134 FERC ¶ 61,070
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman;
Marc Spitzer, Philip D. Moeller,
John R. Norris, and Cheryl A. LaFleur.

California Independent System Operator Corporation	Docket Nos.	ER10-1559-001 ER11-2128-000 ER11-2128-001

ORDER ON REHEARING REQUESTS, COMPLIANCE FILING, INSTITUTING SECTION 206 PROCEEDING AND ESTABLISHING REFUND EFFECTIVE DATE

(Issued January 31, 2011)

1. This order rejects the requests for rehearing filed regarding the Convergence Bidding Order.[1] This order also conditionally accepts the November 15, 2010 compliance filing and December 3, 2010 errata to the compliance filing, except for the proposed revisions to Paragraph 9 of Part A, Schedule 1 of Appendix F of CAISO's tariff, made by the California Independent System Operator Corporation (CAISO) in the above-captioned dockets, as directed by the Convergence Bidding Order. In addition, the Commission accepts the proposed revisions to Paragraph 9 of Part A, Schedule 1 of Appendix F of CAISO's tariff, to become effective February 1, 2011, subject to refund, additional filing, and further Commission order, and the Commission establishes an investigation under section 206 of the Federal Power Act (FPA).

[1] *Cal. Indep. Sys. Operator Corp.*, 133 FERC ¶ 61,039 (2010) (Convergence Bidding Order).

I. Background[2]

2. To avoid delaying CAISO's Market Redesign and Technology Upgrade (MRTU), the Commission directed CAISO to file tariff language for the implementation of convergence bidding within 12 months of the effective date of MRTU.[3] In November 2009, CAISO made a conceptual filing regarding convergence bidding,[4] and the Commission addressed CAISO's conceptual convergence bidding filing and granted an extension of time to implement convergence bidding on February 1, 2011.[5] In the Convergence Bidding Design Order, the Commission approved, in principle, the majority of the proposed convergence bidding features and provided guidance and sought additional details on other aspects of the proposal.[6]

3. On June 25, 2010, CAISO filed its convergence bidding proposal. CAISO also requested waiver, allowing the proposal to be effective February 1, 2011. Under CAISO's proposal, convergence bids, also known as virtual bids, represent financial transactions. They are submitted like other bids in the day-ahead market and are recognized by system operators as not being physical. If convergence bids are cleared in the day-ahead market, they are automatically liquidated with the opposite buy/sell positions at real-time prices.

4. The proposal includes a series of charges to convergence bidding scheduling coordinators including a Virtual Award Charge, a transaction fee and a metering and client relations charge. The proposal also contains a cost allocation methodology to assign certain uplift costs to convergence bidding scheduling coordinators.

5. Under the proposal, convergence bids would only be accepted in the day-ahead market to the extent scheduling coordinators satisfy certain credit requirements. CAISO also includes initial position limits, to be gradually phased out, to reduce the total

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[2] For a more detailed description of the history of convergence bidding, please *see Cal. Indep. Sys. Operator Corp.*, 130 FERC ¶ 61,122, at P 3-5 (2010) (Convergence Bidding Design Order).

[3] *Cal. Indep. Sys. Operator Corp*., 116 FERC ¶ 61,274, at P 452 (2006) (September 2006 MRTU Order).

[4] CAISO November 20, 2009 Convergence Bidding Design Filing, Docket No. ER10-300-000 (Convergence Bidding Design Filing).

[5] Convergence Bidding Design Order, 130 FERC ¶ 61,122 at P 24.

[6] *Id.* P 1.

megawatts of convergence bids that a scheduling coordinator can place on behalf of a convergence bidding entity at any one internal pricing node or intertie.

6. Further, the CAISO proposal includes a settlement rule to discourage engaging in strategic convergence bidding that could affect a scheduling coordinator's congestion revenue rights (CRR). CAISO proposed to be able to suspend convergence bidding for a single entity or all convergence bidding either at a particular location or system-wide. Also, CAISO would release the net cleared quantities of convergence bids at each node at the close of the real-time market for the trading day.

