lowered from its current 60 percent
11 value to something like 50 percent, to prevent any binding constraints that might
12 arise in Tier LT from spilling over to the annual allocation tiers in the same or
13 subsequent years. This type of change to the rules could be accommodated fairly
14 easily because it requires only making some changes to parameter settings when
15 the CAISO prepares the network model for the CRR processes.¹²

16 **Q. Why did the CAISO not adopt any of these changes prior to filing?**

17 **A.** It goes back to the adopted principles of balance with which I started this
18 discussion. A major challenge associated with putting together a good set of rules
19 for allocation of financial transmission rights has to do with striking the proper
20 balance to accommodate the diverse preferences and business models of the
21 whole group of participating LSEs. At the end of the day, the CAISO believes

¹² It is important to note that the idea just mentioned is only feasible with respect to auction processes that are already included in the CRR design. The idea of creating a new auction process, which some parties have proposed for Long Term CRRs for example, and incorporating that into the CRR production process is unequivocally impossible to do without major impact on MRTU implementation.

1 that none of these changes tip the balance in a direction that is necessarily more
2 desirable for the market as a whole. Even the seemingly modest changes
3 mentioned above, which might also be just and reasonable, could be problematic
4 from a stakeholder perspective because they do deviate from the filed proposals
5 which were developed through lengthy stakeholder processes and reflect careful
6 balancing of often competing objectives. Having considered all the reasons why
7 the CAISO is proposing what is contained in this filing, which I reviewed above
8 and include efficient market incentives, the response to the Commission's long-
9 term transmission rights rule, and the diversity of stakeholder concerns, the
10 CAISO decided that it is important to preserve most of its original proposal and
11 not continue to fine tune the balance in favor of any particular stakeholder or
12 group of stakeholders.

13

14 **2. Set-aside of Import Capacity for CRR Auctions**

15 **Q. Earlier you mentioned the set-aside of import capacity on the interties. Please**
16 **explain the discussion about it in the recent stakeholder process.**

17 A. The CAISO's filed MRTU Tariff provides for a certain quantity of the import
18 capacity on each intertie between the CAISO and neighboring control areas to be
19 set-aside from the annual and monthly CRR allocation process to be made
20 available in the corresponding CRR auctions. FERC approved this provision in
21 its September 2006 MRTU order and directed the CAISO to report on the
22 effectiveness of the filed rules based on the experience of the CRR Dry Run. The

1 purpose of including this item in the recent stakeholder process was to consider
2 whether the results observed indicated a need for any changes to the filed rules.

3 **Q. What was observed in the CRR Dry Run?**

4 A. Since I already explained the underlying concept and the calculation in the
5 previous section, I will jump right into the Dry Run results. The CRR Dry Run
6 demonstrated that for many interties and many CRR terms (season/TOU and
7 month/TOU): (1) more import capacity was available for auctions than was
8 initially set aside, due to the fact that LSEs often did not nominate as much as
9 they were eligible for in the CRR allocations; (2) on some interties the auction
10 participants did not bid for much of the available capacity; and (3) on other
11 interties the available capacity attracted significant quantities of bids and
12 significant quantities of CRRs were awarded. There were some instances,
13 however, where parties did bid for available import capacity but very small
14 quantities cleared the auction, mainly due to “downstream” constraints within the
15 CAISO system that caused the import CRRs to be infeasible.

16 **Q. Do these instances where small quantities cleared the auction indicate a need
17 to change the filed rules?**

18 A. No, because such results could easily change if other auction participants bid to
19 obtain export CRRs on these interties, which would create counterflows in the
20 CRR optimization and enable more import CRRs to clear. There is an important
21 difference between how to think about the allocation results versus how to think
22 about the auction results when considering the Dry Run. In the case of the
23 allocation, LSE participants were all interested to get an initial assessment of how

1 well the CRR allocation rules could provide sufficient CRRs for them to manage
2 expected congestion under MRTU. Indeed the financial analysis of the Dry Run
3 results was conducted explicitly to provide this kind of information, and the
4 source verification was conducted to provide some realism to the sets of eligible
5 sources LSEs could nominate in the verified tiers. In the case of the auctions,
6 however, there is no way to say how realistic the submitted bids were, that is, how
7 good a picture they provide of the bidding behavior we can expect to see in
8 production. Therefore, whereas I view the Dry Run allocation process as a
9 demonstration of the capability of the filed rules to provide each LSE with a
10 portfolio of CRRs that comes reasonably close to covering its expected
11 congestion exposure at MRTU startup, I view the Dry Run auction process as
12 little more than a demonstration that the systems work and a view of one potential
13 scenario of bidding behavior and outcomes. With respect to the item at hand, the
14 set-aside quantities were a result of the Dry Run allocation, specifically the source
15 verification process, whereas the quantities of import CRRs that cleared the
16 auction were very much a result of how the participants bid. Putting all these
17 observations together the CAISO concluded that there is no evidence to say that
18 changes to the rules are needed. Overall the CAISO believes that the results
19 demonstrate the viability and effectiveness of the MRTU Tariff provisions as
20 originally filed.

21 **Q. Are there any open concerns stakeholders may raise in response to this**
22 **CAISO conclusion, and did the CAISO attempt to address them?**

1 A. Among stakeholders the predominant though not unanimous view of LSEs
2 supports the CAISO's recommendation not to change the filed provisions. Among
3 parties not eligible for CRR allocation, however, there is probably still some
4 uncertainty whether the filed rules will not ensure sufficient capacity for CRRs is
5 available in the auctions. This concern is related to the change of the historical
6 reference period to calendar 2006. Recall that the set-aside calculation is based
7 on the quantities of import supply sources the LSEs submit for the source
8 verification process. One concern that has been raised, therefore, is that with the
9 CAISO's January 2007 proposal to change the historical verification period to
10 calendar 2006 from the previously filed September 2004 to August 2005 period,
11 the source verification data set could change significantly and the CRR Dry Run
12 set-aside quantities might no longer be a good indicator of how much capacity the
13 set-aside rules will make available for the auctions once we get into the
14 production CRR process. The CAISO expects, however, that the change of
15 historical reference year should not have a large impact on the set-aside quantities
16 because in general the reliance of LSEs on imports has not changed significantly
17 from 2004 to 2006. Not to rely on such a broad observation, however, over the
18 past two months the CAISO did identify and explore with stakeholders some
19 potential changes to the set-aside provision that could provide greater certainty
20 regarding the set-aside quantities without waiting for the actual submission of
21 source verification data and re-calculation of the set-aside quantities. None of the
22 options considered, however, was sufficiently narrowly targeted to the concern at
23 hand as to be implementable without having broader impacts on the CRR

1 allocation design such that they would require much more extensive stakeholder
2 discussion of some of the fundamentals of the CRR design. The CAISO therefore
3 is not proposing any change to the filed MRTU Tariff provisions related to this
4 item.

5 **Q. Does this conclude your testimony?**

6 A. Yes it does.

7

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

_____)
City of Folsom)
State of California)
_____)

AFFIDAVIT OF DR. LORENZO KRISTOV

I, Lorenzo Kristov, being duly sworn, depose and say that the statements contained in the foregoing Direct Testimony on behalf of the California Independent System Operator Corporation in this proceeding are true and correct to the best of my knowledge, information, and belief.


Dr. Lorenzo Kristov

~~Subscribed and sworn before
me this ___ day of May, 2007~~

~~_____
Notary Public, State of California~~

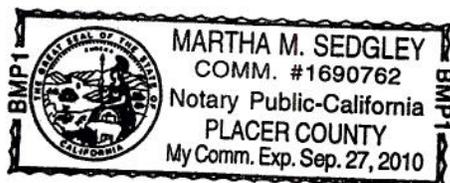
~~Printed Name: _____~~

~~My Commission Expires: _____~~

State of California County of
Sacramento
Subscribed and sworn to (or affirmed)
Before me on this 3rd day of May, 2007, by
Lorenzo Kristov
personally known to me or proved to me on
the basis of satisfactory evidence to be the
person(s) who appeared before me.

Signature Martha M. Sedgley

(Seal)



Attachment E

Exhibit ISO-2- Direct Testimony of Debi LeVine

1 **I. INTRODUCTION**

2 **Q. Please state your name, title, and business address.**

3 **A.** My name is Deborah A. Le Vine and I am the Director of Market Services and
4 Program Manager of the Market Redesign Technology Upgrade (“MRTU”)
5 program for the California Independent System Operator (“CAISO” or “ISO”).
6 My business address is 151 Blue Ravine Road, Folsom, California 95630.

