

120 FERC ¶ 61,192  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;  
Sudeen G. Kelly, Marc Spitzer,  
Philip D. Moeller, and Jon Wellinghoff.

California Independent System Operator Corporation      Docket Nos. ER07-1077-000  
ER07-1077-001  
ER07-613-004

ORDER CONDITIONALLY ACCEPTING IN PART  
AND REJECTING IN PART TARIFF REVISIONS

(Issued August 28, 2007)

1. On June 22, 2007, as clarified on June 29, 2007, the California Independent System Operator Corporation (CAISO) filed revisions to the congestion revenue rights (CRRs) credit policy in its tariff.<sup>1</sup> The CAISO submits these revisions in order to augment the CRR-related credit policy provisions already in its tariff with additional credit policy provisions regarding the auctioning, holding, and transferring of CRRs, as well as enforcement actions the CAISO may take with regard to entities that fail to meet CRR credit policy requirements. As discussed below, the Commission grants waiver of the notice requirement and conditionally accepts the tariff revisions effective August 22, 2007.

**I. Background**

2. On September 21, 2006, the Commission conditionally accepted the CAISO's Market Redesign and Technology Upgrade (MRTU) proposal.<sup>2</sup> The CAISO is scheduled

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<sup>1</sup> FERC Electric Tariff, Third Replacement Volume Nos. I and II (CAISO tariff).

<sup>2</sup> *Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274 (2006) (MRTU Order), *order on reh'g*, 119 FERC ¶ 61,076 (2007) (MRTU Rehearing Order).

to commence operations under the MRTU Tariff in early 2008. The MRTU Tariff will implement a market design based on locational marginal prices (LMP). Under the MRTU's LMP-based congestion management design, CRRs will replace the path-specific firm transmission rights used by the CAISO under its current zonal congestion management design.

3. CRRs are financial instruments designed to help the market participants (*e.g.*, load-serving entities (LSEs)) holding these instruments manage their exposure to congestion costs associated with the new LMP-based congestion management design.<sup>3</sup> CRRs entitle the holder to receive revenues or obligate the holder to pay charges based on the marginal cost of congestion, calculated for each hour in the CAISO's Integrated Forward Market. The CAISO will first allocate CRRs to LSEs based upon a nomination process, and then will make the remaining CRRs available to all creditworthy market participants and candidate CRR holders<sup>4</sup> through auction. Market participants that obtain CRRs may hold them or transfer them, subject to the relevant tariff provisions.

4. The CAISO will conduct its first CRR allocations and auctions prior to the start of MRTU operations in 2008. On May 8, 2007, the Commission conditionally accepted tariff revisions needed to effectuate the CAISO's plan to allocate and auction CRRs to market participants starting in summer 2007.<sup>5</sup> The CAISO began the CRR allocation process August 3, 2007, and plans to conduct the first CRR auction in fall 2007. During these initial CRR allocations and auctions, the CAISO will still be operating under its

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<sup>3</sup> For a more complete discussion of CRRs, *see* MRTU Order, 116 FERC ¶ 61,274 at P 704 (2006), and MRTU Rehearing Order, 119 FERC ¶ 61,076, at P 348 (2007). For a discussion of long-term CRRs, *see generally* *Cal. Indep. Sys. Operator Corp.*, 120 FERC ¶ 61,023 (2007) (Long-Term CRR Order).

<sup>4</sup> A candidate CRR holder is an entity that is registered and qualified by the CAISO to participate in the CRR allocation, the CRR auction, or in the secondary registration system to become a CRR holder, and is a party to a fully executed CRR Entity Agreement and, therefore, must comply with the requirements for candidate CRR holders under the CAISO tariff. *See* CAISO tariff Appendix BB, Original Sheet No. 1298.

<sup>5</sup> *Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,124 (2007) (May 8 Order). In this order, the Commission also directed the CAISO to submit to the Commission on an informational basis the Business Practice Manuals (BPMs) necessary for the first annual CRR allocation, including the BPM for Credit Management.

current CAISO Conformed Simplified and Reorganized Tariff (CAISO tariff), rather than the MRTU Tariff.

5. Under the CAISO tariff, section 12 (Creditworthiness) is meant to ensure that market participants that submit schedules or transact in the CAISO's markets meet their present and future financial obligations. Section 12 describes creditworthiness requirements, requirements for posting financial security, and steps that the CAISO can take if a market participant fails to satisfy these requirements.<sup>6</sup> For example, section 12 requires each market participant to ensure that its aggregate credit limit (*i.e.*, the sum of its unsecured credit limit and financial security amount) is equal to or greater than its estimated aggregate liability (*i.e.*, the sum of its known and reasonably estimated potential liabilities) at all times. The provisions in section 12 that address CRR-related credit policy requirements are limited, and were recently accepted by the Commission in the May 8 Order. The instant filing expands on the existing CRR-related creditworthiness provisions.

## **II. The CAISO's Filing**

6. The CAISO states that, based on expert advice and stakeholder input, its proposed CRR credit policy consists of the following general elements: (1) credit requirements for participation in CRR auctions; (2) credit requirements applicable to holders of CRRs with a term of a year or less (*i.e.*, short-term CRRs); (3) credit requirements applicable to long-term CRRs; (4) credit requirements associated with transfers of CRRs; and (5) enhanced enforcement tools in case of default or for failure to comply with the CAISO's credit policies. With its proposed CRR credit policy amendments, the CAISO intends to balance two competing goals: protecting the financial interests of market participants by enabling the CAISO to mitigate the losses to other market participants if a default should occur; and ensuring that credit requirements are not so conservative as to create a barrier to participation in the CRR market by creditworthy CRR participants.<sup>7</sup>

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<sup>6</sup> In 2006, the Commission approved revisions to section 12 designed to provide greater assurance that each market participant can satisfy its financial obligations and not present undue credit risk to CAISO market creditors. *See Cal. Indep. Sys. Operator Corp.*, 115 FERC ¶ 61,170 (2006), *order on reh'g and compliance filings*, 119 FERC ¶ 61,053 (2007) (April 19 Order).

