

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 No. ER02-1656-024

ORDER ACCEPTING COMPLIANCE FILING

(Issued September 22, 2006)

1. In this order, we accept the California Independent System Operator Corporation's (CAISO) compliance filing submitted pursuant to the directive in a February 10, 2005 Order.¹ In that order, the Commission addressed the CAISO's conceptual proposal for honoring existing transmission contracts (ETC)² under the CAISO's Market Redesign and Technology Upgrade (MRTU).³ We approve, in concept the CAISO's so-called perfect hedge proposal which is designed to provide financial protection to ETC rights holders against any congestion charges that may arise under the Locational Marginal Price (LMP) market design proposed in the MRTU Tariff.

2. In this order, we provide guidance in response to details submitted in response to our February 10 Order. Our objective is to provide this guidance, as requested by the CAISO, on whether elements of its ETC proposal, including the perfect hedge proposal, is acceptable so that the CAISO could proceed with the development of the software and

¹ *California Independent System Operator Corporation*, 110 FERC ¶ 61,113 (2005) (February 10 Order).

² An existing transmission contract (ETC) is an encumbrance, established prior to the start-up of the CAISO, in the form of a contractual obligation of a CAISO Participating Transmission Owner (PTO) to provide transmission service to another party in accordance with terms and conditions specified in the contract, utilizing transmission facilities owned by the PTO that have been turned over to CAISO operational control pursuant to the Transmission Control Agreement.

³ The CAISO's MRTU Tariff filing is being addressed separately and issued concurrently in Docket No. ER06-615-000, *et al.*

systems required to implement this aspect of its market redesign. We note that in the MRTU Tariff filing, the CAISO proposes tariff revisions that will implement the perfect hedge mechanism. Those tariff revisions are addressed in the order on the MRTU tariff that is issued concurrently with this order.

Background

3. As part of its conceptual proposal for honoring ETCs under the MRTU, the CAISO proposed to create the perfect hedge mechanism that would preserve the financial terms of all ETCs such that ETC rights holders will not bear any day-ahead or real-time congestion costs associated with valid ETC schedules and schedule changes. Under its proposal, the CAISO, using the simultaneous feasibility test in the Congestion Revenue Rights (CRRs) allocation process, would create ETC CRRs⁴ “on paper” and hold them on behalf of ETC holders in order to ensure revenue adequacy for CRRs allocated or auctioned to other parties. The CAISO will use these CRRs to offset congestion costs associated with valid day-ahead ETC schedules.⁵

4. While the Commission found the perfect hedge concept appealing, the Commission found that the proposal lacked sufficient detail regarding exactly how the mechanics of the perfect hedge would work, including the settlement and allocation of those costs that would result from the implementation of the ETC Proposal. Specifically, the Commission stated that:

it is unclear from the CAISO’s proposal: (1) whether revenues from the paper CRRs flow to the neutrality account or are maintained in a separate account; (2) whether congestion costs that result from valid post day-ahead ETC schedule changes will be paid for by surpluses in the neutrality account (which includes only congestion surpluses from the real-time market); (3) whether the real-time congestion revenues that accrue to the neutrality account will be sufficient to cover the costs associated with ETC holders’ scheduling changes following the day-ahead market; and (4) how many CRRs should be withheld from the CRR allocation process in order to implement the “perfect hedge.” We note that excess

⁴ Under the MRTU, CRRs will replace the current system of contract path-specific Firm Transmission Rights. Instead of specific paths, the CAISO’s CRR design recognizes a set of network nodes in which power is injected and withdrawn from the transmission grid. Proposed CRRs will entitle the CRR holder to receive revenues based on the congestion charges assessed to load according to whether the LMP at the source is greater or less than the LMP at the sink.