7 **Q. In what capacity are you employed?**

8 **A.** As the Director of Market Services I am responsible for the “bid-to-bill” process
9 of the CAISO’s markets. This means I oversee market operations including
10 support of the grid operations, evaluating market performance, reporting market
11 status, quality review of market data, billing, settlements, reruns and settlements
12 projects. As the Program Manager of MRTU, I am responsible for the overall
13 delivery of the program based on the specified scope, schedule and budget,
14 including day-to-day operation of the program which includes 16 separate
15 projects; managing and communicating upwards to the Program Sponsor, Steering
16 Committee, Board of Governors, and stakeholders, to ensure that they have the
17 necessary information to execute their roles; setting overall direction for the
18 program team; issue resolution; tracking of scope, schedule and budget; and
19 ensuring that adequate knowledge transition is planned and executed.

20 **Q. Please describe your educational and professional qualifications.**

21 **A.** I received a Bachelor of Science degree in Electrical Engineering from San Diego
22 State University in San Diego, California in May 1981. In May 1987, I received a
23 Master in Business Administration from Pepperdine University in Malibu,
24 California. In December 2002, I completed an Executive Program in Driving
25 Government Performance: Leadership Strategies that Produce Results from the

1 John F. Kennedy School of Government, Harvard University in Cambridge,
2 Massachusetts. In May 2007, I am on track to complete an Advanced Masters
3 Certificate in Project Management from Villanova University in Villanova,
4 Pennsylvania. Additionally, I am a registered Professional Electrical Engineer in
5 the State of California.

6 **Q. Have your testified previously before this Commission?**

7 **A.** Yes. I have previously submitted testimony on behalf of the ISO in Docket No.
8 ER98-1057-000, et al., concerning the ISO's Responsible Participating
9 Transmission Owner Agreements; Docket No. ER98-992-000, et al., pertaining to
10 the ISO's Participating Generator Agreements; Docket No. ER98-1499-000, et
11 al., involving the ISO Meter Service Agreements for Scheduling Coordinators and
12 ISO Metered Entities; Docket Nos. ER98-997-000, et al., ("QF PGA
13 proceeding"), regarding the application of the ISO's Participating Generator
14 Agreement to qualifying facilities ("QFs"); Docket No. EL99-93-000, et al.,
15 regarding the Turlock Irrigation District and Modesto Irrigation District
16 complaint; Docket No. ER01-66-000, et al., regarding Pacific Gas and Electric
17 Company's ("PG&E") Transmission Owner ("TO") Tariff ("TO 5 Filing");
18 Docket No. ER00-2019-000, et al., involving the ISO's transmission Access
19 Charge filing as required by California State Legislation; Docket No. ER00-2360-
20 000, et al., regarding the PG&E Reliability Service Tariff; Docket No. ER01-839-
21 000, et al., regarding PG&E's transmission Access Charge implementation;
22 Docket No. ER01-831-000, et al., regarding San Diego Gas & Electric
23 Company's ("SDG&E") transmission Access Charge implementation; Docket No.
24 ER01-832-000, et al., regarding Southern California Edison Company's ("SCE")
25 transmission Access Charge implementation, (collectively referred to as the

1 “Implementation Dockets”); Docket No. ER01-313-000, et al., regarding the
2 ISO’s position with regard to certain billing determinants for the ISO’s Grid
3 Management Charge (“GMC”); Docket No. ER02-2192-000, et. al., modifying
4 the rate stabilization plan of the transmission Access Charge and clarifying what
5 Scheduling Coordinators pay the ISO Access Charge; Docket No. EL03-15 and
6 EL03-20 et. al., regarding the Cities of Anaheim and Riverside turning over
7 Operational Control of Northern Transmission System and Southern Transmission
8 System to the ISO; and Docket Nos. ER06-354 and EL06-44 regarding increases
9 in the bid caps supplemental energy and adjustment bids. Additionally, I have
10 testified in a number of proceedings before the California Public Utilities
11 Commission.

12 **Q. What is the purpose of your testimony?**

13 **A.** The purpose of my testimony is to describe the timeline and activities required to
14 implement the Congestion Revenue Right (“CRR”) Year One process, which
15 includes the allocation and auction of one-year annual and monthly CRRs,
16 allocation of Long Term CRRs, and the allocation of Merchant Transmission
17 CRRs (“CRR Year One Process”) and to inform the Commission of the potential
18 impact of any significant policy changes on: (i) the implementation of the CRR
19 Year One Process, and (ii) the start-up date for MRTU markets. In support of this
20 testimony, and to assist the Commission and others in understanding the details of
21 what is required to implement the CRR Year One Process under the MRTU
22 Tariff, I am providing four exhibits in addition to this testimony (Exhibit No.
23 ISO-3, Exhibit No. ISO-4, Exhibit No. ISO-5 and Exhibit No. ISO-6).

1 **Q. Please describe the Exhibit No. ISO-3.**

2 **A.** Exhibit No. ISO-3 is a general timeline from March of 2007 to February of 2008
3 indicating: (i) the time period involved in preparing for the CRR Year One
4 Process, (ii) the time period for the annual CRR Allocation and Auction process,
5 including allocation of Long-Term CRRs and Merchant Transmission CRRs, and
6 (iii) the time period for the monthly CRR Allocation and Auction process. As
7 illustrated in Exhibit No. ISO-3, the data-gathering process in support of the CRR
8 Year One Process has already begun to meet the MRTU start-up date on the
9 February 1, 2008 Trade Date. The time period for the annual, CRR Year One
10 Process begins in July of 2007 and runs through December of 2007. In essence,
11 the process of issuing CRRs under the MRTU Tariff “goes live” in July of 2007.
12 Exhibit No. ISO-3 also indicates that prior to July of 2007 market participants
13 must begin the registration process for the CRR Year One Process and must
14 submit certain required data to the CAISO. Some of the registration and data
15 submission activities began in April of 2007.

16 **Q. Please describe the Exhibit No. ISO-4.**

17 **A.** Exhibit No. ISO-4 provides greater detail regarding the CRR registration and data
18 submission requirements that are to take place between April 4, 2007 and June 20,
19 2007. This Exhibit provides a breakout of the various steps in the CRR
20 registration and data submission process and provides the scheduled starting date
21 and ending date for each activity. For example, some of the activities include the
22 following: (i) a candidate CRR Holder submitting an application form and

1 Information Request for the CRR Entity Agreement (authorization for this pro
2 forma agreement was filed with the Commission on March 9, 2007); (ii) a
3 candidate CRR Holder submitting data for the CRR Year One source and sink
4 verification requirements; (iii) the CAISO notifying a candidate CRR Holder if
5 their application is deficient; (iv) the execution of a CRR Entity Agreement; (v) a
6 candidate CRR Holder submitting a CRR Affiliate Form (a Candidate CRR
7 Holder must notify the CAISO of all affiliates of the Candidate CRR Holder that
8 are themselves Candidate CRR Holders, CRR Holders or Market Participants);
9 (vi) a candidate CRR Holder indicating whether they have received the required
10 CRR training; and (vii) historical Demand data used to calculate a candidate CRR
11 Holder's Load Metric (the Load Metric is the MW level of Demand on a Load
12 Serving Entity's (LSE) load duration curve that is exceeded only 0.5% of the time
13 in the relevant time period). To date the CAISO has received 56 Candidate CRR
14 Holder applications.

15 **Q. Please describe the Exhibit No. ISO-5.**

16 **A.** Exhibit No. ISO-5 provides a table of task start and end dates for Transmission
17 Rights and Transmission Curtailment ("TRTC") Instructions data-gathering effort
18 currently underway as described in Exhibit No. ISO-4. The timely gathering of
19 this data is critical to both the CRR implementation and also implementation of
20 the Integrated Forward Market. With respect to the CRR implementation, the
21 dataset will contain Transmission Ownership Right, Existing Transmission
22 Contract and Converted Right usage information important for the accurate

1 modeling of these rights in the CRR Year One Process to ensure revenue
2 adequacy of the CRRs that are distributed in the CRR Year One Process. Other
3 data to be gathered as part of this effort will be used to validate submitted energy
4 schedules in the Integrated Forward Market for providing the perfect hedge to
5 holders of these rights.

6 **Q Please describe the Exhibit No. ISO-6.**

7 **A.** Exhibit No. ISO-6 provides a detailed timeline of the CAISO and market
8 participant activities involved in the CRR Year One process that begins in July of
9 2007 and runs through December of 2007. These activities include: (i) the annual
10 CRR Allocation and Auction processes conditionally-approved by the
11 Commission in its September 21, 2006 and April 20, 2007 orders in Docket No.
12 ER06-615-000;¹ (ii) the Long-term CRR Allocation process filed by the CAISO
13 on January 29, 2007 in Docket No. ER07-475-000;² (iii) the Monthly CRR
14 Allocation and Auction process approved by the Commission in its September 21,
15 2006 and April 20, 2007 orders in Docket No. ER06-615-000, the Merchant
16 Transmission Allocation process as described in the instant filing; and (iv) the
17 additional CRR provisions proposed by the CAISO in the instant submission.