<sup>7</sup> CAISO June 22 Transmittal Letter, Docket Nos. ER07-613-004 and ER07-1077-000, at 5.

7. The CAISO explains that, although the tariff revisions accepted in the May 8 Order added some CRR-related provisions to the CAISO's credit policy, the credit policy needs further augmentation in preparation for implementation of CRRs under MRTU.<sup>8</sup> Thus, the CAISO submits the instant filing to incorporate into its current tariff new credit policy provisions that will accommodate the auctioning, holding, and transferring of CRRs, as well as enforcement actions the CAISO may take with regard to entities that fail to meet CRR credit requirements. The CAISO also notes that details included in the filing are consistent with guidance provided by the Commission in its April 19 Order.<sup>9</sup> The April 19 Order required the CAISO to specify, in its tariff, rather than in a BPM, how it calculates estimated aggregate liability for market participants.<sup>10</sup> The CAISO explains that, since the net projected obligations of CRRs are a component of estimated aggregate liability, it proposes to include in the CAISO tariff details concerning how CRRs are valued.

8. The CAISO states that, without properly designed credit requirements (and market rules), the CRR market, like any other market, could be subject to potential gaming and speculation. According to the CAISO, without credit requirements for participation in the CRR auction, a market participant could submit bids to purchase positively priced CRRs beyond its financial capability, and then fail to pay the purchase price. Likewise, a market participant could bid for negatively-valued CRRs, take the payments by the CAISO, and then default on subsequent payment obligations to the detriment of market creditors. The CAISO states that it has designed its credit policy to minimize the impact and occurrence of such situations. For example, among other things, participants in CRR auctions must satisfy a \$500,000 minimum available credit requirement.<sup>11</sup>

9. The CAISO avers that its proposed credit requirements are designed to reflect the reality that congestion revenue associated with CRRs may be highly variable because of the variability of LMPs. Consequently, states the CAISO, credit requirements must be designed to cover the potential actual congestion revenues associated with a CRR, in the event that actual congestion revenues differ from those expected at the time the market

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<sup>8</sup> The CRR credit policy provisions will carry over from the CAISO tariff to the MRTU Tariff.

<sup>9</sup> CAISO June 22, 2007 Transmittal Letter, Docket Nos. ER07-613-004 and ER07-1077-000, at 4.

<sup>10</sup> April 19 Order, 119 FERC ¶ 61,053, at P 16.

<sup>11</sup> CAISO tariff section 12.6.2.

participant obtained the CRR. The CAISO's approach for determining the value of a short-term CRR takes these credit considerations into account, and has two components: (1) the most recent evidence of expected value of the CRR (*i.e.*, the CRR auction price); plus (2) a credit margin to reflect the potential for the CRR holder to face future payment obligations in excess of the expected value of the CRR.<sup>12</sup>

10. The CAISO's proposed tariff revisions amend tariff section 12 and also add defined terms to Appendix A (the Master Definition Supplement). More specifically, the CAISO proposes to amend sections 12.1 (Credit Requirements), 12.5 (ISO Enforcement Actions Regarding Under-Secured Market Participants) and 12.6 (Credit Obligations Applicable to CRRs).<sup>13</sup> The June 22, 2007 filing also includes the BPM for Credit Management, which the CAISO submits for informational purposes in compliance with the May 8 Order<sup>14</sup> and the Order Granting Extension of Time.<sup>15</sup> The CAISO's June 29, 2007 supplemental filing clarifies provisions in sections 12.6.3.2, 12.6.3.3, and 12.6.3.4, and makes related changes to defined terms in Appendix A.

11. Proposed modifications to section 12.1 make creditworthiness requirements applicable to CRR holders and candidate CRR holders. Proposed revisions to tariff section 12.5, which deals with CAISO enforcement actions for market participants who are under-secured,<sup>16</sup> would allow the CAISO to take actions such as limiting a market participant's market activity and eligibility to participate in a CRR allocation or CRR auction, or reselling the CRR holder's CRRs in a subsequent CRR auction or bilateral transaction.

12. Section 12.6 of the current CAISO tariff addresses credit obligations applicable to CRRs. Proposed section 12.6.1 provides that LSEs eligible to participate in any CRR allocation are not required to provide additional financial security in advance, while proposed section 12.6.2 requires each candidate CRR holder that participates in a CRR auction to ensure that its aggregate credit limit is in excess of its estimated aggregate

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<sup>12</sup> *Id.* section 12.6.3.2.

<sup>13</sup> Within section 12.6, the CAISO proposes to add a new section 12.6.1, renumber current section 12.6.1 as section 12.6.2 and modify it, and add a new section 12.6.3.

<sup>14</sup> May 8 Order, 119 FERC ¶ 61,124 at P 70.

<sup>15</sup> *Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,244, at P 6 (2007).

<sup>16</sup> A market participant is considered under-secured if its estimated aggregate liability at any time exceeds its aggregate credit limit.

liability by a specified amount. A candidate CRR holder that fails to satisfy this requirement may lose its ability to participate in the relevant CRR auction.

