126 FERC 61,315 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman; Suedeen G. Kelly, Marc Spitzer, and Philip D. Moeller.

California Municipal Utilities Association, et al. Docket No. EL09-38-000

vs.

California Independent System Operator Corporation

ORDER ADDRESSING COMPLAINT

(Issued March 31, 2009)

1. In this order the Commission addresses a complaint filed by the California Municipal Utilities Association (CMUA) jointly with other parties.¹ CMUA's complaint seeks to introduce additional tariff provisions in the California Independent System Operator's (CAISO) Market Redesign and Technology Upgrade (MRTU) Tariff² currently scheduled to go into effect on March 31, 2009. CMUA has requested fast tracking processing of its complaint.

2. The Commission rejects CMUA's complaint in its entirety. As discussed below, we find that CMUA has not met its burden of proof under section 206 of the Federal Power Act $(FPA)^3$ to demonstrate that the MRTU Tariff is not just and

² *Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274 (2006) (MRTU Order), *order on reh'g*, 119 FERC ¶ 61,076 (2007); *see also Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,313 (2007).

³ 16 U.S.C. § 824e (2006).

¹ Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California, the City and County of San Francisco, Northern California Power Agency, Sacramento Municipal Utility District, Modesto Irrigation District, Transmission Agency of Northern California (jointly with CMUA, CMUA or Complainants).

reasonable or would produce unjust or unreasonable results. The MRTU Tariff was accepted for filing by the Commission in September 2006.⁴ In March 2009, we also accepted the CAISO's certification of readiness of its systems for MRTU implementation.⁵ Because we continue to find that the MRTU Tariff is just and reasonable, we are not required to consider the merits of CMUA's proposal. Nevertheless, in assessing the specifics of the relief requested in CMUA's complaint and comments and protests filed in response, we find that CMUA has failed to demonstrate that its Interim Payment Option is just and reasonable, and necessary for inclusion in the MRTU Tariff. We also find that the CAISO has sufficient safeguards already in place to provide adequate opportunities to protect market participants from anomalous prices and provide market participants with reasonable avenues to report any potential problems experienced during MRTU operations. As explained further below, these safeguards include the tariff authority to validate and correct anomalous prices, fill in missing data, and impose price caps. The CAISO also has in place round-the-clock personnel that will provide market monitoring and price validation processes, as well as providing market participants with a constant avenue through which they can report any

problems during MRTU operation. It is also implementing a rapid response team to address go-live issues as they arise for at least the initial 30 days of MRTU operation. Further, the CAISO may seek emergency waiver of its tariff, in the unlikely event that it may be necessary. Given the sufficiency of the CAISO's market safeguards and the lack of showing by CMUA of the alleged unjustness and unreasonableness of the MRTU Tariff, we dismiss the complaint.

I. <u>CMUA's Complaint</u>

3. CMUA's complaint was filed on March 3, 2009, and proposes last minute changes to the MRTU Tariff. Specifically, CMUA proposes to revise the MRTU Tariff to include an Interim Payment Option which, according to CMUA, is intended to function as a safety net mechanism to allow scheduling coordinators to defer payment of potentially high invoices pending investigation of those high charges. According to CMUA, the proposed mechanism will address concerns arising from the higher than historic charges that have been observed in the pre-MRTU market simulations and the absence of adequate opportunity to verify that

⁴ See MRTU Order, 116 FERC ¶ 61,274.

⁵ *Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,221 (2009) (MRTU Readiness Certification Order)

the CAISO has resolved all issues identified in its MRTU readiness certification filing.⁶

4. In support of its complaint, CMUA argues that without the proposed changes the MRTU Tariff is rendered unjust and unreasonable for several reasons. First, CMUA asserts that there is no assurance that implementation of MRTU will not impair reliability of the CAISO-controlled grid by exposing market participants to excessive charges.

5. CMUA supports its position with affidavits from Complainants' officers attesting that estimated charges produced in market simulations exceed by many multiples charges for historical periods.⁷ CMUA further argues that if post-implementation charges are similar to high market simulation charges, scheduling coordinators would not be able to pay excessive invoices, which would affect reliability of the CAISO's system. According to CMUA, scheduling coordinators are required under the MRTU Tariff to pay invoices in full on time even if the charges are being disputed.⁸ CMUA adds that simulated settlement statements have contained charges so large that when compared with scheduling coordinators' overall budgets and credit capabilities, payment in full pending dispute resolution would be impossible. CMUA further states that excessive charges and errors in settlement statements could result in defaults or excessive financial burdens for scheduling coordinators in the form of continuous collateral calls, which would result in increased costs on the markets.⁹

6. Further, CMUA warns the Commission of the possibility of catastrophic consequences for the economy of California and the reliability of the CAISO-

⁷ See Appendices B-F.

⁸ CMUA refers to section 11.29.8.7 of the MRTU Tariff.

⁹ CMUA states that in Docket No. ER09-589-000, Southern California Edison Company (SCE) argues for a temporary delay in the reduction of the maximum Unsecured Credit Limit until market participants can gain a better understanding of their potential credit liabilities under MRTU. CMUA Complaint at 26. We note that on March 30, 2009, the Commission issued an order in that proceeding. *See Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,285 (2009).

⁶ The CAISO submitted the MRTU readiness certification filing on January 16, 2009. The Commission accepted the CAISO's certification of its systems for MRTU implementation on March 13. *See id.*

controlled grid if multiple scheduling coordinators default on payment of anomalously high invoices. CMUA also argues that the potential consequences are not hypothetical because, according to CMUA, the inability of large scheduling coordinators to pay their invoices in 2000-2001 contributed to the energy crisis.¹⁰ CMUA adds that the current economic situation intensifies the risks associated with cascading defaults.

7. Furthermore, CMUA argues that the MRTU Tariff is unjust and unreasonable without the proposed Interim Payment Option based on the simulation results, which, according to CMUA, is the only available empirical evidence. CMUA points out that the Commission has previously held that the simulation results can be relied upon in the absence of hard price data.¹¹ CMUA expresses concerns that the CAISO's admission that it is impossible to produce settlement statements that reflect the charge amounts that can be expected post-MRTU implementation¹² and that market participants will have no opportunity to validate the "fixes" to settlement system implemented by the CAISO in the short time prior to MRTU go-live. Accordingly, CMUA concludes that the inclusion of its proposal in the MRTU Tariff will prevent destabilization of the CAISO's markets.

8. CMUA also argues that the proposed Interim Payment Option is a just and reasonable mechanism because it will mitigate the adverse effects of exceptionally high invoices. Specifically, CMUA explains that one of the features of the proposed Interim Payment Option is an early warning mechanism, i.e., the CAISO-implemented process to identify and communicate to affected scheduling coordinators potentially extreme settlement outcomes indicating that scheduling coordinators might owe amounts that substantially exceed amounts owed during

¹¹ CMUA cites to *Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,147, at P 82 (2009); and *Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,082, at P 20 (2009) (Price Cap and Floor Order).

¹⁰ CMUA cites to *Cal. Indep. Sys. Operator Corp.*, 94 FERC ¶ 61,132, at 61,510-11 (2001) (adopting a waiver of certain credit requirements during the energy crisis to mitigate threats of blackouts resulting from downgrades in credit ratings of Pacific Gas & Electric Company (PG&E) and SCE).

¹² CMUA cites to CAISO Answer, Docket No. ER06-615-038, at 8 (Feb. 18, 2009).

comparable historic periods. According to CMUA, the objective of such early warning mechanism is to allow for investigation and resolution of anomalous results prior to issuance of invoices.

9. CMUA further explains that under its proposed Interim Payment Option, if any scheduling coordinator receives an invoice exceeding 200 percent of the invoice for a comparable prior year period, it may exercise an option to pay at least 125 percent of the invoice amount for the comparable period in lieu of the current invoice amount due. CMUA also states that such interim payment would be subject to subsequent adjustment, if necessary, to ensure that all suppliers are compensated for their Default Energy Bid¹³ cost and any transmission revenue requirements plus the CAISO's grid management charge during the period to which the Interim Payment Option applies. CMUA continues to state that if following an investigation of the reasons for such a higher than historic settlement outcome, the CAISO determines that payment in excess of the interim payment is appropriate, the scheduling coordinator shall pay the difference plus interest at the Commission-determined interest rate. CMUA adds that under its proposal, the interest would begin accruing as of the date of interim payment in lieu of the invoice charges. According to the CMUA's proposal, a scheduling coordinator would also be paid interest if the interim payment was more than the payment ultimately determined to be correct.