¹ *California Independent System Operator Corporation*, 116 FERC ¶ 61,274 (September 21, 2006) (“*September 21 Order*”); and *California Independent System Operator Corporation*, 119 FERC ¶ 61,076 (April 20, 2007) (“*April 20 Order*”).

² The CAISO’s January 29, 2007 filing was in compliance with the Commission’s Final Rule regarding *Long-Term Firm Transmission Rights in Organized Electricity Markets*, Order No. 681, 71 FR 43564 (Aug. 1, 2006), FERC Stats. & Regs. ¶ 31,226 (2006) (“Order No. 681” or “Final Rule”); and Order No. 681-A, 117 FERC ¶ 61,201 (2006) (“Order No. 681-A” or “Rehearing Order”).

1 **Q. What is the significance of the CRR Year One Process timeline and**
2 **implementation activities that you have described and which are set forth**
3 **Exhibit Nos. ISO-3, ISO-4, ISO-5 and ISO-6?**
4

5 **A.** The significance of the information is two-fold. First, as indicated there are a
6 number of activities that must take place to release CRRs for the first year of the
7 MRTU market design. Second, while the time periods for each activity on the
8 implementation timeline contain a few days leeway to deal with unforeseen issues
9 or problems, if the Commission were to require a policy change that significantly
10 impacts the design of the CRR program under the MRTU Tariff it is likely that
11 the policy change could not be implemented without delaying the February 1,
12 2008 Trade Date for MRTU.

13 **Q. Please provide an example of the type of policy change that would impact the**
14 **start date for MRTU.**
15

16 **A.** One example involves the historic reference period to verify source nominations
17 for CRRs. In the February 2006 MRTU Tariff Filing, the CAISO proposed using
18 a historical reference period of September 1, 2004 to August 31, 2005. In the
19 January 29, 2007 LT CRR filing, the CAISO announced its decision to change the
20 historical reference period to verify source nominations for CRRs to calendar year
21 2006 and is now filing the supporting tariff sheets for this change. As explained
22 in greater detail by Dr. Kristov, the CAISO proposed to change the historic
23 reference period in response to numerous comments from stakeholders while
24 undergoing the LT CRR stakeholder process. In the January 29, 2007 filing the
25 CAISO did not submit tariff language in support of this policy change until the
26 instant filing because the change to the historical reference period for source

1 verification affects all CRRs (not just Long Term CRRs that were the subject of
2 the CAISO's January 29, 2007 filing). For the purposes of my testimony, the
3 important point is to recognize that data submission for CRR source and sink
4 verification purposes began on May 2, 2007 and will end on May 11, 2007. The
5 CAISO must conduct this preparatory activity consistent with its stated policy
6 during this time to ensure it completes this activity in a timely manner, which is
7 necessary for a number of other subsequent requirements. If the Commission
8 were to change the historic reference period in acting on the instant filing, it is
9 likely that the CAISO would not be able to obtain the data for a different
10 reference period from market participants and begin the annual CRR Allocation
11 and Auction process as scheduled in July. Consequently, the change in such a
12 policy could jeopardize the start up of MRTU as well, which is dependent on the
13 CRR Year One Process being completed in a timely manner.

14 **Q. Are there other examples of policy changes that would impact the start date**
15 **for MRTU?**

16
17 **A.** Yes. While the CAISO cannot anticipate precisely either the comments that the
18 Commission will receive in response to the instant submittal or the Commission's
19 actions in response to such comments, it is likely that any significant policy
20 change issued by the Commission in May or June regarding CRRs would result in
21 pushing back the timelines for the annual CRR Allocation and Auction process
22 and, consequently, delay the start up of MRTU. Other examples of such rules are
23 associated with the rules in two other filings pending at the Commission that
24 could affect the release process timeline for the CRR Year One Process. For

1 instance, in the CAISO's January 29, 2007 filing in compliance with the
2 Commission's Final Rule regarding *Long-Term Firm Transmission Rights in*
3 *Organized Electricity Markets* the CAISO proposed that Long Term CRRs be
4 allocated through a process that makes use of the tiered approach previously
5 conditionally accepted by the Commission in ER06-615. Should the Commission
6 not approve the tiered Long Term CRR allocation process, the CAISO would
7 have to restructure its systems and procedures to implement any alternative
8 methodology, which could delay implementation of all its CRR Year One
9 Process. Another filing that implicates the CRR Year One Process is the
10 CAISO's March 9, 2007 filing that is pending at the Commission. That filing
11 requests that the CAISO have in effect by mid May tariff language that permits it
12 to determine Load eligibility for CRR allocation. The CAISO in the current filing
13 is requesting certain modifications to these provisions in light of the April 20
14 Order on Rehearing and the post CRR Dry Run review of the rules. These
15 changes can still be implemented within the CRR Timeline attached in Exhibit
16 No. ISO-3. Should, however, the Commission issue an order that significantly
17 changes the policy and procedures this too can have a significant impact on the
18 procedures the CAISO must employ to verify such load eligibility. Again, the
19 CAISO would have to restructure its procedures, which could delay a start of the
20 CRR allocation in July.

21 **Q. Is the CAISO planning on making another filing regarding CRRs in**
22 **August of 2007?**
23

1 **A.** Yes. Per the Commission's *September 21 Order* the CAISO has CRR compliance
2 obligations regarding: (i) the modeling of transmission outages in the network
3 model used for CRR purposes; (ii) the use of common monthly demand forecasts
4 to determine the eligibility for monthly CRRs and to comply with Resource
5 Adequacy requirements; (iii) the frequency of the Monthly Allocation and
6 Auction process; and (iv) the process or mechanics of the transfer of CRRs due to
7 Load migration. The Commission required that these compliance obligations be
8 filed with FERC no later than 180 days prior the start of MRTU or by August 3,
9 2007.

10 **Q.** **Will these policy issues impact the CRR Year One Process timelines?**

11

12 **A.** The CAISO does not anticipate that the resolution of these issues will delay the
13 schedule of activities for the CRR Year One Process as these issues either do not
14 implicate the CRR Year One Process at all or only impact the monthly Allocation
15 and Auction scheduled to begin in October 1, 2007. The CAISO has been
16 discussing these issues with stakeholders and continues to engage stakeholders to
17 resolve any remaining issues in time for a filing on or about August 3, 2007.

18 **Q.** **Are there any other issues affecting CRR implementation timelines that**
19 **should be brought to the Commission's attention?**

20 **A.** No. The main purpose of my testimony is to provide the Commission with the
21 details regarding the existing timeline for implementation of CRR Year One
22 Process. The timeline details in Exhibit Nos. ISO-3, ISO-4 and ISO-5 should help
23 the Commission in acting on the instant filing and on the other pending filings
24 related to CRRs that I mentioned previously. The intent is to provide the
25 Commission with an awareness of, or sensitivity to, how a decision to change a

1 significant policy determination may affect timing of the implementation of CRRs
2 and possibly the date for start up of MRTU.

3 **Q. Does this conclude your testimony?**

4 **A. Yes it does.**

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

California Independent System)
Operator Corporation)

Docket No. ER07-____-000

_____)
City of Folsom)
County of Sacramento)
State of California)
_____)

AFFIDAVIT OF WITNESS

I, Deborah A. Le Vine, being duly sworn, deposes and says that she has read the foregoing questions and answers labeled as her testimony; that if asked the same questions her answers in response would be as shown; and the facts contained in her answers are true and correct to the best of her knowledge, information, and belief.

Executed on this 3 day of May, 2007.


Deborah A. Le Vine

Proof of Execution by Subscribing Witness

State of California)
) ss.
County of Sacramento)

On May 3, 2007, before me, the undersigned a notary public for the state, personally appeared Deborah A. LeVine, ~~personally known to me~~, or proved to me on the oath of Julie McCallion, to be the person whose name is subscribed to the within instrument, as a witness thereto, who, being by me duly sworn, deposed and said that he/she was present and saw/heard Deborah A. LeVine, the same person described in and whose name(s) is/are subscribed to the within and annexed instrument in his/her/their capacity(ies) as (a) party (ies) thereto, execute or acknowledge executing the same and that said affiant subscribed his/her name to the within instrument as a witness at the request of Deborah A. LeVine.

WITNESS my hand and official seal.