13. Proposed section 12.6.3 addresses credit risks associated with holding CRRs. For example, proposed section 12.6.3.1 requires, among other things, each CRR holder to maintain an aggregate credit limit that satisfies the applicable credit requirements, and provides that CRRs will be evaluated on a portfolio basis.<sup>17</sup> This section also directs the CAISO to reevaluate, on at least a monthly basis, the credit requirements for holding CRRs, and to adjust credit requirements accordingly.<sup>18</sup>

14. Proposed section 12.6.3.2 (as clarified by the June 29, 2007 supplemental filing) lists the credit requirements for CRR holders with short-term CRRs. Likewise, proposed section 12.6.3.3 (as clarified by the June 29, 2007 supplemental filing) lists the credit requirements for CRR holders with long-term CRRs. The two components for determining the value of short-term CRRs, as listed *supra* at paragraph 9, are the CRR auction price and a credit margin. Holders of long-term CRRs will be subject to all requirements for holding short-term CRRs, plus additional requirements that cover the financial risk associated with the payment obligations over the whole (10-year) term of the long-term CRR. The CAISO explains that it considered a number of approaches, but ultimately chose a conservative one given the “initial uncertainty as to the volatility of CRR payment obligations.”<sup>19</sup> Proposed section 12.6.3.4 (also clarified by the June 29, 2007 supplemental filing) details how the credit margin will be calculated for CRRs, and

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<sup>17</sup> The CAISO will evaluate CRRs on a portfolio basis by looking at a CRR holder’s portfolio and, if a CRR holder owns more than one CRR, the CAISO will impose a credit requirement on the CRR holder that is equal to the sum of the individual credit requirements applicable to each of the CRRs held by such CRR holder. In other words, a CRR holder’s negative credit requirements (CRRs with high positive expected values) can offset its positive credit requirements (CRRs with low expected values).

<sup>18</sup> Credit requirements for holding long-term CRRs and related credit margins will be updated at least once per year. CAISO tariff section 12.6.3.1.

<sup>19</sup> See CAISO June 22, 2007 Transmittal Letter, Docket Nos. ER07-613-004 and ER07-1077-000, at 10. Specifically, a long-term CRR holder will be subject to a credit requirement equal to the negative of the most recent CRR auction price of a one-year term CRR with the same source and sink as the long-term CRR, multiplied by the number of years remaining in the long-term CRR, plus the credit margin calculated for the one-year CRR multiplied by the square root of the number of years remaining in the long-term CRR. CAISO tariff section 12.6.3.3.

provides that the CAISO may reassess the credit margin at any time and require additional financial security from a CRR holder if necessary to meet section 12 credit requirements.

15. The CAISO requests that the Commission accept the tariff revisions proposed in the June 22, 2007 filing (and the clarifications in the CAISO's June 29, 2007 supplemental filing) effective August 22, 2007. The CAISO explains that parties obtaining CRRs in the initial CRR allocation (which began August 3, 2007) will be required to comply with the applicable credit requirements after completion of the initial CRR auction, scheduled for fall 2007. Therefore, the CAISO states, the proposed August 22, 2007 effective date falls before the time that LSEs receiving their initial CRR allocation are required to comply with the CRR credit requirements, and also prior to the time that market participants obtain CRRs in the first CRR auction. With respect to the June 29, 2007 supplemental filing, the CAISO requests waiver, pursuant to section 35.11 of the Commission's regulations, 18 C.F.R. § 35.11 (2007), of the 60-day notice rule to permit all proposed revisions to be effective August 22, 2007. The CAISO states that granting waiver is appropriate because provisions in the June 29, 2007 supplemental filing are intended to become effective at the same time as the provisions in the June 22, 2007 filing that are not affected by the June 29, 2007 filing.

### **III. Notice of Filings and Responsive Pleadings**

16. Notice of the June 22, 2007 filing was published in the *Federal Register*, 72 Fed. Reg. 36,696 (2007), with interventions or protests due on or before July 13, 2007. Notice of the June 29, 2007 supplemental filing was published in the *Federal Register*, 72 Fed. Reg. 39,399 (2007), with interventions or protests due on or before July 20, 2007.

17. The following parties filed notices of intervention or timely motions to intervene: Williams Power Company, Inc., Western Area Power Administration, the California Electricity Oversight Board, the Transmission Agency of Northern California, the Modesto Irrigation District, and the Alliance for Retail Energy Markets. Constellation Energy Group Companies and Golden State Water Company filed motions to intervene out of time.

18. Southern California Edison Company (SoCal Edison) and the Northern California Power Agency (NCPA) filed timely motions to intervene and comment or protest. The CAISO filed an answer to the protests and NCPA filed an answer to the CAISO's answer.

#### **IV. Discussion**

##### **A. Procedural Matters**

19. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2007), the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Given the early stage of this proceeding, we accept Constellation Energy Group Companies' and Golden State Water Company's motions to intervene out of time.

20. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2007), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We are not persuaded to accept the CAISO's and NCPA's answers and will, therefore, reject them.