10. CMUA also argues that the Interim Payment Option proposal is just and reasonable because it will provide enhanced stability for the benefit of suppliers. CMUA explains that although suppliers would receive reduced payments, the requirement that scheduling coordinators pay at a minimum suppliers' Default Energy Bid would prevent potentially ruinous reductions in payments to suppliers. CMUA also points out that unlike in 2000-2001, suppliers would not face the risk of not receiving timely payment at all in the event of a default by a scheduling coordinator.

11. Furthermore, CMUA argues that the CAISO's rapid response and price validation procedures do not provide adequate protection against the risks of extreme settlement charges. CMUA explains that the staggering amount of data that the CAISO's rapid response team must monitor and process each trading day makes it unrealistic to expect quick identification of anomalous or erroneous charges. Moreover, according to CMUA, the first priority for the rapid response team is immediate operational issues in the event of a disruption of supply, not the settlement issues. CMUA adds that the CAISO's price validation and correction

¹³ See section 39 of the MRTU Tariff.

processes would not address erroneous settlement results arising from errors relating to various inputs to the settlement processes.

12. CMUA further states that the CAISO cannot logically object to the Interim Payment Option because the CAISO itself sponsored the price cap and price floor proposal based upon concerns arising from the market simulation results.¹⁴ CMUA argues that the proposed Interim Payment Option will supplement the protection afforded by the price cap and price floor when, notwithstanding the price cap, scheduling coordinators receive potentially high invoices, which may result from inputs other than extreme prices.

13. CMUA further argues that the implementation of its proposed Interim Payment Option will not require overall changes to the MRTU Tariff and software system. CMUA also points out that the CAISO itself suggested that it could implement measures comparable to CMUA's proposal if anomalous prices were to materialize after the MRTU start-up.¹⁵ CMUA thus asserts that there is no logical reason to decline to implement a payment protection mechanism before an emergency arises rather than after.

14. CMUA also notes that not a single market participant expressed unconditional support for implementation of the MRTU Tariff on April 1, 2009. In addition, CMUA discusses the substance of comments filed in Docket No. ER06-615-038 by WPTF and Dynegy and responds to them.¹⁶

II. Notice of Filing and Responsive Pleadings

15. Notice of CMUA's complaint was published in the *Federal Register*, 74 Fed. Reg. 10,728 and 10,906 (2009) with interventions and protests due on or before March 16, 2009. Timely motions to intervene were filed by entities listed in the Appendix to the order. Turlock Irrigation District (Turlock) filed a late motion to intervene.¹⁷

 14 CMUA refers to the Price Cap and Floor Order, 126 FERC \P 61,082 (2009).

¹⁵ CMUA refers to CAISO Answer, *supra* n. 12.

¹⁶ We will not address CMUA's responses to arguments made in a filing submitted in a different proceeding.

¹⁷ Turlock states that it supports the complaint.

16. The following interveners also filed comments and/or protests: the CAISO, Western Power Trading Forum (WPTF), SCE, PG&E, and San Diego Gas and Electric Company (collectively, Investor-Owned Utilities or IOUs), United States Department of Energy on behalf of the Berkeley Site Office (DOE), Western Area Power Administration (Western), Golden State Water Company (GSWC), Los Angeles Department of Water and Power (LADWP), and Powerex Corp. (Powerex).

17. On March 24, 2009, CMUA filed an answer to the CAISO's protest.

III. <u>Comments</u>

A. <u>Burden of Proof</u>

18. The CAISO and WPTF both state that CMUA fails to meet its burden of showing that its proposal is just and reasonable and CMUA incorrectly states that the CAISO has not met its burden in showing that the MRTU Tariff is just and reasonable without the relief sought by CMUA in the instant complaint. The CAISO notes that the Commission has already accepted the MRTU Tariff provisions as just and reasonable and has already accepted the CAISO's certification of its readiness to implement MRTU. The CAISO claims, therefore, that it is incumbent on CMUA to demonstrate by actual evidence that the MRTU Tariff, when implemented, will not be just and reasonable and that the instant proposal would be.

19. The CAISO asserts that, in support of the complaint, CMUA makes unsubstantiated claims that price anomalies arising from unrealistic simulation conditions in the past will continue under different, and actual, market conditions, and that the safeguards and corrective procedures adopted by the CAISO will fail. The CAISO states that the Commission has previously rejected reliance upon speculation based on unrepresentative factors, when the Commission rejected a complaint seeking to demonstrate that the implementation of a joint and common market by the Midwest Independent Transmission System Operator and PJM Interconnection (together, RTOs) without single system dispatch was unjust and unreasonable.¹⁸ According to the CAISO, the Commission found that the cost studies which were at the core of that complaint were based on early operation of the market and periods prior to the implementation of many market initiatives, and ignored additional initiatives that the RTOs had committed to implementing in the

¹⁸ The CAISO cites to Wis. Pub. Serv. Corp. v. Midwest Indep. Sys. Operator, Inc., 118 FERC ¶ 61,089 (2007).

future. The CAISO notes that in that order, the Commission concluded that the complainants had not met their burden to show that the RTOs' existing tariff structures were unjust and unreasonable. The CAISO argues that similar reasoning is applicable in the instant proceeding.

B. <u>Anomalous Market Simulation Prices</u>

20. GSWC supports CMUA's proposal and argues that the Interim Payment Option is an essential component of MRTU to protect consumers. GSWC states that it and its ratepayers cannot endure the hardships that might arise if MRTU systems fail upon their deployment. GSWC questions the CAISO's readiness to implement MRTU by March 31, 2009, citing the protests and comments in the CAISO's Readiness Certification filing in Docket No. ER06-615-038. GSWC states that the CAISO, in response to these concerns, has simply asked market participants and the public to trust that MRTU will work, and has rejected as unnecessary and counterproductive protective measures like those proposed in the instant complaint, while simultaneously contending that it could adopt them by emergency tariff amendment if needed.

21. GSWC further states that the only possible source of evidence that would address load-serving entities' concerns regarding MRTU readiness could be found in market simulation data. However, GSWC states that the CAISO acknowledges that it is impossible to produce settlement statements in market simulation that reflect charge amounts that participants can expect to see after go-live. GSWC argues that the CAISO has not explained why it is impossible to simulate normal or expected conditions or to sustain sufficient participation in its simulations. GSWC notes that these limitations may not be inherent to the testing process, but rather self-imposed by the CAISO due to its aggressive implementation schedule. Further, GSWC points out that, because the CAISO plans to use the final month before go-live to engage in parallel operations currently in CAISO production – market participants will not have the ability to evaluate the month's settlement statements before the scheduled go-live date.¹⁹

22. GSWC claims that its own experience with MRTU has been frustrating and gives it little assurance that MRTU will be successfully implemented. Specifically, GSWC notes that its scheduling coordinator was prevented from entering GSWC's load schedules into the MRTU systems, an unexplained glitch that prevented GSWC from assessing the impact of MRTU during a critical time

¹⁹ GSWC Comments at 9-10.

of parallel testing. GSWC asserts that the wild and unexplained results of MRTU systems suggest that market participants will be placed at significant financial risk once MRTU is implemented.

23. DOE claims that it has received no evidence indicating that the potential for "market chaos" after MRTU implementation is not real. DOE asserts that if market simulations had produced typical, reasonable billings, the trial runs would have been submitted as evidence of the CAISO's readiness to proceed. DOE states that if the Commission has relied on simulation results for other decisions, it should do so here as well.

24. Western expresses concern that the CAISO has chosen to deploy MRTU even though the CAISO's proposed Integrated Balancing Authority Area (IBAA) amendments are still in flux. Western notes that the Commission recently required the CAISO to make a further compliance filing on numerous integral components of the CAISO's IBAA proposal, a filing requirement not due until May 6, 2009.²⁰

25. Western also points out numerous anomalous prices that have come out of market simulation. It states that while Western recognizes the fact that market simulations settlements may not be indicative of expected future prices under actual MRTU operations due to a variety of differences in the two environments, Western is most concerned about the large magnitude of the differences between MRTU simulations and historical prices.²¹ Western also notes that the CAISO has provided inconsistent statements regarding high prices coming from market simulation, thus leading to uncertainty about price expectations once MRTU is implemented.

26. Western has further concerns regarding the magnitude of potential price increases for certain Western customers due to the implementation of an LMP-based pricing mechanism under MRTU. Western argues that many of Western's customers do not have a large and diverse rate base where increased costs associated with the deployment of MRTU/IBAA can be easily spread; thus, the individuals who are supposed to be the beneficiaries of low cost federal power and who can least afford to pay are put in a position in which they must pay more for their power as a result of electric industry restructuring.

²⁰ Western cites to *Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,207 (2009).