Martha M. Sedgley
Martha M. Sedgley, Notary Public

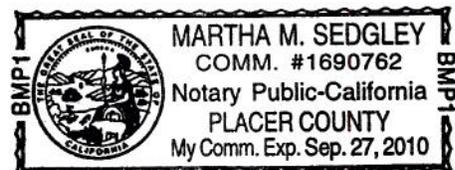


Exhibit ISO-3

Exhibit No. ISO-3: Timeline of CRR Year One Data Gathering, Annual CRR Allocation and Auction, and Monthly CRR Allocation and Auction Process

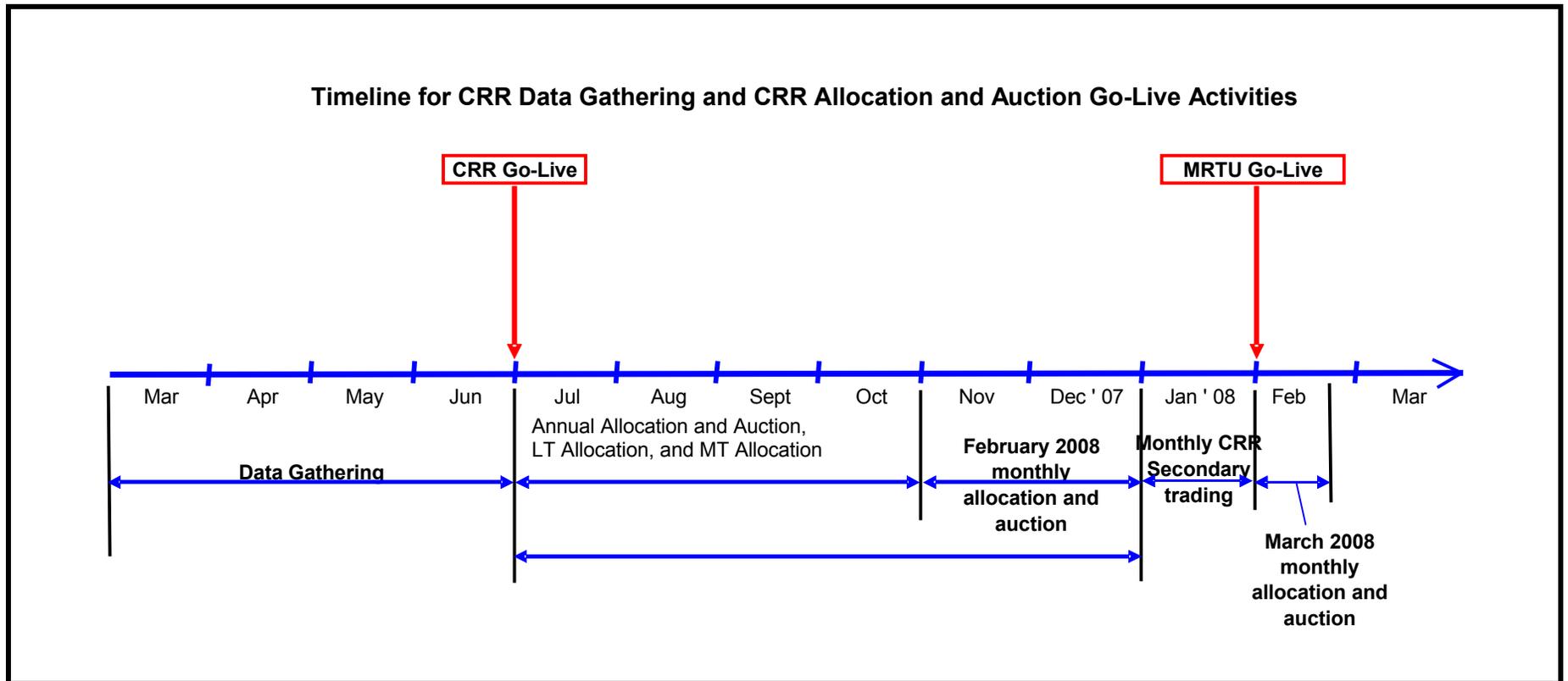


Exhibit ISO-4

Exhibit No. ISO-4: Preparation for CRR Year One Allocation and Auction Process – Data Submission & Registration Timeline

Step #	Step Description	Information for Completing Step	Allocation or Auction or Both	Communication	Start Date	End Date
1	<p>1.1 CRR Registration Process: Complete and submit the following two items:</p> <ol style="list-style-type: none"> 1) <i>Candidate CRR Holder Application Form</i> 2) <i>CRR Entity Agreement Information Request Sheet</i> <p>Both of these forms need to be completed and submitted before completing Step 4.</p> <p>1.2 CAISO acknowledges receipt of Application and Information Sheet</p>	<p>These two items can be found in the <i>BPM for Candidate CRR Holder Registration</i> which is located at: http://www.caiso.com/1bb4/1bb4b07318d0.html</p> <ol style="list-style-type: none"> 1) Attachment A of <i>BPM for Candidate CRR Holder Registration</i> contains the form. 2) Attachment B of <i>BPM for Candidate CRR Holder Registration</i> contains the sheet. 	Both	<p>Information regarding how to submit these forms is documented at the end of each form in the <i>BPM for CRR Holder Registration</i></p> <p>CAISO will send an email confirming the receipt of application.</p>	<p>Started April 4, 2007</p> <p>April 4, 2007</p>	<p>April 25, 2007</p> <p>April 27, 2007</p>
2	<p>Data Template Submittal Process: Submit source/sink verification and MSS election via the <i>Data Template</i> including a signed CRR Source Declaration agreement.</p>	<ol style="list-style-type: none"> 1) The Data Template has a “Read Me” file which describes how to complete the form. To understand the Source/Sink verification process and MSS selection process, please see Section 6.3 and Section 6.4 of <i>BPM for CRR</i> which is located at: http://www.caiso.com/1840/1840b23c226f0.html 2) <i>Data Template</i> and <i>CRR Source Declaration form</i> located at: http://www.caiso.com/1bb4/1bb4745611d10.html 	Allocation	<p>The Data Template has a “Read Me” tab which describes how to submit the completed Data Template to CAISO.</p>	<p>May 1, 2007</p>	<p>May 11, 2007</p>
3	<p>Candidate CRR Holder Application Form Status Process:</p> <ol style="list-style-type: none"> 3.1) CAISO notifies applicant of deficient application 3.2) For an application that was deficient, applicant will provide additional information by completing the form again as in Step 1. 		Both	<p>CAISO will send an email notifying the applicant.</p>	<p>April 4, 2007</p> <p>May 9, 2007</p>	<p>May 9, 2007</p> <p>May 15, 2007</p>

Step #	Step Description	Information for Completing Step	Allocation or Auction or Both	Communication	Start Date	End Date
4	CRR Entity Agreement Submittal Process: 4.1) CAISO Contracts Dept. sends <i>CRR Entity Agreement</i> to applicant upon FERC approval of pro forma agreement (approval expected in May). 4.2) <i>CRR Entity Agreement</i> signed and returned to CAISO by applicant.	For further information see Section 2.3.6 of <i>BPM for Candidate CRR Holder Registration</i>	Both	All the communication in this step by both CAISO and the applicant to be done via postal mail.	May 14, 2007 May 15, 2007	May 15, 2007 May 21, 2007
5	CRR Affiliate Form Submittal Process: <i>CRR Affiliate Form</i> completed and returned to CAISO by applicant. (See Note1)	1) For further information see Section 2.3.5 of <i>BPM for Candidate CRR Holder Registration</i> 2) <i>CRR Affiliate Form</i> located at: http://www.aiso.com/1bb4/1bb4745611d10.html	Both	Information regarding how to submit this form is documented in Section 2.3.5 of <i>BPM for CRR Holder Registration</i>	April 4, 2007	May 21, 2007
6	Application Access Request Form Process: <i>Application Access Request Form</i> completed and returned to CAISO by applicant. (See Note1)	1) For further information see Section 2.3.2 of <i>BPM for Candidate CRR Holder Registration</i> 2) <i>Application Access Request Form</i> located at: http://www.aiso.com/docs/2000/03/01/2000030110195926538.xls	Both	Information regarding how to submit this form is documented in Section 2.3.2 of <i>BPM for CRR Holder Registration</i>	April 4, 2007	June 1, 2007
7	Training Waiver Form Process: <i>Training Waiver Form</i> signed and returned by applicant if they have already attended a previous CRR training class. (See Note1)	1) For further information see Section 2.3.3 of <i>BPM for Candidate CRR Holder Registration</i> 2) <i>Training Waiver Form</i> located at: http://www.aiso.com/1bb4/1bb4745611d10.html	Both	Information regarding how to submit this form is documented in Section 2.3.3 of <i>BPM for CRR Holder Registration</i>	April 4, 2007	June 1, 2007