##### **B. Protests**

###### **1. Use of Auction Prices in Establishing Credit Obligations**

21. SoCal Edison asserts that the CAISO's credit obligation methodology for allocated CRRs is flawed because nominations and awards in the allocation process are made prior to the auction. This sequencing of actions means that a candidate CRR holder must nominate the CRRs it wants to receive through the allocation process without knowing what impact such requests will have on its credit obligation. SoCal Edison states that this situation creates risks that could threaten the viability of the CRR allocation process. For example, if, after the auction, the credit obligation is too great, the LSE may not be financially capable of meeting that obligation. If this happens, SoCal Edison asserts, under the CAISO tariff, the LSE could lose its ability to hold CRRs and may not be able to participate in other CAISO markets. Furthermore, as SoCal Edison emphasizes, since the issuance of CRRs is based on simultaneous feasibility, if an LSE is unable to meet its financial obligation, other CRRs may no longer be revenue adequate. SoCal Edison argues that such risks may be avoidable, provided an LSE knows what its credit requirement will be prior to the allocation of CRRs.<sup>20</sup>

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<sup>20</sup> For example, SoCal Edison contends that CRRs could clear at an unexpected auction price, resulting in a credit requirement that an LSE may not be financially capable of meeting; in such case, the entity could lose its ability to hold CRRs and to participate in the CAISO markets.



22. SoCal Edison suggests an alternative to the CAISO's methodology whereby the credit calculation for the initial CRR allocation will be based on the realized auction price, but limited so that this price must fall between plus or minus twenty percent of the expected congestion revenue identified in the CRR study process.<sup>21</sup> SoCal Edison asserts that, while this approach still would not enable candidate CRR holders to know the exact credit requirement associated with holding a particular CRR, nevertheless, it would allow them to reasonably estimate and limit their credit exposure.

23. SoCal Edison explains that the CAISO declined to adopt this proposal during the stakeholder process, and SoCal Edison now requests that the Commission require the CAISO to adopt this alternative. According to SoCal Edison, the CAISO responded to SoCal Edison's criticism of the CAISO's proposal by stating that LSEs can manage their risk by selecting CRRs with positive expected value, limiting their CRR nominations, and electing to purchase some CRRs in the auction, and that the CAISO lacked a reasonable alternative means of valuing CRRs.<sup>22</sup> SoCal Edison disputes this and asserts that no allocation participant should need to participate in an auction strictly to limit its credit exposure. SoCal Edison states that constructing auction bids is complicated and that there is no guarantee that an entity would be able to ensure a not unduly burdensome credit requirement through submitting auction bids. Further, SoCal Edison avers, some LSEs may desire only to participate in the allocation process and requiring them to participate in the auction to assure reasonable credit terms is unacceptable.

24. SoCal Edison challenges the CAISO's reliance on the theoretical notion that the auction price, even in the first year of the CRR process, is the best measure of expected congestion payments. According to SoCal Edison, there are a number of reasons why the auction price may not reflect the expected congestion payments. For example, since a CRR serves as a hedge, an entity may be willing to pay a premium over the expected value in order to eliminate the risk of swings in congestion costs; or an illiquid market or a market subject to manipulation may produce clearing prices that are not indicative of expected congestion payments; or market participants could lack the necessary information to adequately evaluate the expected congestion payments.

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<sup>21</sup> The "CRR study process" that SoCal Edison refers to is, presumably, the CAISO's LMP studies, which, among other things, simulated LMP prices and congestion patterns, based on historical data.

<sup>22</sup> SoCal Edison July 13, 2007 Comments, Docket Nos. ER07-613-004 and ER07-1077-000, at 4 (quoting CAISO response to SoCal Edison Draft CRR Credit Requirement Tariff Language Dated June 6, 2007 at <http://www.caiso.com/1c03/1c03979410740.pdf>).

25. SoCal Edison is concerned that, without sufficient information and experience, credit requirements for allocated CRRs will be driven by factors that are neither predictable nor controllable by the LSE receiving the allocation, which could result in significant costs for an LSE and potentially cause it to default. SoCal Edison asserts that this can be prevented by setting boundaries on the credit requirement for LSEs receiving an allocation, so LSEs can make informed decisions when submitting their CRR allocation requests.

## 2. Long-Term CRRs

26. NCPA's protest focuses mainly on the long-term CRR component of the CAISO's proposed CRR credit policy revisions. NCPA argues that long-term CRRs are too speculative to comport with statutory and Commission requirements, that the credit obligations associated with long-term CRRs are too onerous for small LSEs, and that the Commission should modify the CAISO's filing to: (1) allow LSEs who receive negatively-valued long-term CRRs through allocation to return them, if, when their collateral requirements become known, they do not wish to maintain them; and (2) require the CAISO to provide option (as opposed to obligation) long-term CRRs, and/or provide a limitation on the exposure window for which the CAISO can require credit to be posted (preferably a term of one year), and/or provide for modification of long-term CRRs such that holders of negative value instruments will not be charged if the unit cannot run.

27. NCPA expresses concern that the collateral requirements associated with long-term CRRs will result in instruments so potentially expensive that smaller LSEs, such as NCPA members, cannot afford them. NCPA contends that long-term CRRs may become so cost-prohibitive for smaller entities that they violate the requirements of section 217(b)(4) of the Federal Power Act<sup>23</sup> and the Commission rulemakings concerning long-term firm transmission rights.<sup>24</sup> NCPA also argues that potentially burdensome collateral requirements will harm market participation and liquidity in CAISO markets by tying up significant assets that could be put to better use in the CAISO market, or in building new transmission or generation resources.

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<sup>23</sup> NCPA July 13, 2007 Protest, Docket Nos. ER07-613-004 and ER07-1077-000, at 3 (citing 16 U.S.C. § 824q(b)(4) (2000)).