²¹ Western Comments at 8-9.

27. Western states that MRTU cannot require Western to violate the federal Reclamation Laws,²² designed to use federal power to serve project uses and to provide low cost federal power to statutorily defined preference entities. Western states that, as the power marketer for its array of customers, it is required to set its rates at the lowest possible cost consistent with sound business principles. Western notes that Congress included cities and municipalities as "preference" customers served by Western under Reclamation Laws.²³ Western states that its municipal customers, including Trinity County, the Lassen Municipal Utility District, the Calaveras Public Power Agency, and the Tuolumne County Public Power Agency will all be severely adversely impacted by significant increases in CAISO charges, and may not be able to absorb such cost increases.

28. Western also points out that Congress has defined state and federal agencies as preference customers served by Western,²⁴ including DOE, which provides critical research of national importance that require large amounts of electric energy. Western notes that, in order to reimburse the federal taxpayer for the United States' contribution to the California Oregon Transmission Project (COTP), Western received a 6.25 percent entitlement on the COTP on behalf of DOE and federal wildlife refuges. Western argues that MRTU, including IBAA, significantly alters the considerations which DOE received, and that the discriminatory pricing proposal devalues the DOE's rights on the COTP and significantly increases the cost of transmitting energy. Western notes that MRTU will cause the DOE to allocate more resources for paying for transmitting energy and less on research. Western further argues that without the adoption of the Interim Payment Option, MRTU may frustrate Western's ability to meet its statutory obligations to its municipal and federal customers.

29. Western notes that it entered into numerous contracts to protect its ability to meet its obligations under Reclamation Laws to serve its federal project uses and federal preference customers. Western argues that MRTU impacts these contracts by ignoring the price of energy and by discriminating against transactions coming

²⁴ Id. at 20.

²² Western explains that the federal Reclamation Laws are a series of laws arising from the Desert Land Act of 1872 which includes, but is not limited to: the Desert Land Act of 1872, Reclamation Laws of 1902, Reclamation Project Act 1939, and the Central Valley Project Authorizing Act of 1937. *See* Western Comments at 16.

²³ Western Comments at 17, *citing* 43 U.S.C. § 485h(c).

from Western's sub-balancing authority. Western states that while the CAISO has repeatedly stated that it will honor existing contracts, Western remains concerned and claims a number of outstanding issues still remain. Western reserves its rights under existing contracts and in the event these issues continue to remain unresolved, Western claims it will take appropriate actions at that time.

30. Western also states that it is concerned about securing adequate appropriations to serve numerous federal project pumping loads under MRTU. Western explains that many of these pumping loads are served only from CAISO transmission lines, but because of the uncertain and unknown costs associated with MRTU, Western is having difficulties in determining the amount of appropriations which it must seek through its budget process. Western states that the uncertainties surrounding MRTU has led Western to have significant concerns regarding anti-deficiency issues. Western also notes that the MRTU Tariff is subject to the limitation imposed by federal law, including the Antideficiency Act,²⁵ and that Western's liabilities under MRTU cannot exceed its requested appropriations to implement the program.

31. In response to CMUA's contention that anomalous prices from market simulation represent unjust and unreasonable results if repeated in MRTU's actual operations, the CAISO states that it is not appropriate to evaluate MRTU actual prices by comparing them to historical prices under the old market structure. The CAISO notes that different market structures produce different prices, and the difference does not equate to a lack of just and reasonable pricing. The CAISO explains that because of the particular features of MRTU, net charges under MRTU may differ from current net charges not because they are excessive, but because they reflect the differences in market design, most notably the use of Locational Marginal Pricing (LMP) at the nodal level in contrast to today's zonal pricing for energy, and the introduction of a day-ahead energy market.

²⁵ The Antideficiency Act, 31 U.S.C. §§ 1341 *et al.* (2006), prohibits making or authorizing an expenditure from, or creating or authorizing an obligation under, any appropriation or fund in excess of the amount available in the appropriation or fund unless authorized by law; involving the government in any obligation to pay money before funds have been appropriated for that purpose, unless otherwise allowed by law; accepting voluntary services for the United States, or employing personal services not authorized by law, except in cases of emergency involving the safety of human life or the protection of property; and making obligations or expenditures in excess of an apportionment or reapportionment, or in excess of the amount permitted by agency regulations.

32. Further, the CAISO notes that, as reported by the CAISO Market Monitor,²⁶ the vast majority of prices in market simulation have been reasonable. The CAISO notes that the DMM Report found that: (1) there were no performance issues that would warrant a delay of MRTU implementation; (2) the Residual Unit Commitment prices paid to non-resource adequacy capacity were generally moderate and high Load Aggregation Point prices were limited to just a few 5-minute intervals, and recommended that no changes were warranted for the Residual Unit Commitment process at that time; (3) local market power mitigation procedures are effective and working as intended in all but five percent of the time, and thus recommended price correction procedures, which the CAISO established; (4) the MRTU price validation and correction process is fully implemented that will prevent the premature publication of, and allow the correction of, potentially erroneous excessive prices; and (5) all known issues with MRTU implementation have been resolved.

33. In response to CMUA's assertion that protective measures are necessary because CMUA cannot verify that the solutions to the known issues will be effective, the CAISO states that the CAISO is in the best position to determine whether a known issue has been resolved, and that it has confirmed the resolution of these issues to market participants. The CAISO further notes that CMUA has offered no factual basis for casting doubt on the CAISO's conclusion or on the effectiveness of a solution, and thus has not met the FPA section 206 burden, providing only unsubstantiated speculation.

34. The CAISO also states that the existence of high simulated charges on settlement statements in market simulation has been known to all market participants for some time, and can be explained by particular features of the market simulation environment that the CAISO has no reason to believe will recur in the actual operation of MRTU. According to the CAISO, MRTU software variances and the parameter settings originally used for setting prices in instances where constraints are relaxed or self-schedules are adjusted have been the two reasons for anomalous prices in the market simulation environment. However, the CAISO notes that it identified and resolved the software variances,²⁷ and has

²⁶ CAISO Comments at 12, citing *Review of California ISO MRTU* Structured Market Simulation Results Trade Days – December 9-12, 2008, Department of Market Monitoring (Jan. 16, 2009) (DMM Report).

²⁷ CAISO Comments at 15, citing MRTU Readiness Certification Filing, Docket No. ER06-615-038, at 8 (Jan. 16, 2009); CAISO Answer, Docket No. ER06-615-038, at 8 (Feb.18, 2009); CAISO March 2009 MRTU Status Report, Docket No. ER06-615-000, at 4 (Mar. 5, 2009).

revised the parameters to minimize the adverse impact on pricing, thereby ensuring that the revised parameters will not likely contribute to anomalous pricing.²⁸

35. Further, the CAISO states that another reason for high charges in market simulation involved the inputs used in the simulation. Specifically, the CAISO explains that not all market participants participated or fully participated in the bidding and scheduling of their resources in market simulation. According to the CAISO, in market simulations it has been observed that some scheduling coordinators did not submit meter data for use in market simulation and some market participants tested unreal market strategies, which affected market prices. The CAISO claims that the latter situation is unlikely to repeat itself in actual MRTU operations, while the former is prohibited by the MRTU Tariff. Further, the CAISO points out that it "stress tested" the MRTU system functionality in order to simulate extreme conditions, a scenario that, according to the CAISO, is unlikely to occur in actual MRTU operations. The CAISO also points out that it will continue to work with market participants to ensure that unexpected settlement results observed in market simulation are not related to either extreme scenario testing or to missing or incorrect data inputs, as advised by the Commission.²⁹

36. The CAISO further argues that CMUA dismisses the CAISO's explanations for anomalous prices in market simulations with no justification, and concludes that the conditions leading to high charges in the market simulation environment will also prevail in the production environment following MRTU golive. The CAISO also points out the data it has provided sufficiently demonstrates that the market simulation settlement statements are explainable and that conditions after MRTU go-live will be different.

37. The CAISO argues that it is not asking the Commission to disregard the market simulation results; rather, it asks that the Commission recognize market simulation results for what they are – the outcome of tests designed to determine how the MRTU systems operate under a wide range of conditions, including extreme stresses. The CAISO notes that market simulation results did establish

²⁹ CAISO Comments at 16, citing MRTU Readiness Certification Order, 126 FERC ¶ 61,221 at P 78.

²⁸ *Id.*, citing MRTU Readiness Certification Filing at 8 and *Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,147 (2009) (order approving tariff changes needed to revise parameters).

that the software, working properly, could produce high – but correct – prices in certain circumstances, an observation that led to the proposal of the price cap and parameter tuning tariff amendments.