Step #	Step Description	Information for Completing Step	Allocation or Auction or Both	Communication	Start Date	End Date
8	EDI/Fedwire Process: Applicants should establish and test EDI/Fedwire connection with the CAISO. Prior to Settlements and Market Clearing (SaMC) going live (CAISO assumes February 1 2008), entities obtaining CRRs through the auction will need to transact with the CAISO by EDI.	EDI/Fed-Wire form located at: http://www.caiso.com/1bb4/1bb4745611d10.html	Both	Information regarding this is documented in the <i>BPM for CRR Holder Registration</i>	April 4, 2007	June 1, 2007
9	Contract Completion Process: CAISO will sign and return to applicant fully executed <i>CRR Entity Agreement</i> .		Both	CAISO will send the executed agreement via postal mail.	May 17, 2007	June 8, 2007
10	Historical Load Data Submittal Process: Submit historical load data for use in the annual allocation through the Market User Interface.	The purpose of this data submittal is described in Section 7.1 of <i>BPM for CRR</i> . Production URL and digital certificate are required in order to complete this task and will be provided upon execution of CRR Entity Agreement.	Allocation	MPs submit this data through CAISO CRR system's MUI.	June 5, 2007	June 20, 2007
11	CRR Training Registration Process: To register for the CRR Training class at the CAISO, please send mail to crrdata@caiso.com indicating your name, company name, preferred date etc.	Previous training class material can be found at: http://www.caiso.com/docs/2004/01/29/2004012910353027828.html	Both	Class 1: June 5: MUI Training June 7-8: CRR Basics/ Rules Class 2: June 6: MUI Training June 7-8: CRR Basics/ Rules More information regarding CRR training class is provided in CAISO Market Notice dated April 12, 2007.	April 4, 2007	June 5-8, 2007

Notes:

- 1) The *Application Access Request Form*, *Training Waiver*, and *Affiliate Form* can be turned in at any time before June 1, 2007 and will help expedite the registration process.

Exhibit ISO-5

Exhibit No. ISO - 5:TRTC Instruction Data-Gathering Effort

	Start Date	End Date
Transmission Rights and Transmission Curtailment Data-Gathering	3/13/2007	5/31/2007
Internal Planning Meeting	3/13/2007	3/13/2007
Conference call planning meeting	3/16/2007	3/16/2007
Materials preparation for face to face meetings with PTOs and TOR holders	3/19/2007	3/22/2007
Conference call with all Stakeholders	3/23/2007	3/23/2007
Face to face meeting with all Stakeholders	4/4/2007	4/4/2007
Face to face meeting with TOR holders	4/6/2007	4/6/2007
Individual meetings with all rights holders at the CAISO	4/9/2007	5/4/2007
Pacific Gas and Electric	4/9/2007	5/4/2007
Southern California Edison	4/9/2007	5/4/2007
San Diego Gas and Electric	4/9/2007	5/4/2007
City of Azusa	4/9/2007	5/4/2007
City of Banning	4/9/2007	5/4/2007
City of Riverside	4/9/2007	5/4/2007
City of Pasadena	4/9/2007	5/4/2007
City of Vernon	4/9/2007	5/4/2007
City of Anaheim	4/9/2007	5/4/2007
City and County of San Francisco	4/9/2007	5/4/2007
Metropolitan Water District	4/9/2007	5/4/2007
Imperial Irrigation District	4/9/2007	5/4/2007
Arizona Public Service	4/9/2007	5/4/2007
Western Area Power Administration	4/9/2007	5/4/2007
Salt River Project	4/9/2007	5/4/2007
Nevada Power Company	4/9/2007	5/4/2007
Los Angeles Department of Water and Power	4/9/2007	5/4/2007
Submittal of draft TRTC instructions to CAISO	4/9/2007	5/11/2007
ISO review of submitted TRTC instructions and return	4/9/2007	5/24/2007
Submittal of Final TRTC instructions to CAISO	5/25/2007	5/31/2007

Exhibit ISO-6

Exhibit No. ISO-6: Detailed Timeline of Year One CRR Allocation and Auction Process

CRR PROCESS	Start Date	End Date
Annual Allocation Process		
CRR Tier 1 Annual Allocation		
Open Annual Market/Accept Historical Load Data/ Resolve Market Participant Input Issues/Make FNM available to MPs via NDA, Answer questions, Close load submittal market	7/20/2007	7/24/2007
Develop Annual Upper Bound nomination values for each Market Participant for first Annual Iteration/Populate values in CRR System.	7/25/2007	7/27/2007
Open market for first Annual CRR nominations/ Input ETC Nominations/LSE nominations/work with Market Participants to correct errors. Close market.	7/30/2007	8/1/2007
Run first Annual allocation iteration. Do market reruns. Analyze results via off-line studies / Post results.	8/2/2007	8/6/2007
Respond to questions from MPs on Annual allocation results	8/7/2007	8/8/2007
CRR Tier 2 Annual Allocation		
Make FNM available to MPs via NDA, answer questions	8/9/2007	8/9/2007
Develop Upper Bound nomination values for each Market Participant for Iteration/Populate values in CRR System.	8/10/2007	8/14/2007
Open Market / Input LSE nominations / Close Market / Run market, analyze results /work with Market Participants to correct errors.	8/15/2007	8/22/2007
Do market reruns. Analyze results via off-line studies / Post results.	8/23/2007	8/24/2007
Respond to questions from MPs on allocation results	8/27/2007	8/29/2007
Long Term CRR Process		
Make FNM available to MPs via NDA, answer questions	8/30/2007	8/30/2007
Prepare signature validation data	8/31/2007	9/4/2007
Develop LT Upper Bound nomination values for each Market Participant / Populate values in CRR System.	9/5/2007	9/7/2007
Open Market / Input LT LSE nominations/ Close market / Run market, analyze results	9/10/2007	9/17/2007
Do market reruns. Analyze results via off-line studies / Post results.	9/18/2007	9/20/2007
Respond to questions from MPs on LT allocation results	9/21/2007	9/24/2007
CRR Tier 3 Annual Allocation		
Make FNM available to MPs via NDA, answer questions	9/25/2007	9/25/2007

	Start Date	End Date
Develop Upper Bound nomination values for each Market Participant for Iteration/Populate values in CRR System.	9/26/2007	9/28/2007
Open Market/ Input LSE nominations / Close Market / Run market, analyze results / work with Market Participants to correct errors.	10/1/2007	10/8/2007
Do market reruns. Analyze results via off-line studies / Post results.	10/9/2007	10/11/2007
Respond to questions from MPs on allocation results	10/12/2007	10/16/2007
Annual Auction Process		
CRR Annual Auction		
Open market for Annual Auction/Accept Auction bids/Resolve Issues	10/17/2007	10/19/2007
Run Annual Auction/ Analyze results via off-line studies/Do market reruns / Post results	10/22/2007	10/24/2007
Respond to questions from MPs on Annual auction results	10/25/2007	10/29/2007
Monthly Allocation Process		
CRR Tier 1 Monthly Allocation		
Conduct monthly outage studies	10/1/2007	10/12/2007
Input Data (Validation, interface, monitored facilities, outages)	10/25/2007	10/29/2007
Open Monthly Market for Accepting Forecasted Load Data/ Accept and Validate Forecasted Load Data/ Resolve Market Participant Input Issues	10/30/2007	11/1/2007
Develop Monthly Upper Bound nomination values for each Market Participant/Populate values in CRR System.	11/2/2007	11/6/2007
Open first iteration of the Monthly allocation market/Accept Monthly nominations / resolve issues with nominations and collateral/close market	11/7/2007	11/9/2007
Run first iteration of the Monthly allocation market / Conduct market reruns/Analyze results via off-line studies/Post results	11/12/2007	11/14/2007
CRR Tier 2 Monthly Allocation		
Input Data (Validation, interface, monitored facilities, outages)	11/15/2007	11/19/2007
Open Monthly Market for Accepting Forecasted Load Data/ Accept and Validate Forecasted Load Data/ Resolve Market Participant Input Issues	11/20/2007	11/22/2007
Develop Monthly Upper Bound nomination values for each Market Participant/Populate values in CRR System.	11/23/2007	11/27/2007

	Start Date	End Date
Open second iteration of the Monthly allocation market/Accept Monthly nominations / resolve issues with nominations and collateral/close market	11/28/2007	11/30/2007
Run second iteration of the Monthly allocation market / Conduct market reruns/Analyze results via off-line studies/Post results	12/3/2007	12/5/2007
Monthly Auction Process		
CRR Monthly Auction		
Input Data into system using DIM	12/6/2007	12/10/2007
Open market for Monthly Auction/Accept Auction bids/Resolve Issues	12/11/2007	12/13/2007
Run Monthly Auction/ Analyze results via off-line studies / Post results	12/14/2007	12/18/2007
Respond to questions from MPs on Monthly auction results	12/19/2007	12/21/2007