<sup>24</sup> *Id.* (citing *Long-Term Firm Transmission Rights in Organized Electricity Markets*, Order No. 681, 71 Fed. Reg. 43,564 (Aug. 1, 2006), FERC Stat. & Regs. ¶ 31,226 (Order No. 681), *order on reh'g*, Order No. 681-A, 117 FERC ¶ 61,201 (2006)).

28. NCPA explains that under the CAISO's proposal the estimated aggregate liability for the long-term CRR component will expand to cover a long-term CRR holder's potential indebtedness for the entire ten-year term of the long-term CRR. NCPA states that, unlike monthly or annual CRRs where an LSE can wait until the end of the term and decline to renew it, ten year terms for long-term CRRs pose a significant risk for smaller LSEs due to a variety of factors (such as cases of mistaken analysis and changes in load flows or generation patterns). NCPA avers that, due to limited knowledge and a lack of data used to determine likely LMP prices under MRTU, future LMP prices are highly uncertain, so LSEs relying on limited information may not make optimal choices in the CRR nomination process, potentially leading to substantial collateral requirements. The CAISO's proposal is also problematic, according to NCPA, because values for long-term CRRs will not be known until after the CRRs have been allocated and entities have designated long-term CRRs. Thus, NCPA recommends that the CAISO allow LSEs who receive negatively-valued CRRs through allocation to return them if, once the collateral requirements become known, they do not wish to maintain them.

29. NCPA states that another source of the risk associated with long-term CRRs derives from the nature of obligations instruments.<sup>25</sup> Whereas an option CRR carries no downside risk if the holder cannot schedule the resource covered by a negatively-valued CRR, an obligation CRR for a negatively-valued right will require a net payment if the underlying resource is not scheduled. NCPA states that a baseload resource's outages or changes in environmental laws that affect how a unit is operated could cause a holder of negatively-valued obligation long-term CRRs to incur multiple years of unexpected payments. NCPA proposes a partial fix to this problem: the Commission could require the CAISO to allow the return of negatively-valued long-term CRRs associated with retired plants or plants shut down due to regulatory changes.

30. NCPA also argues in support of its request that the Commission limit the "exposure window" for posting credit for long-term CRRs, preferably to a term of one year or less. NCPA notes that Dr. Scott Harvey (whose declaration in support of the CAISO's proposal is attached to the CAISO's June 22, 2007 filing as Attachment D) acknowledged that one of the key risks facing the CAISO is the possibility that CRR auction bidders who win positively-valued CRRs that later prove to be negatively-valued might not keep up payments. NCPA contends that this type of risk can also be applied to allocated CRRs. NCPA next points to the CAISO's statement that "LSEs should have sufficient information [prior to allocation] to know which CRRs are positive and will be

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<sup>25</sup> NCPA states that the difference between an obligation CRR and option CRR is that an option CRR carries no downside if the holder cannot schedule the resource covered by a negatively-valued CRR.

expected to receive net-positive valued portfolios.”<sup>26</sup> According to NCPA, if the CAISO’s statement is true, then the CAISO and market participants should be able to bear the risk of a one year (as opposed to ten year) collateral requirement for allocated CRRs. Conversely, NCPA states that if the CAISO’s statement is not true, then long-term CRRs are “too speculative to fulfill the statutory requirement that [long-term firm transmission rights] be the financial equivalents of physical rights.”<sup>27</sup>

31. NCPA is also concerned that the collateral requirement for long-term CRRs is based on an estimated aggregate liability covering the aggregate value of these instruments for the full ten years, with no consideration for the time value of money. NCPA assumes that the Commission will prefer not to delay MRTU while an option CRR mechanism is developed. Therefore, NCPA suggests that the Commission consider a collateral requirement that would compute estimated aggregate liability for long-term CRRs on the basis of the current year’s estimated liability only. NCPA states this provision would match the annual nature of the CRR process while avoiding potential defaults if an LSE cannot post as collateral all the money it might owe for the ten year term of the long-term CRR.

### **3. Commission Determination**

32. We conditionally accept the CAISO’s proposed tariff revisions, as submitted in the June 22, 2007 filing and as clarified in the June 29, 2007 supplemental filing. With the exception of the CAISO’s proposed 10-year collateral requirement for long-term CRRs (discussed below), we find the tariff revisions to be reasonable.

33. As the Commission explained in its *Credit Policy Statement*, ISOs and RTOs, such as the CAISO, are typically non-profit entities that administer the market on behalf of market participants, serving as the clearinghouse to every transaction. Therefore, ISO/RTO members are exposed to the credit risk of other members. If collateral posted by a defaulting party is not sufficient to cover the amount of its default, the remaining credit risk exposure and costs are socialized across ISO/RTO members.<sup>28</sup> In establishing credit policy, the role of an ISO is to balance the competing goals of minimizing risk to non-

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<sup>26</sup> NCPA July 13, 2007 Protest at 26 (citing CAISO June 22, 2007 Transmittal Letter, Docket No. ER07-1077-000, at 8).

<sup>27</sup> NCPA July 13, 2007 Protest at 26.

<sup>28</sup> See *Policy Statement on Electric Creditworthiness*, 109 FERC ¶ 61,186, at P 17 (2004) (*Credit Policy Statement*).

defaulting market participants (which could take the form of high collateral requirements) with low barriers to entry (low collateral requirements). The CAISO's new CRR credit policy will help ensure that market participants who take part in the CRR allocation and auction process post sufficient collateral, thereby protecting against the possibility that the market will be exposed to inadequate congestion revenue payments if a CRR holder defaults on its CRR payment obligations.