⁵ For the detailed description of the CAISO’s original proposal, *see* February 10 Order at P 48-49 and 58-60.

revenues from the paper CRRs could serve to further reduce those costs associated with post day-ahead ETC schedule changes. It is also unclear how and to whom these costs are assigned.⁶

Accordingly, the Commission directed a compliance filing that was to provide additional details on the perfect hedge concept, including responses to the issues identified above.⁷

CAISO's Compliance Filing

5. The CAISO's compliance filing, filed in response to the February 10 Order, provides clarifying information on the mechanics of the perfect hedge, along with specific settlement examples of how the perfect hedge will function. The CAISO states that its compliance filing contains clarification of issues related to settlements of the perfect hedge in the day-ahead market and post day-ahead market. With respect to the day-ahead market, the CAISO explains that in order to minimize potential adverse financial impacts of the day-ahead perfect hedge on holders of CRRs (which are settled based on day-ahead prices), the CAISO will set aside CRR obligations that correspond to the ETC holders' expected utilization of their rights for the purpose of performing the simultaneous feasibility optimization that is used for allocating CRRs to eligible parties and auctioning CRRs to the rest of the market. These ETC CRRs, referred to as "paper CRRs," are not released to any party; rather they serve as a placeholder in the CRR simultaneous feasibility test to preserve funding for non-ETC CRRs.⁸ In response to the first clarification sought by the Commission as to whether revenues from the paper CRRs flow to the neutrality account or are maintained in a separate account, the CAISO explains that there would be no dollar flows associated with the paper CRRs. It further states that no accounting entries are necessary with ETC schedules in the day-ahead market, and no entity receives a payment or charge associated with the paper CRRs.⁹

⁶ *See id.* at P 61.

⁷ *See id.* at P 62.

⁸ The CAISO states that it will maintain an accounting record of the day-ahead ETC congestion charges that are reversed under the perfect hedge, as well as the hypothetical CRR revenue stream that would correspond to the paper CRRs to accurately offset the perfect hedge.

⁹ The CAISO states that it intends for the settlement statements of a Scheduling Coordinator representing an ETC rights holder to show, through an explicit line item, that the congestion charged created by a valid ETC schedule is exactly reversed to demonstrate that during each settlement interval, ETC rights holders are fully protected from congestion costs that arise from the exercise of their contractual rights.

6. The second clarification relates to how many CRRs the CAISO will withhold from the CRR allocation process in order to implement the perfect hedge. The CAISO explains that the precise amount of CRRs created for ETC usage but not allocated has not been determined; however, the CAISO states that it plans to create as many paper CRRs, as necessary, to offset the congestion charges expected to accrue to ETC schedules and reflect the actual usage of those ETCs that will remain in place upon implementation of MRTU.

7. With respect to post day-ahead settlements of the perfect hedge, the Commission sought clarification on whether congestion costs that result from valid post day-ahead ETC schedule changes will be paid for by surpluses in the neutrality account (which includes only congestion surpluses from the real-time market).¹⁰ The CAISO clarifies that the total congestion settlement in real-time (after reversing the real-time congestion charges/credits from ETC schedules) will normally be positive or in certain instances could be negative (for example during transmission outages). In either case, the CAISO states that it will distribute the net total congestion revenues or charges in real time to non-ETC metered demand for every settlement interval. Hence, the ETC rights holder would be neither harmed nor benefited by real-time congestion costs.

8. The Commission also sought clarification of whether the real-time congestion revenues that accrue to the neutrality account will be sufficient to cover the costs associated with ETC holders' scheduling changes following the day-ahead market. The CAISO explains that the net congestion settlement amount, whether it is a charge or revenue would be allocated to non-ETC metered demand. In response, the CAISO states that it expects that the collection of all non-ETC real-time congestion charges will normally produce a positive balance for every settlement interval, although it is possible under very unusual circumstances, for the net total congestion settlement in real-time to be a net charge instead of net revenue. For example, the CAISO explains that if there was congestion only on a derated path and there was no congestion elsewhere, the result could be a net congestion charge during a limited number of settlement intervals. However, the CAISO believes these would be rare occurrences and that for the majority of settlement intervals, and certainly over a long-term basis, this neutrality account will have positive funds to disburse.

¹⁰ The CAISO explains that in the real-time settlement, the CAISO collects congestion charges determined by the difference between the amount of money charged to real-time load and export deviations versus the amount of money paid to supply and import deviations, after covering the cost of losses. These funds flow into a neutrality account that is dedicated to real-time congestion settlement.