Attachment F
Chart Categorizing and Describing Tariff Changes

Description of Proposed Tariff Changes

Tariff Section	Nature of Change	Origin and Explanation of Change	Category	Pending Proceeding
App. A – New Definition of “Fixed CRRs”	Adds new defined term to tariff.	Definition added to be clear about how the SFT for CRRs will be run and respect existing rights.	Compliance Obligation	None
App. A – New Definition of “Merchant Transmission CRR”	Adds new defined term to tariff.	Definition needed to accurately incorporate the proposal to allocate CRRs to merchant transmission sponsors.	Compliance Obligation	None
App. A – New Definition of “Merchant Transmission Facility”	Adds new defined term to tariff.	This term is added for clarity regarding which transmission facilities will be eligible for Merchant Transmission CRRs.	Compliance Obligation	None
App. A – New Definition of “Out-of-Control Area Load Serving Entity (OCALSE)”	Adds new defined term to tariff.	This is necessary because term “LSE” in the tariff is limited to load internal to the CAISO Control Area.	Compliance Obligation	None
App. A – New Definition of “Qualified OCALSE”	Adds new defined term to tariff.	This term is added for clarity to allow the CAISO to refer to those OCALSEs who are have satisfied the eligibility requirements and may be allocated CRRs.	Compliance Obligation	None
App. A – New Definition of “Sub-LAP”	Adds new defined term to tariff.	Term added for clarity in discussion of role of sub-LAPs in nomination process.	205 Proposal – Detail from BPM	None

App. A – New Definition of “Verified CRR Source Quantity”	Adds new defined term to tariff.	Term added for clarity in discussing the amount of CRR nominations that can be source verified.	205 Proposal – Detail from BPM	None
App. A – New Definition of “Adjusted Verified CRR Source Quantity”	Adds new defined term to tariff.	Term added for clarity in discussing the amount of CRR nominations that can be source verified.	205 Proposal – Detail from BPM	None
<p>Defined Terms:</p> <p>Adjusted Load Metric; CAISO; CAISO Controlled Grid; CAISO Tariff; CAISO Website; CRR Balancing Account; CRR Charge; CRR Year One; Existing Transmission Contract (ETC) or Existing Contracts; Inter-SC Trade; Load-Serving Entity (LSE); Monthly CRR; Multi-Point CRR; PMax; PNP Eligible Quantity; Point-to-Point CRR, Priority Nomination Process (PNP); Real-Time Interchange</p>	Brings existing defined terms from the MRTU Tariff into Attachment BB of the currently-effective ISO Tariff.	Terms added for clarity and precision in discussing CRR allocation process in ISO Tariff. Definitions not changed from MRTU Tariff, except for CRR Charge and CRR Balancing Account to remove references to MRTU Tariff, and to Real Interchange Export Schedule to capitalize defined terms.	205 Proposal –Minor Change	None

Export Schedule; Seasonal Available CRR Capacity; Tier LT				
6.5.1.1.1	New (d) added to include CRR-related information.	Information added to include CRR-related information in the materials available under the non-disclosure agreement.	205 Proposal – Detail from BPM	Language was included in Appendix BB of current ISO Tariff in March 9 CRR Implementation Filing. Language in 6.5.1.1.1 (a) and (c) was clarified in the Nov. 20 Compliance Filing and in the March 9 CRR Implementation filing. Addition of new subsection (d) does not affect these sections.
6.5.1.1.2				Language was included in Appendix BB of current ISO Tariff in March 9 CRR Implementation Filing. Language in 6.5.1.1.2 (a) and (c) was clarified in the Nov. 20 Compliance Filing and in the March 9 CRR Implementation filing. Addition of new subsection (d) does not

				affect these sections.
11.2.4.3	Adds this language to Appendix BB of the current ISO Tariff. Adds “of this Appendix” to cross reference and adds additional clarifying language.	This language is being added to the currently effective tariff so that the CAISO may have the authority to settle the CRR Auction to be held later this year. Minor clarifying language to ensure cross references are confined to tariff Appendix BB.	205 Proposal –Minor Change	Last sentence of 11.2.4.3 was modified in the January 29 LT CRR Filing.
24.7.3	Adds this language to Appendix BB of the current ISO Tariff. Language added regarding CRR allocation to merchant transmission sponsors.	Incorporates merchant transmission CRR proposal reflected in this filing. Preserves treatment of Western Path 15 recovery as previously approved by the Commission as the CAISO transitions to CRRs.	205 Proposal – Further Policy Development and Compliance Obligation	None
36.1	Adds “of this Appendix” to cross reference.	Minor clarifying language to ensure cross references are confined to tariff Appendix BB. Last sentence was deleted as it does not add any substance beyond what the provisions of Section 36.1 already contain.	205 Proposal –Minor Change	Cross references in the first two sentences were added in January 29 LT CRR Filing.
36.2.1	Capitalizes terms and deletes last sentence.	Term capitalized consistent with defined terms. Last sentence deleted because the CAISO will not be	205 Proposal –Minor Change	None

		conducting any hourly settlement of CRRs held prior to go-live of the rest of MRTU in February 2008. This language will be reinstated when CAISO files its conformed tariff before that time.		
36.2.2	Capitalizes terms and deletes last sentence.	Term capitalized consistent with defined terms. Last sentence deleted because the CAISO will not be conducting any hourly settlement of CRRs held prior to go-live of the rest of MRTU in February 2008. This language will be reinstated when CAISO files its conformed tariff before that time.	205 Proposal –Minor Change	None
36.2.4	Language added to require that Multi-Point CRRs must be allocated by specifying a single sink.	The need for this detail became apparent through the BPM development process and CRR Dry Run.	205 Proposal –Detail from BPM	None
36.2.8	Deletes first part of first sentence and adds “of this Appendix” to cross reference.	First part of the first sentence deleted because the CAISO will not be conducting any hourly settlement of CRRs held prior to go-live of the rest of MRTU in February 2008. This change leaves	205 Proposal –Minor Change	Section was added in the January 29 LT CRR Filing.

		in place requirement for full funding as filed in January 29 LT CRR Filing. Minor clarifying language to ensure cross references are confined to tariff Appendix BB.		
36.3.2	Standardizes terminology for Merchant Transmission CRRs as defined in this filing and deletes cross reference.	Clarifying change using newly defined term eliminates need for cross reference.	205 Proposal – Further Policy Development and Compliance Obligation.	Section was modified in January 29 LT CRR Filing.
36.4	Language added to clarify that outages known 30 days in advance will be incorporated into the FNM for determining the amount of grid capacity available for CRRs.	The exact term of the outage was developed in the BPM process and warranted inclusion in the tariff.	205 Proposal – Further Policy Development	None
36.4.1	Deletes terms “allocation process.” Adds “of this Appendix” to cross reference and clarifies other terms to conform with new defined terms. Standardizes terminology for Merchant Transmission CRRs as defined in this filing and deletes cross reference.	Deleted terms not necessary as Tier LT is defined. Minor clarifying language to ensure cross references are confined to tariff Appendix BB. Clarifying change using newly defined term eliminates need for cross reference.	205 Proposal – Minor Change	Section was modified in Nov. 20 Compliance Filing and the January 29 LT CRR Filing.
36.4.2	Tariff language added to address the situation where there are two or	Detail added to the tariff as a result of BPM development process. Also	205 Proposal – Detail from BPM	None.

	more identical nominations. Also adds “of this Appendix” to cross reference.	adds minor clarifying language to ensure cross references are confined to tariff Appendix BB.		
36.5.1	This language adds additional detail on credit requirements.	Detail added to the tariff as a result of BPM development process. [Note: Sections 36.5, 36.5.1, and 36.5.2 as filed in the March 9 CRR Implementation Filing were moved so that they now appear in sequence with the additional provisions of Section 36. This change was not substantive and the CAISO continues to seek a May 9, 2007 effectiveness date for these provisions as filed on March 9.]	205 Proposal – Detail from BPM	Language was included in Appendix BB of current ISO Tariff in March 9 CRR Implementation Filing. Language was modified for clarity in March 9 CRR Implementation Filing.
36.5.2	This language adds additional clarifying detail regarding the specific training requirements, recognizing the situation when a company loses an employee who had attended training on the company’s behalf.	Detail added to the tariff as a result of BPM development process. [Note: Sections 36.5, 36.5.1, and 36.5.2 as filed in the March 9 CRR Implementation Filing were moved so that they now appear in sequence with the additional provisions of Section 36. This change was not	205 Proposal – Detail from BPM	Language was included in Appendix BB of current ISO Tariff in March 9 CRR Implementation Filing. Language was modified for clarity in March 9 CRR Implementation Filing.