34. We disagree with the issues raised by SoCal Edison. The financial security of the market is best ensured by using the actual CRR auction price to estimate the expected value of allocated CRRs. We find that the auction price will be the most reliable proxy for determining the value of an allocated CRR with the same source and sink because it reflects the value placed on it by market participants. In determining a CRR holder's credit risk, the CAISO must use a reliable proxy for valuing allocated CRRs; otherwise, holders of allocated CRRs may not be sufficiently collateralized to protect against the risk of default. If the CAISO uses stale information to calculate credit obligations, and a CRR holder is unable or unwilling to make the required payment, and those credit obligations prove insufficient in the event a market participant defaults on its CRR payment obligations, other market participants will share any uncovered financial loss, potentially for the duration of the entire term of the CRR.

35. SoCal Edison's proposed alternative of limiting credit obligations based on the results of the CRR study process would not provide a better measure of expected congestion revenues (*i.e.*, the expected value of allocated CRRs) because the CAISO used historic data on congestion patterns in running its simulation. The CRR study information used to simulate LMP prices is not based on current data, and as a result, may not be representative of future payment obligations associated with the CRR. While this information is available to all market participants and may inform participants regarding potential auction results, various aspects of the MRTU market design and transmission grid topology have changed since the CAISO produced its simulated results. The Commission is unwilling to direct the CAISO to rely on simulated, out-of-date information to limit market participants' credit requirements, because doing so could result in CRR holders being under-secured in the event of a default. We do not find it prudent to limit the financial security of market-participants facing mutualized risk of default to LMP simulations that the CAISO never intended to rely on to predict future congestion revenue payments.<sup>29</sup> Other than potentially limiting its own collateral

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<sup>29</sup> Rather, these LMP simulations were meant to assess potential variability of congestion revenue payments. *See* CAISO July 22, 2007 Filing, Attachment D, Declaration of Dr. Scott M. Harvey, at P 46 & n.11. In the first year of MRTU, the CAISO will rely on simulated variations in LMP to assess the potential that actual CRR

exposure, SoCal Edison has not demonstrated why shifting the potential exposure to other market participants is desirable or reasonable. Further, we expect the CRR auction to work as designed and to yield appropriate prices.

36. We also note that both the CAISO's proposal and SoCal Edison's alternative were vetted through the stakeholder process. The Commission has emphasized the importance of stakeholder input in establishing RTO credit policies, given the impact of default on non-defaulting RTO participants.<sup>30</sup> Since the majority of CAISO stakeholders support the CAISO's proposal, we consider this additional evidence of the degree of risk that CAISO stakeholders are willing to assume in connection with CRRs, and give this factor its appropriate deference.<sup>31</sup>

37. As the Commission has stated previously, we expect that the first few years of MRTU will provide valuable experience, and, accordingly, we expect market participants to consider the newness of the market when making their CRR nominations.<sup>32</sup> In addition to our recommendation that market participants take a cautious approach in nominating and bidding on CRRs, especially in the first year, we note that credit requirements for CRRs will be determined on a portfolio basis, allowing positively-valued CRRs to offset negatively-valued CRRs in market participants' overall credit

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payment obligations, as valued through the day-ahead market, will exceed the expected CRR payment as valued through the auction (*i.e.*, the credit margin). While the use of simulated data on LMP variance may not be the best long-term approach for setting the credit margin, we find it acceptable at the outset of a new market, until actual LMP data become available. Also, we emphasize that the credit margin is a conservative check on auction prices, to ensure sufficient collateral.

<sup>30</sup> See, e.g., *Midwest Indep. Trans. Sys. Operator, Inc.*, 111 FERC ¶ 61,250, at P 32 (2005); *Midwest Indep. Trans. Sys. Operator, Inc.*, 111 FERC ¶ 61,053, at P 177 (2005).

<sup>31</sup> The stakeholders have approved this filing, but we nevertheless must independently assess its merits and find the proposal just and reasonable. See *PJM Interconnection, L.L.C.*, 104 FERC ¶ 61,309 at P 19 (2003), *order on reh'g*, 109 FERC ¶ 61,286 (2004).

<sup>32</sup> Long-Term CRR Order, 120 FERC ¶ 61,023, at P 168.

requirement calculations.<sup>33</sup> Should a market participant's predictions of CRR values indeed vary from the auction results, this netting of credit requirements can reduce a market participant's overall exposure.

38. We recognize that, at the beginning of any new market operation, market participants face uncertainty, but we have confidence that the CAISO's proposed CRR credit policy will limit the risk of credit defaults while not imposing serious barriers to participation in CRR allocations and auctions. While we expect the CRR auction price to function as a reasonable component of market participants' credit obligations, to the extent market participants believe the auction results are anomalous, they should raise these issues with the CAISO market monitor and with the Commission. Further, if a market participant believes that its credit obligation is unjust, unreasonable, unduly discriminatory or preferential as a result of the CAISO's CRR credit policy, the market participant may bring a complaint to the Commission.<sup>34</sup>

39. Regarding NCPA's protest, we first emphasize that many of the issues NCPA raises are essentially CRR design issues, rather than CRR credit policy issues. These issues are inappropriate for our consideration here, either because they constitute a collateral attack on prior, final Commission orders, or because they are beyond the scope of this proceeding, and would be more properly raised in ongoing, parallel proceedings that focus on CRR design, rather than CRR credit issues.<sup>35</sup> Consequently, as discussed below, we reject NCPA's arguments for CRR options, small entity exceptions, and for allowing market participants to return negatively-valued CRRs. However, we grant NCPA's request to direct the CAISO to limit estimated aggregate liability for long-term CRRs to only the current year's estimated liability. This is because, as explained below, we find an annual auction to be an insufficient basis for calculating a credit obligation commensurate with a 10-year right.