Notice of Filing, Motions to Intervene and Responsive Pleadings

9. Notice of the CAISO's compliance filing was published in the *Federal Register*, 70 Fed. Reg. 15,075 (2006), with comments, protests, or interventions due by April 4, 2005. Comments and protests were submitted by Modesto Irrigation District (Modesto), Transmission Agency of Northern California (TANC), California Municipal Utilities Association (CMUA), Cities of Anaheim, Azusa, Banning, Colton, and Riverside, California (Southern Cities), Los Angeles Department of Water and Power (LADWP), California Department of Water Resources, State Water Project (CDWR/SWP), Northern California Power Agency (NCPA), and the City of Santa Clara and Silicon Valley Power (SVP)

10. On April 19, 2005, the CAISO filed an answer to protests. Rule 213(a) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a), prohibits an answer to protests unless otherwise permitted by the decisional authority. We are persuaded to allow the CAISO's answer to protests, as it has assisted us in our decision-making.

Comments and Protests

11. TANC states that the CAISO's proposal for issuing paper CRRs on market participants is unclear and urges a fuller explanation of the potential impacts paper CRRs will have on the market and market participants. TANC also supports further discussion on methods to improve cost-allocation mechanisms and the management of ETCs and to help ensure stakeholder understanding of cost-allocation mechanisms to reasonably follow the Commission's principles of cost causation.

12. Modesto argues it is unclear how the CAISO intends to allocate settlement period net costs and debits in the real-time congestion neutrality account. For this reason, Modesto requests that the Commission direct the CAISO to clarify the description of the perfect hedge to state that under no circumstance will the costs of implementing the perfect hedge proposal be allocated to ETC rights holders and if the CAISO does intend to allocate any costs of implementing the perfect hedge proposal to ETC rights holders, that the Commission reject such proposal as inconsistent with the Commission's and the California Legislature's directives to honor ETCs.

13. Southern Cities renews its protest of the CAISO's proposal to recover any costs incurred to honor ETCs under the perfect hedge proposal on a system-wide basis, as opposed to a zonal basis. Southern Cities explains that for ETC rights involving paths that are internal to the CAISO control grid, the CAISO will not reserve capacity but will honor schedule changes to utilize ETC rights by re-dispatching resources. The CAISO proposes to collect the costs resulting from such redispatch from "non-ETC metered

demand and exports on a per-MWh basis.” According to Southern Cities, prior to the formation of the CAISO, costs incurred by SCE and PG&E to honor the rights of ETC holders were borne by the non-ETC loads in the SCE and PG&E control areas. Therefore, redispatch costs incurred to accommodate the exercise of ETC rights on paths internal to the CAISO controlled grid should be recovered from the non-ETC loads in the SCE and PG&E load aggregation areas.

14. Southern Cities states that given the uncertainties and potential adverse cost impacts on non-ETC loads, the Commission should only accept the CAISO’s perfect hedge proposal on an experimental basis, subject to reevaluation following initial implementation upon complaint by any market participant or upon the Commission’s own motion and the CAISO should retain the burden to demonstrate that continued implementation of the perfect hedge proposal is just and reasonable. In addition, Southern Cities argues that the Commission should require the CAISO to maintain records separately identifying any costs charged to non-ETC loads (whether on a system wide or zonal basis) for implementation of the perfect hedge and to submit monthly reports to the Commission and to market participants showing such costs.

15. LADWP supports the CAISO’s cost allocation methodology to the extent that it protects all ETC holders from congestion charges. However, LADWP is uncertain whether the CAISO recognizes the need to treat line losses in conformance with the terms and provisions of the ETC agreement. LADWP states that the Commission should direct the CAISO to include confirmation that line losses will be treated in accordance with the terms and provisions of the ETCs, notwithstanding its process for treatment of losses associated with ETC schedules under MRTU.

16. NCPA and CMUA state that the Commission should withhold conceptual approval of the perfect hedge until critical elements of the proposal are supplied and the CRR allocation is completed. CMUA states that before the perfect hedge proposal is considered, the methodology for estimating ETC usage must be known and critically evaluated, as well as transparent in its application to allow for changing conditions and patterns of ETC usage. CMUA also states that the treatment of transmission line losses for ETCs remains outstanding.