38. Regarding its discussion of settlement results, the CAISO states that CMUA ignores recalculations, corrections, and offsets that significantly affected the simulation results. The CAISO acknowledges that the results identified by CMUA revealed issues that needed to be resolved; however, although some market participants remain dissatisfied with the resolution, the CAISO argues that these issues are discrete market participant concerns that the CAISO can and should address individually and not *via* a systematic approach, such as the CMUA proposed Interim Payment Option proposal. The CAISO also states that CMUA's attempt to rely on settlement statements from the IOUs in supporting their proposal for a systematic approach is irrelevant because the IOUs have submitted comments in another proceeding in which they support a March 31, 2009 go-live date for MRTU.³⁰

C. Adequacy of CAISO's Readiness for Extreme Prices

39. LADWP and GSWC support CMUA's complaint. LADWP argues that the anomalous market simulation results have the potential for significant market disruption. LADWP and GSWC agree with CMUA that the CAISO's various safety net measures do not provide adequate mitigation for the risks to market stability and reliability that could result from scheduling coordinators unexpectedly receiving extraordinarily high invoices. LADWP argues that the Interim Payment Option or a similar measure directed by the Commission that achieves the same purpose are just and reasonable measures to ameliorate the otherwise unacceptable risk of defaults that could once again destabilize the Western energy markets and threaten system reliability.

40. The CAISO states that there is little reason to believe that the extreme, anomalous prices seen in market simulation and cited in the instant complaint will be more than a very infrequent occurrence after MRTU *go-live*. The CAISO points out that to the extent such prices do occur, the CAISO has the tariff authority to validate and correct the prices.³¹ The CAISO explains that price validation and correction includes a business process to block prices that may be

³⁰ CAISO Comments at 19, citing IOUs Answer to the MRTU March 2009 Monthly Status Report, Docket No. ER06-615-038, at 8 (Mar. 13, 2009)

³¹ CAISO Comments at 19, citing section 35 of the MRTU Tariff.

incorrect or appear anomalously high until they can be reviewed. The CAISO states that while CMUA acknowledges the existence of this process, they argue that the price validation and correction process would not address erroneous settlement results arising from errors relating to other inputs to the settlement processes, such as scheduled or real-time transaction volumes. The CAISO notes, however, that such errors are not likely to be problematic under MRTU because, to the extent that there were errors revealed in market simulation, the CAISO corrected those errors. More importantly, the CAISO states that one of the main causes for high bills was not errors but lack of meter data, which will not occur in actual MRTU operation.

41. The CAISO further argues that the high prices referenced by CMUA would have been mitigated in actual MRTU operations by the application of the interim price cap and price floor recently approved by the Commission. The CAISO states that because it began using the price cap and price floor in market simulations later in January, the impact of this corrective measure is not reflected in the invoices cited in the instant complaint, which are from January and reflect December simulations. The CAISO points out that the settlement statements for market simulations in February and early March – which included the application of the price cap and price floor – have shown an improvement in settlement results. The CAISO further claims that CMUA has not provided any evidence that the price cap and price floor will provide insufficient protection against extreme prices, especially in light of the Commission's finding that the price cap and price floor are "a just and reasonable approach to limiting extreme market clearing prices."³²

42. The CAISO also explains that it will engage in intensive market monitoring and other market participant support activities following go-live, including establishing a round-the-clock support team available to all market participants to address any reliability, market, financial, or other issues that arise. The CAISO states that, for at least 30 days after MRTU go-live, the CAISO will also have a proactive support plan in place that will host multiple phone calls, will constantly monitor prices and dispatches, and will seek to identify problems before they impact the market or settlements. The CAISO states that it will identify and address any extreme, anomalous prices, and market participants will have constant access to CAISO staff in order to inform them of any such prices.

 $^{^{32}}$ CAISO Comments at 21, citing Price Cap and Floor Order, 126 FERC \P 61,082 at P 20.

43. The CAISO further notes that it is implementing a proactive monitoring process to help market participants avoid unintentional financial consequences for participants as they gain experience with the new market. The CAISO explains that, as part of the proactive monitoring process, the CAISO team will review accepted bids and prepare shadow statements, based on meter estimates, on the day after the trading day, which will facilitate the review of financial outcomes prior to the actual publishing of the "credit run" seven days after the trading day. The CAISO states that it will use this information to give market participants advance notice of liabilities that are accruing at an excessive rate. The CAISO also states that it will monitor the accrual of liabilities associated with neutrality adjustments and Unaccounted for Energy³³ and make appropriate adjustments to each market participant's estimated aggregate liabilities to reflect anticipated meter data. The CAISO will also monitor other parameters in order to spot situations where large amounts of self-schedules occur at locations with negative prices, whether existing transmission contracts are being scheduled as expected, and whether intertie schedules are tagged as expected.

44. Further, the CAISO states that the Commission accepted the CAISO's "commitment to institute a monitoring process to assess, prior to any charges appearing on a settlement statement, whether a scheduling coordinator's market liabilities are accruing at a rate in excess of the rate over a comparable time period under the current CAISO tariff."³⁴ The CAISO also notes that it is committed to discussing with market participants the process by which the CAISO will identify and address situations where a market participant may be incurring liabilities at an excessive rate, as directed by the Commission.³⁵

³⁴ CAISO Comments at 23, citing MRTU Readiness Certification Order, 126 FERC ¶ 61,221 at P 78.

³³ Unaccounted for Energy is the difference in energy, for each utility service area and settlement period, between the net energy delivered into the utility service area, adjusted for utility service area transmission losses and the total metered demand within the utility service area adjusted for distribution losses using distribution system loss factors. This difference is attributable to meter measurement errors, power flow modeling errors, energy theft, statistical load profile errors, and distribution loss deviations. *See* Appendix A of MRTU Tariff.

³⁵ CAISO Comments at 24, citing *id*. P 78. The CAISO notes that it has scheduled these discussions for the MRTU Implementation Workshop on March 18, 2009.

45. The CAISO asserts that, contrary to CMUA's contention, the CAISO's support team will have the resources and ability to rapidly identify, investigate, and resolve all anomalous or questionable charges. The CAISO notes that the number of anomalous settlements will be small, thus minimizing the probability of overwhelming the CAISO monitoring and investigative teams, and that the support team will be buttressed by numerous other CAISO business groups in monitoring the markets and resolving charge issues.

46. Finally, the CAISO states that if the various CAISO support activities described above do not resolve any extreme, anomalous prices that may arise after MRTU go-live, the CAISO's go-live support team can quickly take action to address such prices. The CAISO notes that its go-live support team can lobby the CAISO to file with the Commission an emergency suspension or waiver of tariff provisions that would otherwise require the timely payment of high charges. The CAISO also notes that it can file an emergency tariff amendment to put any needed measures in place. The CAISO points out that payment of invoices is not due until two months after the end of the trading month, allowing for ample time to take remedial tariff measures in response to anomalous pricing before those charges must be paid.

47. WPTF argues that the CAISO's payment calendar currently affords market participants advanced notice of market outcomes in a credit statement, time to review initial settlement statements, dispute those statements, review re-issued initial settlement statements, and dispute any incremental charges on those statements before monthly invoices are payable. WPTF states that, according to the CAISO's 2009 Payment Calendar,³⁶ the CAISO will issue an initial settlement statement for the first scheduled trade day of MRTU 38 business days after that trade day, and the scheduling coordinators will have eight business days in which to dispute any charges on the initial settlement statement. WPTF notes that the CAISO will then issue a recalculation of the initial settlement statement 51 days after the trade day, allowing scheduling coordinators ten more business days to dispute any incremental charges to the reissued settlement statement; the CAISO will then issue an invoice for April 2009 on July 1, 2009.

³⁶ WPTF Comments at 12, citing http://www.caiso.com/204b/204b98275ce40.pdf.

48. WPTF states that it has requested³⁷ that the Commission increase the window scheduling coordinators have to dispute CAISO initial settlement statements to 76 business days after the trade day in light of the new challenges in reviewing, validating, and disputing settlement statements. WPTF notes that the CAISO was supportive of this approach, and WPTF reiterates that providing market participants with additional time to dispute charges would help alleviate fears about anomalous invoices without the need to allow market participants to short-pay the CAISO market.

D. Comparison to 2000-2001 Energy Crisis

49. GSWC agrees with CMUA that assessing full settlement charges on the state's largest load-serving entities at excessive levels risks collapsing the entire MRTU edifice under a series of system emergencies, similar to the situation in 2000-2001. DOE states that if the extreme experimental settlements become reality, additional millions of dollars expended on electricity would have to come from cuts in its laboratory and scientific programs.