		substantive and the CAISO continues to seek a May 9, 2007 effectiveness date for these provisions as filed on March 9.]		
36.7.1.1	Deletes reference to assigning CRRs.	Assignment terminology not accurate based on CAISO policy that only transfers successfully registered through the Secondary Registration System are recognized by CAISO as further clarified through the BPM process.	205 Proposal – Minor Change	Title of Section 36.7.1.1 was modified in January 29 LT CRR Filing.
36.7.1.2	Adds “of this Appendix” to cross reference.	Minor clarifying language to ensure cross references are confined to tariff Appendix BB.	205 Proposal – Minor Change	Section was added in January 29 LT CRR Filing.
36.7.2	Deletes sentence on automatic postings of SRS transfers.	Inaccuracy of statement with regards to posting became evident through the BPM process.	205 Proposal – Minor Change	None.
36.7.3	Adds “of this Appendix” to cross reference and clarifies existing cross references. Also clarifies certain defined terms.	Minor clarifying language to ensure cross references are confined to tariff Appendix BB.	205 Proposal – Minor Change	None.
36.8	Tariff language is added to clarify that Qualified OCALSEs may also be allocated CRRs. Conforms terminology and adds “of this	Need for specific reference became apparent through review of the tariff for this filing.	205 Proposal – Minor Change	None

	Appendix” to cross reference.			
36.8.1	Tariff language is added to clarify that Qualified OCALSEs may also be allocated CRRs and adds “of this Appendix” to cross reference. Header clarified for use of terms.	Minor clarifying language to ensure cross references are confined to tariff Appendix BB. Also clarified use of new defined term.	205 Proposal –Minor Change	Language was modified in January 29 LT CRR Filing.
36.8.2	Tariff language is added to clarify showings requirements by load-serving entities (LSEs and Qualified LSEs) on their load obligation, and indication that this is the basis for eligibility to participate in the CRR Allocation. Conform usage of defined terms.	Detail added to the tariff as a result of BPM development process. [Note: Sections 36.8.2, 36.8.2.1, 36.8.2.2 and 36.8.6 as filed in the March 9 CRR Implementation Filing were moved so that they now appear in sequence with the additional provisions of Section 36. This change was not substantive and the CAISO continues to seek a May 9, 2007 effectiveness date for these provisions as filed on March 9.]	205 Proposal – Detail from BPM	Language was included in Appendix BB of current ISO Tariff in March 9 CRR Implementation Filing. Language was clarified in Nov. 20 Compliance Filing and cross reference was added in March 9 CRR Implementation filing.
36.8.2.1	Language added to clarify that the CAISO construct on- and off-peak load duration curves. Other clarifying language added.	Added as clarifying language. [Note: Sections 36.8.2, 36.8.2.1, 36.8.2.2 and 36.8.6 as filed in the March 9 CRR Implementation Filing were moved so that they	205 Proposal – Minor Change	Language was included in Appendix BB of current ISO Tariff in March 9 CRR Implementation Filing. Defined terminology

		<p>now appear in sequence with the additional provisions of Section 36.</p> <p>This change was not substantive and the CAISO continues to seek a May 9, 2007 effectiveness date for these provisions as filed on March 9.]</p>		<p>conformed in March 9 CRR Implementation Filing.</p>
36.8.3.1	<p>New defined terms added to clarify that external loads are eligible for the CRR allocation process.</p>	<p>Added for clarity of terms in referring to external loads.</p>	<p>205 Proposal – Minor Change</p>	<p>Section was modified by January 29 LT CRR Filing.</p>
36.8.3.1.1	<p>Tariff language added to clarify eligibility of LSEs in the allocation and to reference the newly proposed Trading Hub rules.</p>	<p>Trading Hub rule changes are proposed, as indicated in the filing, to remedy anomalies resulting from the prohibition on Trading Hubs in the CRR Dry Run.</p>	<p>205 Proposal – Further Policy Development</p>	<p>Section was formatted and terminology conformed in January 29 LT CRR Filing.</p>
36.8.3.1.2	<p>Tariff language added to clarify eligibility of LSEs in the allocation and to reference the newly proposed Trading Hub rules.</p>	<p>Trading Hub rule changes are proposed, as indicated in the filing, to remedy anomalies resulting from the prohibition on Trading Hubs in the CRR Dry Run.</p>	<p>205 Proposal – Further Policy Development</p>	<p>Section was formatted and terminology conformed in January 29 LT CRR Filing.</p>
36.8.3.1.3	<p>Tariff language added to clarify eligibility of LSEs in the allocation and to reference the newly proposed Trading Hub rules. Language also added to clarify that Long Term CRRs are point-to-</p>	<p>Trading Hub rule changes are proposed, as indicated in the filing, to remedy anomalies resulting from the prohibition on Trading Hubs in the CRR Dry Run.</p>	<p>205 Proposal – Further Policy Development</p>	<p>Section was modified by the January 29 LT CRR Filing.</p>

	point instruments.			
36.8.3.1.4	Tariff language added to clarify eligibility of LSEs in the allocation and to reference the newly proposed Trading Hub rules.	Trading hub rule changes are proposed, as indicated in the filing, to remedy anomalies resulting from the prohibition on Trading Hubs in the CRR Dry Run.	205 Proposal – Further Policy Development	Section was formatted and terminology conformed in January 29 LT CRR Filing.
36.8.3.2	Tariff language added to clarify and incorporate new proposed Trading Hub rules. Header clarified for use of terms.	Trading Hub rule changes are proposed, as indicated in the filing, to remedy anomalies resulting from the prohibition on Trading Hubs in the CRR Dry Run.	205 Proposal – Further Policy Development	None
36.8.3.3	Section number added because it was inadvertently removed from prior versions. No substance is added.	Clarifying change.	205 Proposal – Minor Change	None
36.8.3.4	This added language incorporates a new defined term and clarifies the details about how much capacity will qualify for source verification. Added requirement that LSEs make source verification through sworn declaration by executive.	Detail added to the tariff as a result of BPM development process and the CRR Dry Run process.	205 Proposal – Detail from BPM	Terminology conformed in January 29 LT CRR Filing.
36.8.3.5	Added reference to Qualified OCALSEs to clarify their participation in allocation process.	Clarifying change.	205 Proposal – Minor Change	Section was modified in January 29 LT CRR Filing.

	Conformed terminology.			
36.8.3.5.1	Language was added to clarify that CRRs sourced at Trading Hubs may not be nominated in the priority nomination process. Additional existing language regarding PNP nominations was moved to Section 36.8.3.5.5. Added reference to Qualified OCALSEs to clarify their participation in allocation process. Conformed terminology.	Trading Hub rule changes are proposed, as indicated in the filing, to remedy anomalies resulting from the prohibition on Trading Hubs in the CRR Dry Run. Clarifying changes.	205 Proposal – Further Policy Development	Section was modified in January 29 LT CRR Filing. Note – language that had been added in the January 29 LT CRR filing was moved to 36.8.3.5.5.
36.8.3.5.2	Language added to clarify that Trading Hub CRRs may not be nominated in Tier LT.	Trading Hub rule changes are proposed, as indicated in the filing, to remedy anomalies resulting from the prohibition on Trading Hubs in the CRR Dry Run.	205 Proposal – Further Policy Development	Section was added in January 29 LT CRR Filing.
36.8.3.5.3	Language added to clarify that Trading Hub CRRs may be nominated Tier 2 of the annual allocation beyond CRR Year One.	Trading hub rule changes are proposed, as indicated in the filing, to remedy anomalies resulting from the prohibition on Trading Hubs in the CRR Dry Run.	205 Proposal – Further Policy Development	Section was modified in January 29 LT CRR Filing.
36.8.3.5.4	Language added to clarify that Trading Hub CRRs may be nominated Tier 3 of the annual allocation beyond CRR Year One.	Trading hub rule changes are proposed, as indicated in the filing, to remedy anomalies resulting from the prohibition on Trading	205 Proposal – Further Policy Development	Section was modified in January 29 LT CRR Filing.