17. SVP states that it is generally supportive of the concepts contained in the ETC proposal. However, SVP is concerned that its ETC rights could be degraded under the proposal because the PTO unilaterally submits the operating instructions for an ETC between the PTO and the ETC rights holder. SVP requests that the Commission order the CAISO to modify its Tariff so that ETC operating instructions must be mutually agreed upon by the PTO and the rights holder prior to their submission for use by the CAISO. SVP states that if the parties cannot reach agreement on operating instructions under the ETC, the CAISO Tariff should provide for dispute resolution between the

parties, and should provide for parties to bring the dispute to the Commission or a court of competent jurisdiction.

18. SVP states that in those cases where the PTOs have full responsibility (the obligation to deliver to ETC holder loads or to PTO electric system borders) for the ETC, the PTOs not the ETC holders should be subject to the ETC perfect hedge risks, and the ETC load should be held harmless, much like the current treatment of ETCs. SVP also supports ETCs settlements at the LAP level in LMP settlements rather than at the point of delivery nodes.

19. CDWR/SWP asserts that the CAISO's statement that, "ETC rights holders would be neither harmed nor benefited by real-time congestion costs," is not consistent with the current CAISO practice which charges ETC service for real-time inter-zonal congestion managed through must offer generation as highlighted in the CAISO's Amendment 60 proceeding. CDWR/SWP also requests that the Commission accept the CAISO's proposal for treatment of ETCs with the recognition that (1) the proposal is limited to enable the CAISO to cease ETC management through a set aside of capacity that fails to take into consideration actual usage, (2) requires the CAISO to establish the perfect hedge to ensure that the contractual rights of ETC holders will be fully honored; and (3) enforce the perfect hedge so that the CAISO would not be permitted to impose any form of secret congestion charges on firm service under ETCs.

The CAISO's Answer

20. The CAISO states that it conducted a lengthy and thorough stakeholder process to consider the perfect hedge proposal where most parties agreed that a fair manner in which to distribute the impacts associated with ETCs under the MRTU is the market at large, because the benefits of more efficient management of ETC rights are realized by all market participants. The CAISO states that the Commission does not need to delay ruling on the perfect hedge proposal until completion of its CRR study to rule on the perfect hedge proposal because the issuance of CRRs has no bearing on the perfect hedge mechanism.

21. The CAISO states that it has answered all of the questions posed by the Commission regarding the perfect hedge mechanism including clarification that ETC rights holder are not allocated CRRs for their ETCs; rather, the "paper" CRRs are a vehicle to implement the perfect hedge and to assure that the CAISO properly accounts for the perfect hedge in its CRR allocation and auction process for non-ETC users of the transmission grid.

22. In response to Modesto, the CAISO confirms that it does not intend to allocate ETC congestion costs to ETC rights holders under the perfect hedge mechanism.

23. The CAISO objects to Southern Cities request to approve the perfect hedge mechanism on an experimental basis. The CAISO states that the Southern Cities have not supported their request. The CAISO states that the structure of its CRR release provides for monthly adjustments to CRR allocations which will enable the CAISO to adjust the “paper” CRR set-aside in a timely manner, if necessary.

24. The CAISO states that CDWR/SWP claims that ETC rights holders should not be bearing any of “secret” congestion charges incurred as a result of the dispatch of must-offer generation is an issue before the Commission in another proceeding. The CAISO states that nothing in the perfect hedge proposal is intended to affect the outcome of that proceeding.

25. The CAISO further states that issues raised by SVP concerning ETC schedule validation and issues raised by LADWP regarding transmission line losses will be addressed separately and are not at issue in this compliance filing.

Commission Determination

26. We accept the CAISO’s compliance filing providing additional information and explanation for the perfect hedge mechanism under its proposal to honor ETCs. We approve, in concept, the perfect hedge mechanism, including the settlement and allocation of costs associated with ETC schedule changes. In the February 10 Order, the Commission requested additional detail regarding the mechanics of the perfect hedge. Contrary to Modesto and TANC’s request for further details, we find the CAISO’s compliance filing adequately explains the mechanics of the perfect hedge. The CAISO clarified that CRR obligations corresponding to the ETC holders’ expected utilization of their rights will be incorporated into the simultaneous feasibility optimization that is used for allocating CRRs to non-ETC parties. These “paper” CRRs are not released to any party; rather they serve as a placeholder in the CRR simultaneous feasibility test to preserve funding for non-ETC CRRs. In addition, the CAISO further explained that: (1) no ETC receives a payment or charge associated with the paper CRRs; (2) there are no revenues associated with these CRRs; and (3) congestion costs resulting from valid ETC schedule changes will be paid by congestion surpluses from the real-time market.