50. In response to CMUA's claim that high prices under MRTU may cause defaults by CAISO debtors, which will make resources reluctant to bid into CAISO markets and lead to reliability issues in a similar fashion to the 2000-2001 energy crisis, the CAISO asserts that CMUA ignores major differences between conditions that will prevail under MRTU and those that existed in 2000 and 2001. The CAISO notes that public load-serving entities are no longer required to fulfill all of their energy needs through the California Power Exchange and CAISO markets, as was the case during the energy crisis. Now, the CAISO points out, less than five percent of load is served through the CAISO markets, while the rest is served through bilateral contracts, thereby highly diluting the impact of any anomalous prices on a market participant's overall liabilities. The CAISO also notes that a major reason for the 2000-2001 energy crisis was the lack of an obligation imposed on suppliers to make their capacity available to the CAISO markets. In today's market environment, the CAISO notes, the CAISO is able to ensure sufficient generation is available to meet demand via the Resource Adequacy and Interim Capacity Procurement Mechanism³⁸ programs, as well as the Residual Unit Commitment, a process run after the Integrated Forward Market in the day-ahead market. Further, the CAISO notes that, unlike 2000-2001, the CAISO will have numerous measures in place to address anomalous prices.

³⁷ WPTF Comments at 13, citing WPTF Comments, Docket No. ER06-615-038, at 6 (Feb. 6, 2009).

³⁸ See sections 40 and 43 of MRTU Tariff.

E. Justness and Reasonableness of Interim Payment Option

51. The CAISO asserts that because CMUA fails to meet its burden of showing that the MRTU Tariff is not just and reasonable, the Commission does not have to address the Interim Payment Option. The CAISO states, however, that in the event that the Commission does reach the second prong of the FPA section 206 analysis, CMUA has failed to show that the Interim Payment Option proposal is just and reasonable.

52. The CAISO further argues that implementing the Interim Payment Option would undermine the LMP-based market that will go into effect under MRTU by relieving scheduling coordinators of the responsibility to make full, timely payment for all charges they incur, thus blocking or frustrating the MRTU price signals that would otherwise provide incentives for economically efficient decisions under MRTU. The CAISO states that, by altering MRTU price signals and thus skewing market outcomes, the Interim Payment Option could have an effect on the MRTU markets after go-live similar to the distorting effect produced in market simulation when market participants engage in unrealistic bidding, scheduling and market strategies. The CAISO asserts that implementing the Interim Payment Option would result in market participants not being responsible for full, timely payment of all charges they incur, thus possibly creating an incentive for them to engage in strategic behavior based on that knowledge.

53. The CAISO also specifically objects to the component of the Interim Payment Option proposal that requires the CAISO to reduce payments to the affected CAISO creditors for the same invoice period as necessary to reflect the reduction in payments by net debtors as a result of the exercise of the Interim Payment Option, provided that all net creditors would be paid at least their Default Energy Bids and any Transmission Revenue Requirements. The CAISO argues that this use of Default Energy Bids as a floor for payment amounts would create incentives for generation resources to determine their Default Energy Bids in ways that could undermine LMP markets. The CAISO states that it could potentially see more scheduling coordinators opting for LMP-based Default Energy Bids for their generation locations. The CAISO explains that if LMPs were pushed higher and generators were guaranteed payment of the Default Energy Bid amount pursuant to the Interim Payment Option, the increased Default Energy Bids would

undermine the Market Power Mitigation-Reliability Requirement Determination,³⁹ as well as undermine the Interim Payment Option, which was intended to ensure that generators would recover their variable costs.

54. Powerex argues that the Interim Payment Option would unreasonably delay payments to CAISO net creditors for sales made in the MRTU markets. Powerex claims that the interim payments made by net debtors to net creditors to cover Default Energy Bid costs is overly simplistic, as it would provide no relief to net creditors who are importers, a category of market participant not eligible for Default Energy Bid cost recovery under the MRTU Tariff. WPTF also argues that the Interim Payment Option is unworkable for intertie suppliers because the CAISO does not determine Default Energy Bids for intertie suppliers.

55. Powerex claims that CMUA's proposed threshold of 200 percent for eligibility to use the Interim Payment Option is too low. Powerex notes that it would not be unexpected for certain scheduling coordinators to see their charges increase to some degree, even twofold, as they increase their activity in MRTU markets. Powerex explains that, for example, a municipal entity that last year purchased power primarily through bilateral agreements would see those transactions conducted through the CAISO markets under MRTU, and municipals may also increase their activity in the day-ahead market.

56. Powerex and the IOUs claim that the Interim Payment Option is unnecessary and duplicative, as a number of other market safeguards are available to the CAISO, including the price cap and price floor, the ability to delay the posting of prices that exceed applicable bid and price caps, and the presence of the CAISO's price validation and price correction processes. The IOUs point out that in addition, the Commission has remedial power to act expeditiously in response to anomalous results, as it did in 1998 in installing emergency price caps in a matter of days.⁴⁰ Powerex argues that the CAISO appears to have sufficient flexibility to address CMUA's concerns, and adding another layer of market intervention could serve as a disincentive to suppliers, particularly outside the CAISO, to participate in the MRTU markets, if they are unable to ascertain when, if, or how much they will be paid.

⁴⁰ IOUs Comments at 7-8.

³⁹ Market Power Mitigation-Reliability Requirement Determination is the two-optimization run process conducted in both the day-ahead market and the Hour-Ahead Scheduling Process that determines the need for the CAISO to employ market power mitigation measures or dispatch reliability-must-run units. *See* Appendix A of MRTU Tariff.

57. WPTF and the CAISO point out that allowing scheduling coordinators to defer payment of a portion of its charges would effectively overturn the longstanding requirement that a scheduling coordinator must make full payment of all invoices on time, potentially delaying finalization of invoices for significant periods. The CAISO notes that this requirement is an important feature of the CAISO's settlement provisions, as the Commission has recognized.⁴¹

58. The CAISO also proffers that implementation of the Interim Payment Option would require a major revision of the CAISO's settlement software and a significant diversion of CAISO resources. The CAISO explains that MRTU golive would necessarily be delayed in order to reconfigure the CAISO's settlements and market clearing software, as well as following the stakeholder protocols before filing necessary tariff changes with the Commission for approval. The CAISO states that it would be an unnecessary distraction to undertake a new revision at this time, especially in light of the extensive resources that the CAISO and its stakeholders are investing in preparation for go-live. The CAISO states that if in the initial period after go-live the CAISO were to find that it needed to take action by revising its tariff, the CAISO could do what would be needed to implement the tariff changes by July 1, which is when payment of the first MRTU invoices will be due. The CAISO states that in the event that the CAISO determined that it needed to submit an emergency tariff amendment, the CAISO would either conduct an abbreviated stakeholder process or no stakeholder process, depending on how exigent the need to file the tariff amendment was.

59. Western generally supports Interim Payment Option, but argues that the threshold is too high and should be triggered and capped at 125 percent of historical invoices rather than triggered at 200 percent. Western states that for any cost increases above 125 percent, and depending upon how long it takes for the MRTU settlements process to stabilize, Western believes it is reasonable to consider phasing-in the recovery of such costs over a longer repayment period. Western states that implementing the Interim Payment Option is especially critical because the CAISO's existing dispute resolution process requires that parties must pay first before they can dispute their bills. Western notes that if the CAISO's costs are determined to be unjust and unreasonable after the fact, many customers would face financial hardships, including possible bankruptcy, while they dispute their bills.

⁴¹ CAISO Comments at 30, *citing Cal. Indep. Sys. Operator Corp.*, 98 FERC ¶ 61,335, at 62,434 (2002).

60. DOE also argues that the 200 percent threshold is too high; they support a 150 percent threshold and a 125 percent cap. DOE further asserts that the review process of disputed bills must be expeditious and meaningful, i.e., should include the requirement that the CAISO explain significant increases and correct erroneous billings. DOE states that the simulated invoices are "incomprehensible," and that if it is a goal of MRTU to provide price signals designed to affect a change in behavior, then the CAISO should be required to thoroughly explain increased costs to allow customers to consider and implement responsive actions. DOE also states that all penalties and interest for non-payment of invoices while the review process is taking place should be waived during early stages of the new MRTU system.

61. Western further argues that it still has not received a complete set of data from which to verify its market simulation invoices, and maintains its position that the CAISO is attempting to rush into MRTU implementation without first properly testing and verifying the accuracy and reasonableness of MRTU. As a compromise, Western argues that the Commission should accept the Interim Payment Option so that the CAISO bears the risk that anomalous prices will continue to exist, since it is the CAISO that desires to implement MRTU over the serious objections of some of its market participants.