		Hubs in the CRR Dry Run.		
36.8.3.5.5	This entire new section was added to reflect the CAISO’s decision to allow the transition of expiring ETCs and Converted Rights to Long Term CRRs.	This section represents continued policy development of the CRR program and continued enhancements of the Long Term CRR program identified by and with stakeholders.	205 Proposal – Further Policy Development	None.
36.8.3.6	Language added to clarify that Trading Hub CRRs may be nominated Tier 1 of the monthly allocation beyond CRR Year One and to reflect the disaggregation of Trading Hub CRRs in the SFT. Header clarified for use of terms.	Trading hub rule changes are proposed, as indicated in the filing, to remedy anomalies resulting from the prohibition on Trading Hubs in the CRR Dry Run.	205 Proposal – Further Policy Development	None.
36.8.4	Clarifying language was added throughout this section to gain additional precision in term use.	Added for clarity.	205 Proposal – Minor Change	Section was modified in January 29 LT CRR Filing.
36.8.4.1	This new tariff section called “CRRs with Trading Hub Sources” contain the CAISO’s proposed rules for disaggregating Trading Hub CRRs for the purposes of running the SFT.	This tariff section was added to memorialize the CAISO’s proposal for addressing the Trading Hub issues identified in this filing.	205 Proposal – Further Policy Development	None
36.8.4.2	Section was renumbered	Added for clarity.	205 Proposal –Minor	None

	and minor clarifying language added.		Change	
36.8.4.2.1	Adds a new header and corrects a cross reference. Adds “of this Appendix” to cross reference.	Added for clarity.	205 Proposal –Minor Change	None
36.8.4.2.2	New section header added and language added to ensure that Long Term CRR allocation process was accurately captured in the intertie set aside process.	Added for clarity.	205 Proposal – Further Policy Development	None
36.8.5	Conforms use of defined terms. Adds “of this Appendix” to cross reference.	Clarifying changes and minor clarifying language to ensure cross references are confined to tariff Appendix BB.	205 Proposal – Minor Change	Language was modified in Nov. 20 Compliance Filing and January 29 LT CRR Filing.
36.8.5.1	Header clarified for use of terms and other typos corrected.	Added for clarity.	205 Proposal –Minor Change	Language was clarified in January 29 LT CRR Filing.
36.8.5.2.1	Language about load migration clarified.	Added for clarity.	205 Proposal –Minor Change	Language was clarified in January 29 LT CRR Filing.
36.8.5.2.3	Adds “of this Appendix” to cross reference.	Added for clarity.	205 Proposal –Minor Change	None
36.8.5.3	Header clarified for use of terms and other typos corrected.	Added for clarity.	205 Proposal –Minor Change	Formatting change in January 29 LT CRR Filing.
36.8.6	Term use corrected.	Added for clarity. [Note: Sections 36.8.2, 36.8.2.1, 36.8.2.2 and 36.8.6 as filed in the March	205 Proposal –Minor Change	Language was included in Appendix BB of current ISO Tariff in March 9

		9 CRR Implementation Filing were moved so that they now appear in sequence with the additional provisions of Section 36. This change was not substantive and the CAISO continues to seek a May 9, 2007 effectiveness date for these provisions as filed on March 9.]		CRR Implementation Filing.
36.9	Incorporates defined term "OCALSE." Also header clarified for use of terms.	Added for clarity in addressing issues related to external loads. [Note: Sections 36.9, 36.9.1, 36.9.2, 36.9.2.1, 36.9.3 and 36.9.4 as filed in the March 9 CRR Implementation Filing were moved so that they now appear in sequence with the additional provisions of Section 36. The CAISO is seeking a July 9, 2007 effectiveness date on these provisions in light of the changes made in this filing.]	205 Proposal –Minor Change	Language was included in Appendix BB of current ISO Tariff in March 9 CRR Implementation Filing. Clarified terminology in March 9 CRR Implementation Filing.
36.9.1	This new tariff language incorporates the new inclusion of wheel-through transactions in the definition of the	These revisions and additions were added in accordance with P 379 of the April 20 MRTU Rehearing Order. [Note:	Compliance Obligation.	Language was included in Appendix BB of current ISO Tariff in March 9 CRR Implementation

	“legitimate need” showing.	Sections 36.9, 36.9.1, 36.9.2, 36.9.2.1, 36.9.3 and 36.9.4 as filed in the March 9 CRR Implementation Filing were moved so that they now appear in sequence with the additional provisions of Section 36. The CAISO is seeking a July 9, 2007 effectiveness date on these provisions in light of the changes made in this filing.]		Filing.
36.9.2	New language incorporates the ability for external loads to prepay WAC charges monthly subject to appropriate credit requirements.	These revisions and additions were added in accordance with P 380 of the April 20 MRTU Rehearing Order. [Note: Sections 36.9, 36.9.1, 36.9.2, 36.9.2.1, 36.9.3 and 36.9.4 as filed in the March 9 CRR Implementation Filing were moved so that they now appear in sequence with the additional provisions of Section 36. The CAISO is seeking a July 9, 2007 effectiveness date on these provisions in light of the changes made in this filing.]	Compliance Obligation.	Language was included in Appendix BB of current ISO Tariff in March 9 CRR Implementation Filing. Clarified terminology in March 9 CRR Implementation Filing.

<p>36.9.2.1</p>	<p>Incorporates defined term “OCALSE.” New language incorporates the ability for external loads to prepay WAC charges monthly subject to appropriate credit requirements.</p>	<p>Added for clarity in addressing issues related to external loads. [Note: Sections 36.9, 36.9.1, 36.9.2, 36.9.2.1, 36.9.3 and 36.9.4 as filed in the March 9 CRR Implementation Filing were moved so that they now appear in sequence with the additional provisions of Section 36. The CAISO is seeking a July 9, 2007 effectiveness date on these provisions in light of the changes made in this filing.]</p>	<p>205 Proposal – Minor Change</p>	<p>Language was included in Appendix BB of current ISO Tariff in March 9 CRR Implementation Filing. Language was modified in January 29 LT CRR Filing.</p>
<p>36.9.3</p>	<p>Clarifying language added regarding the quantity of external load that OCALSEs will be eligible to nominate for CRRs. Also clarified header for use of terms.</p>	<p>These revisions and additions were added in accordance with P 380 of the April 20 MRTU Rehearing Order. Also terms added for clarity in addressing issues related to external loads. [Note: Sections 36.9, 36.9.1, 36.9.2, 36.9.2.1, 36.9.3 and 36.9.4 as filed in the March 9 CRR Implementation Filing were moved so that they now appear in sequence with the additional provisions of</p>	<p>Compliance Obligation.</p>	<p>Language was included in Appendix BB of current ISO Tariff in March 9 CRR Implementation Filing. Language was clarified in March 9 Implementation CRR Filing.</p>

		Section 36. The CAISO is seeking a July 9, 2007 effectiveness date on these provisions in light of the changes made in this filing.]		
36.9.4	Clarifying language added regarding the source and sinks to incorporate OCALSEs' ability to nominate wheel-through CRRS.	These revisions and additions were added in accordance with P 379 of the April 20 MRTU Rehearing Order. [Note: Sections 36.9, 36.9.1, 36.9.2, 36.9.2.1, 36.9.3 and 36.9.4 as filed in the March 9 CRR Implementation Filing were moved so that they now appear in sequence with the additional provisions of Section 36. The CAISO is seeking a July 9, 2007 effectiveness date on these provisions in light of the changes made in this filing.]	Compliance Obligation.	Language was included in Appendix BB of current ISO Tariff in March 9 CRR Implementation Filing. Language was clarified in March 9 Implementation CRR Filing.
36.10	Use of defined terms corrected.	Added for clarity. [Note: Section 36.10 as filed in the March 9 CRR Implementation Filing were moved so that they now appear in sequence with the additional provisions of Section 36.	205 Proposal –Minor Change	Language was included in Appendix BB of current ISO Tariff in March 9 CRR Implementation Filing. Language was clarified in March 9 Implementation CRR

		This change was not substantive and the CAISO continues to seek a May 9, 2007 effectiveness date for these provisions as filed on March 9.]		Filing.
36.11	Section 36.11 and its new subsections now contain the CAISO's proposal for allocating CRRs to sponsors of Merchant Transmission projects.	Section supplemented to fulfill CAISO's commitment in the MRTU filing to develop and file a Merchant CRR proposal, as discussed in the transmittal letter to this filing.	205 Proposal – Further Policy Development	None
36.11.1				
36.11.2				
36.11.3				
36.11.3.1				
36.11.3.2				
36.11.3.2.1				
36.11.3.2.2				
36.11.3.2.3				
36.13	Sentence added for greater detail.	Added clarification regarding settlement of CRR auction results.	205 Proposal –Detail from BPM	None
36.13.1	Use of defined terms corrected. Adds “of this Appendix” to cross reference.	Added for clarity.	205 Proposal –Minor Change	Language was modified in January 29 LT CRR Filing.
36.13.2	Adds “of this Appendix” to cross reference. Use of defined terms corrected.	Added for clarity.	205 Proposal –Minor Change	None
36.13.3	Adds language to clarify cross references.	Added for clarity.	205 Proposal –Minor Change	None
36.13.4	Use of defined terms corrected.	Added for clarity.	205 Proposal –Minor Change	None
36.13.5	Use of defined terms corrected.	Added for clarity.	205 Proposal –Minor Change	None
36.13.6	Language clarified about	Detail added to the tariff as	205 Proposal –Detail from	None

	the treatment of identical bids.	a result of BPM development process.	BPM	
36.13.7	Use of defined terms corrected.	Added for clarity.	205 Proposal –Minor Change	None