27. Upon further review of the perfect hedge proposal, we find this market design feature in conjunction with those elements that the Commission accepted in its

February 10 Order¹¹ reasonable because ETC rights holders will be held financially harmless from congestion charges that may arise under LMP. Thus, the CAISO can continue to honor these contracts under its MRTU design. As a result, we approved the concepts discussed herein regarding the perfect hedge mechanism.

28. We note that NCPA and CMUA contend that the Commission should withhold its approval of the perfect hedge until the CRR allocation study has been completed. We disagree because the CRR study will not impact this proposal. It is our understanding that in the CRR study, the CAISO will set-aside “paper” CRRs on behalf of the ETCs. These paper CRRs will not be issued; rather the capacity associated with the “paper” CRRs will be used in the CRR study to accurately establish the appropriate amount of CRRs available to non-ETC market participants.¹² Since the perfect hedge mechanism proposed by the CAISO provides full protection from congestion related costs and given that ETCs are not allocated CRRs, we find it unnecessary for the Commission to delay ruling on this proposal. We also believe that our action in this regard will allow the CAISO to proceed with the implementation of MRTU.

29. We disagree with SVP that the CAISO’s perfect hedge subjects the ETC rights holder to greater risk than the PTO. It is our understanding that the perfect hedge holds both parties harmless from congestion-related charges under LMP. Thus, we deny SVP’s request.

30. We disagree with Southern Cities assertion that cost impacts associated with honoring scheduling changes should be allocated on a zonal, rather than system-wide basis. Because the benefits of the CAISO’s more efficient management of ETCs on the transmission system under the MRTU accrue to all market participants, we believe it is appropriate to distribute the redispatch costs associated with honoring scheduling changes to all non-ETC metered demand and exports without delineating zones. We therefore deny Southern Cities request.

31. With respect to the Southern Cities request that the Commission approve the perfect hedge on an experimental basis, we find this approach unwarranted. The Commission has conceptually approved certain elements of the CAISO’s ETC Proposal

¹¹ The ETC proposal contain three main elements: (1) scheduling the use of ETC right in the CAISO markets; (2) validating that ETC schedule submitted to the CAISO are consistent the ETC holders’ contractual rights; and (3) settlement and allocation of charges associated with ETC schedules. In the February Order, the Commission accepted design elements (1) and (2), and sought additional information under the third element.

¹² We note that the CAISO’s CRR proposal is being addressed in Docket No. ER06-615-000, *et al.* issued concurrently with this order.

because the methodology preserves the terms of ETCs under MRTU and allows the CAISO to manage the transmission grid more efficiently and reliably by eliminating phantom congestion. In addition, the CAISO represents that under the structure of its CRR process the CAISO may adjust the CRR set-aside for ETC rights holders in a timely manner, if necessary. We therefore deny the Southern Cities request to approve the proposal on an experimental basis. We agree that the CAISO should maintain a record of redispatch costs associated with honoring ETCs and charged to non-ETC loads. Rather than filing this information with the Commission, we direct the CAISO to make this information publicly available to market participants on the CAISO website. This will provide market participants transparent information regarding costs associated with honoring ETCs under MRTU.

32. We also find that those issues raised by LADWP, regarding the treatment of transmission line losses, and SVP, regarding the treatment of operating instructions for ETCs to be beyond the scope of the compliance filing addressing the mechanics of the perfect hedge proposal for settlement and allocation of congestion charges related to ETCs.¹³ In addition, we conclude that the issues raised by CDWR/SWP regarding the current practice by the CAISO to assess congestion charges to ETCs for the dispatch of must-offer generation is currently pending in Docket No. ER04-835-000 and therefore is beyond the scope of this proceeding.

Commission orders:

The CAISO's compliance filing is hereby accepted for filing and the perfect hedge mechanism is approved in principle, as discussed in the body of this order.

By the Commission.

(S E A L)

Magalie R. Salas,
Secretary.

¹³ These issues are discussed in the Commission order addressing the CAISO's proposed MRTU Tariff issued concurrently in Docket No. ER06-615-000, *et al.*