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<sup>33</sup> We also note that the CAISO will recalculate the credit requirement for a CRR holder's portfolio at least monthly, and thus a CRR holder's credit requirement will reflect its current holdings.

<sup>34</sup> 16 U.S.C. § 824e (2000).

<sup>35</sup> *See, e.g., Mobil Oil Exploration v. United Distrib. Cos.*, 498 U.S. 211, 239 (1991) ("An agency employs broad discretion in determining how to handle related, yet discrete, issues in terms of procedures . . . [such as] where a different proceeding would generate more appropriate information and where the agency was addressing the question.") (citations omitted).

40. First, we will not require the CAISO to provide option, rather than obligation, long-term CRRs. NCPA's arguments are a collateral attack on prior Commission orders, or, at the very least, would be more appropriately raised on rehearing of the Long-Term CRR Order. In 2003, the Commission accepted the CAISO's proposal to allocate obligation CRRs.<sup>36</sup> In the MRTU Order and the MRTU Rehearing Order, the Commission thoroughly vetted the debate between option versus obligation CRRs, and ultimately concluded in both orders that the CAISO's proposal to offer CRR obligations as a hedging tool against congestion in the day-ahead market is reasonable.<sup>37</sup> Most recently, in the Long-Term CRR Order, the Commission specifically addressed option versus obligation CRRs in the context of long-term CRRs, and found that obligation long-term CRRs satisfy the requirements of Order No. 681.<sup>38</sup> This proceeding involves the CAISO credit policy for CRRs, not CRR design. Consequently, the CRR design issues NCPA raise are beyond the scope of this proceeding, and it would be inappropriate for the Commission to revisit the debate on obligation versus option CRRs here, particularly when other parties had no notice that this issue would be reconsidered.<sup>39</sup> This issue would be more appropriately revisited on rehearing of the Long-Term CRR Order, and, indeed, NCPA has filed a rehearing request in that proceeding that reiterates many of the arguments NCPA raises here.<sup>40</sup>

41. Next, NCPA argues that long-term CRRs impose disproportionate risk on smaller LSEs in contravention of statutory and Commission precedent.<sup>41</sup> Again, this is a design issue beyond the scope of this proceeding, and one that is under consideration in the Long-Term CRR proceeding. In the Long-Term CRR Order, the Commission found "no reason to conclude that the [CAISO's] long-term CRR proposal exposes smaller LSEs to

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<sup>36</sup> *See Cal. Indep. Sys. Operator Corp.*, 105 FERC ¶ 61,140, at P 177 (2003).

<sup>37</sup> *See MRTU Order*, 116 FERC ¶ 61,274, at P 733 & n.325 (2006), *and see MRTU Rehearing Order*, 119 FERC ¶ 61,076, at P 407 (2007).

<sup>38</sup> Long-Term CRR Order, 120 FERC ¶ 61,023, at P 226.

<sup>39</sup> NCPA has raised the issue of developing option long-term CRRs as a potential solution to some of its concerns in a more appropriate forum – as an issue for the Commission to reconsider on rehearing of the Long-Term CRR Order. *See NCPA August 3, 2007 Reh'g Request*, Docket No. ER07-475-003, *et al.*, at 27.

<sup>40</sup> *See NCPA August 3, 2007 Reh'g Request*, Docket No. ER07-475-003, *et al.*

<sup>41</sup> *See Long-Term CRR Order*, 120 FERC ¶ 61,023, at P 165-69.



disproportionately greater financial risks” and that the proposal “treats all LSEs alike.”<sup>42</sup> NCPA’s objections to the design of long-term CRRs and the impact such design will have on small LSEs are more appropriately addressed on rehearing of the Commission’s Long-Term CRR Order.

42. Further, we reject NCPA’s request to allow LSEs that are allocated negatively-valued CRRs to return them if they are unsatisfied with the resulting collateral obligations. The CAISO’s CRR allocation process is designed to satisfy the simultaneous feasibility test.<sup>43</sup> This test limits the number of CRRs awarded to ensure that they do not exceed the transfer capability of the transmission system. The CRR allocation process consists of tiers, and within each tier a participant is allowed to nominate a certain percentage of the total amount of CRRs it is eligible to request. In each tier, the CAISO runs the simultaneous feasibility test on all nominated CRRs to determine the set of feasible CRRs and, accordingly, which CRRs can be awarded.<sup>44</sup> Permitting LSEs to return allocated CRRs after the CAISO has completed this multi-tiered process would compromise the CAISO’s CRR allocation process and impose costs on a system the Commission has already approved as just and reasonable. We note that any LSE wishing to relinquish a CRR may attempt to sell the CRR in a bilateral transaction (and record the transfer in the secondary registration system), thereby reducing its collateral requirements.<sup>45</sup>

43. Likewise, we will not require the CAISO to allow market participants to return negatively-valued long-term CRRs associated with retired plants or plants shut down due to regulatory changes, nor will we require the CAISO to permit market participants holding negatively-valued long-term CRRs to avoid payment if their unit cannot run. As stated above, there are simultaneous feasibility problems associated with returning CRRs, and LSEs have the ability to re-sell unwanted CRRs. Further, we note that all market participants face regulatory and operational risks. CRRs are intended to allow LSEs to

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<sup>42</sup> *Id.*

<sup>43</sup> The main purpose for applying the simultaneous feasibility test is to help ensure that CRRs created through an allocation or auction process are revenue adequate. Revenue adequacy is the situation in which, over a given period, at least as much congestion revenue is collected by the CAISO as is paid out in CRR entitlements to CRR holders.