62. The IOUs argue that the Interim Payment Option is not able to be implemented in the time frame requested by CMUA. The IOUs claim that the Interim Payment Option proposal is vague, and does not elaborate on: (1) how the CAISO will track payments related to the Interim Payment Option; (2) the details and timeline of the "Interim" process; (3) the process and timeline the CAISO will use to determine whether and how much to increase charges to scheduling coordinators in order to ensure coverage of Default Energy Bids; (4) how the CAISO should account for other cost uplifts; (5) how the expedited investigation/resolution process will work; (6) how the Interim Payment Option will impact credit and collateral obligations to both debtors and creditors; and (7) how the Interim Payment Option works if the CAISO verifies prior to invoice net charges above 200 percent of the prior year are not anomalous.⁴²

63. WPTF and the IOUs state that CMUA's complaint is based on the faulty premise that increased invoices necessarily mean there is a failure in MRTU. WPTF notes that the complaint fails to distinguish between high invoices that are the result of market software or settlement failure and invoices that may simply be the result of proper functioning of the CAISO markets, thus unreasonably

⁴² IOUs Comments at 3-4.

providing buyers with an unwarranted opportunity to short-pay legitimate invoices. The IOUs also argue that the proposal is unworkable because it erroneously assumes any invoice in excess of 200 percent of the prior year's value is by definition anomalous. The IOUs and WPTF assert that there are several dynamic, year-to-year variables at work – market participants' procurement practices, choices of market, customer base, location, hedging, rising fuel costs, higher loads, and outages – that can all impact net exposure to CAISO charges and result in higher CAISO bills. The IOUs object to the Interim Payment Option proposal's provision that would allow the market participant to determine what is defined as "anomalous." The IOUs point out that the Interim Payment Option leaves all market participants with an unpredictable settlement process.

64. WPTF also objects to the CMUA's proposal to increase, where necessary, the interim payment only to the level of the Default Energy Bid thereby mitigating the suppliers' revenues. WPTF notes that CMUA reasons that suppliers should support the proposal because the only other alternative is that suppliers would not be paid at all. WPTF claims that under the MRTU Tariff, suppliers would be paid in full because net debtors in the CAISO's markets are required to post collateral to cover their expected aggregate liability. According to WPTF, thus, if a buyer defaults, the CAISO will first recover any unpaid amounts by drawing on the posted security.

65. Further, WPTF argues that this proposal represents an unwarranted form of mitigation on suppliers' revenues. WPTF notes that the CAISO's MRTU mitigation includes stringent market power mitigation that replaces a supplier's energy bid with a Default Energy Bid if that supplier is determined to have market power. The mitigated supplier would then be paid the higher of its Default Energy Bid or the LMP. In the CMUA's proposal, however, no such market power determination would be made, and the resource would be limited to recovering its Default Energy Bid and not allowed to collect the LMP. WPTF objects to this shift of risk of non-payment to suppliers, and WPTF states that earning interest paid back to the day of the original invoice provides no comfort to a CAISO seller who is short-paid because it has no ability to short-pay its creditors.

66. In response to CMUA's claim that CAISO debtors may be forced to access short-term credit markets in order to pay invoices in full, which might not be an option under current economic conditions, WPTF states that CMUA's proposal would simply shift that need to suppliers, who may be forced to turn to short-term credit markets to pay their creditors while they wait for payment from the disputing scheduling coordinator. WPTF also argues that the Interim Payment Option unjustly affects only net creditors for the same reason that CMUA seeks to impose their proposal, by providing that any market shortfalls only be allocated to creditors.

IV. Discussion

A. <u>Procedural Matters</u>

67. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2008), the filing of timely, unopposed motions to intervene serves to make the movants parties to the proceeding. Given the lack of undue prejudice and Turlock's interest, we find good cause to grant, under Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2008), Turlock's unopposed, untimely motion to intervene.

68. Rule 213(a) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a) (2008), prohibits an answer to a protest unless otherwise permitted by the decisional authority. We are not persuaded to allow CMUA's answer to the CAISO's protest.

B. <u>Commission Determination</u>

1. <u>CMUA's Failure to Prove that MRTU Tariff is Unjust</u> <u>and Unreasonable</u>

69. The Commission finds that CMUA has failed to meet its burden under FPA section 206 to show that the MRTU Tariff is not just and reasonable in its current form. Without such a finding, the Commission cannot consider any proposals from CMUA proffered under the guise of restoring the MRTU Tariff to just and reasonable status.

70. In filing a complaint pursuant to FPA section 206, a party challenging the existing rate bears the burden of proof. The United States Supreme Court has stated that any party that "would upset the rate order under the [FPA] carries the heavy burden of making a convincing showing that it is invalid because it is unjust and unreasonable."⁴³ Further, parties challenging the existing rate pursuant to section 206 of the FPA may not simply demonstrate that another rate is just and reasonable, or more just and reasonable than the rate being challenged. As the United States Court for the D.C. Circuit previously found,

[m]erely because petitioners can conceive of a refund allocation method that they believe would be superior to the one FERC

⁴³ FPC v. Hope Natural Gas Co., 320 U.S. 591, 602 (1944).

71. Thus, in meeting its FPA section 206 burden, a challenging party must furnish the Commission with a satisfactory evidentiary record that demonstrates how and why the existing rate is unjust and unreasonable; then, and only then, may a challenging party submit an alternative rate or revision to the filed rate proffered as just and reasonable, and must provide evidence as to the justness and reasonableness of the new rate. This "dual" burden also has a lengthy history at the Commission. The Commission has previously found that,

[i]n a [s]ection 206 matter, the party seeking to change the rate, charge or classification has a dual burden – it must first provide substantial evidence that the existing rate is unjust, unreasonable or unduly discriminatory, and then demonstrate through substantial evidence that the new rate is just, reasonable and not unduly discriminatory.⁴⁵

72. Further, the Commission has consistently found that a party challenging a rate pursuant to section 206 of the FPA will have failed to provide a sufficient evidentiary record showing the filed rate to be unjust, unreasonable or unduly discriminatory if the entirety of the challenging party's submittal is comprised of unsubstantiated speculation.⁴⁶ Specifically, the Commission has found that "[d]isputed facts cannot be mere allegations, the complainant must make an adequate proffer of evidence" to support its claim.⁴⁷

⁴⁴ Wis. Pub. Power, Inc. v. FERC, 493 F.3d 239, 265-267 (D.C. Cir. 2007).

⁴⁵ Cal. Indep. Sys. Operator Corp., 106 FERC ¶ 63,026, at P 42 n. 19 (2004). See also New England Conf. of Pub. Util. Commissioners, Inc. v. Bangor Hydro-Electric Co., 124 FERC ¶ 61,291, at P 46 (2008); PJM Interconnection LLC, 107 FERC ¶ 61,112, at P 11 (2004); Occidental Chem. Corp. v. PJM Interconnection LLC, 102 FERC ¶ 61,275, at P 18 (2003); S. Cal. Edison Co., 41 FERC ¶ 61,188, at 61,492 (1987).

⁴⁶ BP West Coast Products LLC v. SFPP, L.P., 121 FERC ¶ 61,239, at P 35 (2007). See also AES Ocean Express, LLC v. Fla. Gas Transmission Co., 119 FERC ¶ 61,075, at P 97 (2007).

⁴⁷ *Muni. Resale Serv. Customers Ohio Power Co.*, 63 FERC ¶ 61,336, at 63,201 (1993).

73. As an initial matter, we note that CMUA fails to meet the burden they must carry in challenging the justness and reasonableness of the Commission-accepted MRTU Tariff pursuant to section 206 of the FPA. Instead, CMUA argues that "[b]efore the Commission can conclude that the implementation of MRTU is just and reasonable, it must order the [CAISO] to include protective provisions of the type outlined" in the complaint.⁴⁸ The MRTU Tariff, including the provision at issue in this proceeding, has already been accepted as just and reasonable.⁴⁹ As discussed above, the first prong of the analysis under section 206 of the FPA requires that any challenges to the MRTU Tariff must first demonstrate through substantial evidence that the filed rate is unjust, unreasonable or unduly discriminatory.

74. CMUA has failed to make such a showing. Instead, CMUA has attempted to link higher than historic settlements from MRTU market simulation to the expectation that such results will not only repeat themselves in actual MRTU operation, but also lead to unmitigated, disruptive consequences highlighted by defaults of net debtors and threats to the reliability of the CAISO-controlled grid. In order to successfully bridge the gap between the only evidence on record – limited data from market simulation – to the alleged unjustness and unreasonableness of the MRTU Tariff, CMUA must provide substantial evidence showing, at the very least, that: (1) the explanations provided by the CAISO about abnormally high settlement results from market simulations are insufficient to explain the unusual results in the market simulation environment; (2) it is likely that such settlement results from market simulation will repeat themselves in actual MRTU operations; and (3) the terms and conditions of the MRTU Tariff do not already contain adequate protections to ensure just and reasonable results. If CMUA is able to carry its burden of proving the above, it must then justify a new rate that would be just and reasonable.

75. CMUA fails to demonstrate how market simulation settlement results are too high given the CAISO's explanations. In its complaint, CMUA provides no explanation or proof that the extreme market simulation charges indentified in the attached Affidavits will continue in the actual MRTU environment. Rather, CMUA simply asserts that the charges in question are too high because they "deviate substantially from expected outcomes." ⁵⁰

⁴⁹ MRTU Order, 116 FERC ¶ 61,274.

⁵⁰ CMUA Complaint at 22.

⁴⁸ CMUA Complaint at 5.

76. The Commission is not persuaded that deviation from CMUA-expected outcomes or historic averages for the comparable period makes settlement results too high. The Commission rejects CMUA's attempt to equate historical prices under a previous market regime with expected outcomes under MRTU. MRTU is a different market structure than the previous CAISO market. MRTU introduces nodal, LMP-pricing and a day-ahead market that will necessarily contribute to different settlement results than under the currently effective CAISO tariff. The introduction of nodal prices means that customers in certain locations may receive higher settlements than they received under the previous CAISO tariff, while other customers may pay less. This is the nature of LMP and the potential change in market participants' behavior in response to price signals, and the mere increase in settlement amount is not evidence of excessive prices or unjust and unreasonable rates.⁵¹

77. Furthermore, CMUA has also failed to provide the Commission with evidence as to the likelihood of unjust and unreasonable settlement results after MRTU is implemented. The potential for anomalous results following implementation of MRTU exists, as acknowledged by the CAISO.⁵² However, the Commission finds substantial evidence that the frequency of anomalous results has trended lower during subsequent market simulation, ⁵³ and as a result of improvements in the settlement software and the expected improvement in data inputs during actual market operations in comparison with market simulation, the probability of anomalous settlements during actual MRTU operation should decrease.

78. As the CAISO points out in its comments, there are a number of factors that contributed to anomalous settlements during market simulation, including:
(1) software variances; (2) parameter settings; (3) lack of actual metering data;

⁵² CAISO Answer at 17.

⁵³ *Id.* at 12-13.

⁵¹ We also reject CMUA's assertion that market simulation results are anomalous because they differed from "expected outcomes." Market participants had little or no data on which to base any expectations about MRTU market simulation settlements; in fact, market simulation served as a tool for market participants to test their market behavior *in order* to build reasonable expectations about future settlements. *See* CAISO Answer at 15-16. Thus, deviation from market participants' "expected" settlement outcomes cannot serve as evidence of anomalous prices.

(4) market participant behavior, including testing of unrealistic strategies; and (5) various "stress test" scenarios implemented by the CAISO.⁵⁴ According to the CAISO, software variances have been resolved, the parameter settings have been altered and should not contribute to anomalous settlements after MRTU go-live, submission of metering data for settlement purposes and full participation by market participants are required during actual MRTU operations (while it is not during market simulation), and the extreme market participant behaviors and stress test scenarios are highly unlikely to repeat themselves during actual MRTU operation.⁵⁵ The Commission finds the CAISO's explanation of anomalous settlement charges during market simulation to be sufficient and is persuaded that settlement anomalies are unlikely to occur after MRTU launch.

79. We also find that MRTU Tariff contains sufficient safeguards and corrective measures to protect against incorrect settlements. The CAISO has the tariff authority to validate and correct anomalous prices,⁵⁶ fill in missing data,⁵⁷ impose price caps, and has the personnel in place to identify potential problems as expediently as possible. Specifically, the CAISO has designed go-live processes to detect settlements problems, respond quickly, and resolve them before settlement statements are issued.⁵⁸ The CAISO is also implementing a price blocking process whereby prices above or below certain levels will be screened and not be published until the price has been analyzed for accuracy.⁵⁹ If prices are found to be too high, the CAISO has the ability to request an emergency waiver of tariff provisions before the Commission, a process that can be handled expediently and without CAISO Board approval.⁶⁰

⁵⁴ *Id.* at 14-16.

⁵⁵ *Id.* at 15.

⁵⁶ Section 35 of the MRTU Tariff.

⁵⁷ Id..

⁵⁸ CAISO Answer at 22-23.

⁵⁹ *Id.* at 13.

⁶⁰ *Id.* at 24-25. *Also see* section 8.1 of the CAISO Business Practice Manual.

The CAISO also has a rapid response team in place to detect and resolve 80. issues with MRTU implementation.⁶¹ The team is equipped with detailed procedures that involve prioritization and escalation, where necessary, including an escalation process for market participants to bring any problems to the attention of the CAISO, including anomalous prices. Once alerted, the rapid response team will assess the problem in order to determine the root cause, determine the severity of the issue, and develop options for a resolution.⁶² The CAISO has a reversion process whereby it can set an administrative price in accordance with the MRTU Tariff.⁶³ The CAISO also has a round-the-clock price validation process that includes automated warning messages to on-call support staff, designed to quickly address the root cause of anomalous prices and minimize their frequency.⁶⁴ The CAISO is also committed to implementing a proactive monitoring process that will review bids, prepare shadow statements, and inform market participants if their liabilities are accruing at a rapid pace.⁶⁵ The MRTU Tariff also stipulates that the payment of invoices is not due until two months after the end of the trading month,⁶⁶ thereby allowing market participants and the CAISO adequate time to address any anomalous prices, including any emergency, remedial measures, such as an emergency request for tariff waiver, or even a tariff modification prior to the payments becoming due.

81. The Commission finds that the above identified safeguards provide adequate opportunities to protect market participants from anomalous prices and provide market participants with reasonable avenues to report any potential problems experienced during MRTU operations, and for the CAISO to address them. Neither CMUA, nor parties filing in support, have provided substantial

⁶¹ *Id.* at 8-9 n. 17.

 62 *Id.* We also note that the Commission directed the CAISO to provide market participants with more information regarding the process by which the CAISO's rapid response team will identify and address situations where a market participant may be incurring liabilities at an excessive rate. *See* MRTU Readiness Certification Order, 126 FERC ¶ 61,221 at P 78.

⁶³ Section 35 of the MRTU Tariff.

⁶⁴ CAISO Answer, Deborah Le Vine Affidavit, at 8.

⁶⁵ *Id.* at 23.

⁶⁶ CAISO Answer at 25. See also section 11.29 of the MRTU Tariff.

evidence that calls into question the adequacy, justness, or reasonableness of these safeguard measures.

82. CMUA's argument that the price validation and correction process will not address erroneous settlement results arising from input errors, such as scheduled or real-time transaction values, has been fully addressed above. The CAISO explains in its comments that these errors are not likely to be repeated in actual MRTU operation because they have been identified during market simulation and subsequently corrected.⁶⁷ Further, CMUA ignores the fact that a major contributor to such anomalous prices is a lack of meter data,⁶⁸ not input errors, and because participants are required under the MRTU Tariff to submit meter data for settlement purposes,⁶⁹ this issue should not arise under MRTU operation.

83. We also note that the CAISO has only recently started to apply the price cap and price floor in market simulations. Many of the arguably extreme results referenced by CMUA in its complaint would have been mitigated by the application of the price cap and price floor. The Commission has found the price cap and price floor to be a just and reasonable interim mechanism to protect against infrequent high prices,⁷⁰ and CMUA has provided no evidence that even with the price cap and price floor in place, an additional safeguard, such as the proposed Interim Payment Option, is needed to ensure just and reasonable price output from the MRTU Tariff.

84. We also find that CMUA's claim that the CAISO will lack adequate staff to address all of the anomalous charges is unfounded. The CAISO has committed substantial staff to be part of the monitoring, investigative, and resolution process.⁷¹ Moreover, as discussed above, the evidence in the record suggests anomalous prices are unlikely to occur, as the CAISO has solved many of the issues that contributed to anomalous settlements.

⁶⁸ *Id.* at 3.

⁶⁹ Section 10.3.2.1 of the MRTU Tariff.

⁷⁰ Price Cap and Floor Order, 126 FERC ¶ 61,082.

⁷¹ CAISO Answer at 22.