<sup>44</sup> *See, e.g.*, MRTU Order, 116 FERC ¶ 61,274, at P 710.

<sup>45</sup> *Id.* P 871.

hedge against congestion costs in both the short- and long-term; they are not intended as a hedge against the risk of operational malfunctions and regulatory change that all market participants should take into account as part of their business models. Finally, we note that NCPA's arguments for returning negatively-valued CRRs relate not to the CAISO's proposed CRR credit policy, but to the overall CRR design policy, and would be more appropriately considered on rehearing of the Long-Term CRR Order.

44. Although we decline to revisit CRR design issues, here, we nevertheless note that there are a variety of mechanisms in place to help LSEs limit their credit exposure with regard to both short- and long-term CRRs. In the Long-Term CRR Order, the Commission adopted the CPUC's proposal to require a phase-in of long-term CRR eligibility levels, so LSEs can only obtain long-term CRRs for up to and including 20 percent of their adjusted load metric in year one (unless they demonstrate that they have long-term agreements or generation resources that justify receiving CRRs up to and including fifty percent of their adjusted load metric), with incremental increases allowed in subsequent years.<sup>46</sup> In addition, LSEs may opt to nominate only short-term CRRs at the outset of the allocation process and then use their priority standing in subsequent nominations to renew their CRR holdings, thereby obtaining assurance that their short-term CRR will be renewable without the downside risk of assuming a ten-year CRR obligation. While LSEs are still gaining experience with CRRs, they should take advantage of these mechanisms to manage their credit obligations. Finally, as mentioned above, credit requirements for CRRs will be determined on a portfolio basis, allowing positively-valued CRRs to offset negatively-valued CRRs in an LSE's overall credit requirement calculation. This practice minimizes an entity's CRR-related collateral requirements and reduces barriers to entry, as suggested by the Commission in its *Credit Policy Statement*.<sup>47</sup>

45. We reject the CAISO's proposal to use the "CRR auction price of a CRR with the same source and sink as the Long Term CRR but with only a one year term multiplied by the number of years remaining in the term of the Long Term CRR"<sup>48</sup> to calculate the credit amount required to hold a long term CRR. We allow public utilities, including

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<sup>46</sup> See Long-Term CRR Order, 120 FERC ¶ 61,023, at P 136.

<sup>47</sup> *Credit Policy Statement*, 109 FERC ¶ 61,186, at P 20.

<sup>48</sup> CAISO tariff section 12.6.3.3.

RTOs, to establish reasonable credit requirements for transmission service.<sup>49</sup> This includes credit requirements for CRRs commensurate with the financial risk associated with them. The CAISO's proposal, however, does not reflect the financial risk of holding a long-term CRR over the duration of the long-term right. We find that multiplying by ten (or by the remaining number of years in the long-term CRR's term) the auction price of a one-year CRR does not accurately forecast the expected value of a long-term CRR for the duration of its term. Auction participants placing bids for a one-year CRR will not be estimating the value of the CRR in future years, thus multiplying a one-year auction price by the number of years remaining on the long-term CRR could inaccurately estimate the value of the long-term CRR. Since the CAISO has not sufficiently justified its proposal, we will reject it. Instead, we will accept NCPA's request to limit to a term of one year the "exposure window" for which the CAISO can require credit to be posted for long-term CRRs. This will ensure that collateral is only being collected for a term over which a CRR can be appropriately valued under existing valuation methods. Therefore, we direct the CAISO to revise its tariff, reflecting this change, and to submit the revised tariff sheets within 15 days of the date of this order.

46. We find it reasonable under the circumstances to choose lower barriers to entry over the risk of potentially burdensome over-collateralization. Nevertheless, we encourage the CAISO to develop an appropriate method for estimating the value of allocated long-term CRRs that is representative of the financial risk associated with the long-term CRR, and takes into account all years covered by the long-term CRR.

47. Finally, in accepting the CAISO's proposed revisions, we also grant the CAISO's requested waiver of the 60-day notice requirement, and permit all the proposed tariff revisions to become effective on the same date. We find good cause to allow the tariff provisions in the June 29, 2007 supplemental filing to become effective at the same time as the provisions in the June 22, 2007 filing that are not affected by the supplemental filing, and no party has contested the CAISO's request.<sup>50</sup> Accordingly, we accept the tariff amendments effective August 22, 2007, as requested.

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<sup>49</sup> See *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, 72 Fed. Reg. 12,266 (March 15, 2007), FERC Stats. & Regs. ¶ 31,241, at Pro Forma OATT Attachment L (2007), *reh'g pending*.

<sup>50</sup> *Central Hudson Gas & Electric Corp.*, 60 FERC ¶ 61,106, *reh'g denied*, 61 FERC ¶ 61,089 (1992).

The Commission orders:

(A) Waiver of the 60-day notice requirement is hereby granted, and the CAISO's proposed tariff revisions are accepted in part and rejected in part as discussed in the body of this order, effective August 22, 2007.

(B) We acknowledge receipt of the CAISO's BPM for Credit Management.

(C) We direct the CAISO to submit a compliance filing within 15 days of the date of this order, as discussed in the body of this order.

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.