⁶⁷ *Id.* at 20.

85. Regarding GSWC's concern that the CAISO has not explained why it is impossible to simulate normal or expected conditions or to sustain sufficient participation in its simulations, and its assertion that the limitations may be related to the CAISO's aggressive implementation schedule and not inherent to the testing process, the Commission finds that neither CMUA nor GSWC provide any evidence to support this claim. As explained by the CAISO, participants are not required to fully participate in market simulations, as they are in actual MRTU operations, and unrealistic bidding behavior by market participants that is unlikely to repeat itself in actual market operations. Full participation and realistic bidding behavior should prevent market simulations from mirroring expected MRTU operations outcomes.

86. Further, we reject claims by DOE and others that there is a potential for "market chaos," and that the Commission should rely on market simulation data in its decision-making in the instant proceeding as it did in the price cap proceeding. DOE ignores the fact that the CAISO's monitoring, price cap and price floor, and other corrective actions are designed to prevent "chaos" in the market. The market simulation data are results of market simulations, not of actual market operation. The CAISO has provided ample explanation for the causes of abnormal settlement results, has highlighted the measures taken to improve settlement statements, and has outlined the market monitoring and response effort set to begin its operations simultaneously with the MRTU markets.

87. Furthermore, the Commission is not persuaded by GSWC's assertion that its own experience with MRTU casts doubt on MRTU's successful implementation. GSWC's early issues with the functionality of MRTU highlight the importance of testing systems before go-live so that market participants and operators can gain experience with the new software. GSWC offers no indication that it has not been able to overcome these practical hurdles in adjusting to MRTU.

88. Western's concerns regarding the IBAA proposal are outside the scope of this proceeding. IBAA issues are best addressed in the IBAA proceedings, and concerns regarding readiness of the CAISO's systems for MRTU implementation on March 31, 2009 have been addressed in the MRTU Readiness Certification Order.

89. In addition, we find that Western's concerns over potential price increases after MRTU implementation and its claim that MRTU is inconsistent with federal laws governing Western's operations constitute a collateral attack on the Commission's prior orders. MRTU is the product of six years of collaboration

among stakeholders and Commission guidance. The Commission accepted the MRTU Tariff in September 2006.⁷² The nodal, LMP-based pricing system has been at the core of the CAISO's MRTU proposal from the start. Western has had ample opportunities to raise the issue of potential inconsistency of the nodal pricing under MRTU with Western's authority under federal law but failed to do so in a timely manner. Accordingly, we reject Western's concerns on this issue.

90. The Commission recognizes the concern shared by CMUA, GSWC, LADWP, Western, and DOE. The Commission will not, however, accept additional, redundant market mitigation measures to fix a problem in the MRTU Tariff that CMUA has failed to show actually exists. The CAISO has provided the Commission and market participants with ample data and assurance, as well as evidence of actions taken to expediently address all performance issues if and when they arise, including filing necessary tariff amendments or waivers, to ensure that MRTU operation will produce just and reasonable outcomes.

2. <u>CMUA's Failure to Show Justness and Reasonableness of</u> <u>Interim Payment Option</u>

91. As discussed above, CMUA failed to meet its statutory obligation to demonstrate through sufficient evidence that the MRTU Tariff is unjust, unreasonable or unduly discriminatory without the proposed Interim Payment Option. Accordingly, the Commission need not assess the justness and reasonableness of its proposed new rate, the Interim Payment Option provision. Nevertheless, even if we were to consider the justness and reasonableness of CMUA's Interim Payment Option, we would find that it is not just and reasonable. The Commission will address CMUA's Interim Payment Option proposal below.

92. The Commission's concerns with the Interim Payment Option proposal are threefold. Our first concern, as explained in the first section of this order, is one of the purported "necessity" of the Interim Payment Option. The second concern relates to the justness and reasonableness of the Interim Payment Option, and whether the proposal violates the MRTU design objectives and Commission precedent. Our final concern is one of timing and efficacy, as implementation of the Interim Payment Option, or a similar mechanism, would require substantial investments of time, effort, and resources by the CAISO and market participants, and could also delay implementation of MRTU. We will address these concerns below.

⁷² See MRTU Order, 116 FERC ¶ 61,274.

93. We first address the issue of "necessity" of the Interim Payment Option under MRTU Tariff. We agree with numerous commenters, including the CAISO and the IOUs, that the Interim Payment Option is unnecessary and duplicative of the numerous market safeguards available to the CAISO. As outlined above, the CAISO has multiple safeguards already in place to address the potential of anomalous prices. In light of these safeguards and processes, and in light of the lack of evidence in CMUA's complaint demonstrating why these safeguards and processes are insufficient to prevent financial harm to participants due to anomalous prices, we find no need for another mechanism of intervention to be placed into the MRTU markets.

94. We now turn to the issue of whether the Interim Payment Option proposal is just and reasonable. The Commission finds that there are multiple portions of the instant proposal at odds with just and reasonable rates under MRTU. Foremost among these is the well-established principal that requires customers to pay their bills on time, even in the event of dispute or default.⁷³ This requirement is found in the tariffs of other ISOs as well and exists under the current CAISO tariff regardless of MRTU implementation.⁷⁴ Adoption of the Interim Payment Option proposal would be inconsistent with this well-established payment principle.

95. In addition to undermining Commission precedent, the Interim Payment Option is also vague and incomplete so as to be unjust and unreasonable. Importers, for example, do not have calculated Default Energy Bids under the MRTU Tariff. As proposed, the Interim Payment Option would provide no guaranteed variable cost recovery for importers, which is an unjust and unreasonable result. Further, as pointed out by the IOUs in their answer, CMUA's proposal fails to address essential elements, including: (1) how the CAISO will track payments related to the Interim Payment Option; (2) the details and timeline of the "Interim" process; (3) the process and timeline the CAISO will use to determine whether and how much to increase charges to scheduling coordinators in order to ensure coverage of Default Energy Bids; (4) how the CAISO should account for other cost uplifts; (5) how the expedited investigation/resolution

⁷³ *Cal. Indep. Sys. Operator Corp.*, 98 FERC ¶ 61,335, at 62,434 (2002) (In referencing the tariff requirement for scheduling coordinators to make all payments by their due date, even if in dispute, the Commission stated: "Finally, we expect the [CAISO] to enforce the tariff provisions in the event of default...").

⁷⁴ See, e.g., section 3.1(c) of Exhibit 1D of section I of the ISO New England, Inc., FERC Electric Tariff No. 3; sections 7.1 and 7.3 of PJM Interconnection, L.L.C., FERC Electric Tariff, Sixth Revised Volume No. 1.

process will work; (6) how the Interim Payment Option will impact credit and collateral obligations to both debtors and creditors; and (7) how the Interim Payment Option works if the CAISO verifies prior to invoice net charges above 200 percent of the prior year are not anomalous.⁷⁵ The Commission cannot find the Interim Payment Option to be just and reasonable without adequate resolutions of these elements omitted from the proposal.

96. Finally, the Commission finds that the implementation of the Interim Payment Option – or a similar mechanism – would require a substantial investment of time, effort, and resources on behalf of the CAISO and its stakeholders. According to the CAISO, the MRTU settlement software would require revision, a substantial project that would result in a delay of MRTU implementation for weeks or months.⁷⁶ Any tariff revisions would need stakeholder and Commission review, a process that would take additional time and may be necessary before any changes to the settlement software would be made. While these delays and expenditures would certainly be justified *if* the MRTU Tariff was found to be unjust and unreasonable *and* the Interim Payment Option was found to correct the MRTU Tariff's deficiency, this is clearly not the case here, we deny CMUA's complaint.

The Commission Orders:

CMUA's complaint is hereby denied for the reasons discussed in the body of this order.

By the Commission.

(SEAL)

Kimberly D. Bose, Secretary.

⁷⁵ IOUs Answer at 3-4.

⁷⁶ CAISO Answer at 4.

Appendix

Motions to Intervene Docket No. EL09-38-000

American Public Power Corporation California Department of Water Resources State Water Project California Public Utilities Commission Calpine Corporation City of Santa Clara, California Dynegy Morro Bay, LLC Golden State Water Company* Imperial Irrigation District J.P. Morgan Ventures Energy Corporation Los Angeles Department of Water and Power* Metropolitan Water District of Southern California Mirant Energy Trading, LLC, Mirant Delta, LLC, and Mirant Potrero, LLC Pacific Gas and Electric Company* Powerex Corp.* San Diego Gas and Electric Company* Southern California Edison Company* United States Department of Energy* Western Area Power Administration* Western Power Trading Forum*

*filed comments and/or protest

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