7. In the Convergence Bidding Order, the Commission conditionally accepted CAISO's convergence bidding proposal. The Commission directed CAISO to: (1) describe the information it plans to release; (2) clearly define the flow impact value that will be used in assigning the impact that convergence bidding has on CRR revenue; (3) remove the suspension referral to the Commission in instances concerning reliability and operations and make certain clarifications regarding price divergence provisions; (4) include system-wide average divergence threshold in CAISO's tariff; (5) remove ambiguous language regarding Virtual Award Charges; (6) clarify that virtual bids cannot be less than the bid floor; (7) modify the definition of "Virtual Bids" to make clear that virtual bids can be submitted at interties; and (8) make certain miscellaneous and typographical edits to its tariff language.

II. Notice of Filing and Responsive Pleadings

8. Notice of CAISO's November 15, 2010 compliance filing was published in the *Federal Register*, 75 Fed. Reg. 74,034 (2010), with comments, protests, or interventions due on December 6, 2010. Notice of CAISO's errata filing was published with comments, protests, or interventions due on January 27, 2011.

9. The California Department of Water Resources State Water Project (SWP), Powerex Corp. (Powerex), Pacific Gas and Electric Company (PG&E), Western Power Trading Forum (WPTF);[7] and SESCO Enterprises, LLC, Jump Power, LLC, Silverado Energy LP, JPTC, LLC, and Solios Power, LLC (collectively, Financial Marketers) timely filed protests and comments. Modesto Irrigation District timely filed a motion to intervene. CAISO filed an answer to the comments.

10. On November 15, 2010, Powerex, Financial Marketers and WPTF timely filed rehearing requests concerning the Convergence Bidding Order.

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[7] WPTF filed its comments in Docket No. ER10-1559-000, however it is clear from the filing that the comments should have been filed in ER11-2128-000. *See* WPTF Comments, Docket No. ER10-1559-000 (filed December 6, 2010).

III. Discussion

A. Procedural Matters

11. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2010), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept the CAISO's answer because it has provided information that assisted us in our decision-making process.

B. Substantive Matters

1. Rehearing Requests

a. Position Limits

12. WPTF argues that the Commission accepted CAISO's proposal to limit the amount of convergence bidding at internal nodes and interties over one year and 16 months, respectively, despite CAISO's failure to justify the need for such limits.[8] WPTF highlights that the Convergence Bidding Order found that position limits help to avoid unintended consequences of convergence bidding's implementation.[9] WPTF argues that CAISO has not identified what the consequences might be or how position limits would protect against them.[10] Financial Marketers add that no other independent system operator (ISO) or regional transmission operator (RTO) adopted position limits, and none have suffered any unintended consequences that have been harmful to their markets as a result.

13. WPTF adds that convergence bidding was developed through a three-year stakeholder process that studied the best virtual bidding practices in other organized markets. WPTF argues that CAISO is not implementing a materially different convergence bidding design, CAISO's market structure is not materially different from any other market structure, and, therefore, position limits are not warranted.[11]

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[8] WPTF Rehearing Request at 3.

[9] *Id.* (citing Convergence Bidding Order, 133 FERC ¶ 61,039 at P 122).

[10] *Id.* at 4.

[11] *Id.* at 5.

14. WPTF contends that the electricity market design is not the same as the design in place in 2000-2001, and thus it is not appropriate to justify position limits based on the historical context of the 2000-2001 energy crisis.[12]

15. WPTF and Financial Marketers contend position limits will have an adverse impact on the ability of market participants to freely take actions that will converge prices, as recognized by the Commission, preventing the benefits of convergence bidding to be realized.[13] Parties argue that the position limits would mask problems by constraining participation.[14] WPTF adds that collection and evaluation of data on convergence bidding does not affect the expiration of position limits, and it is therefore an arbitrary time period that is not tied to a meaningful event.

16. WPTF is unconvinced that CAISO needs to avoid lifting position limits during the first summer season.[15] WPTF notes that neither CAISO nor the Commission provided evidence that summer peak periods would reduce the liquidity of the virtual market or create conditions that would amplify the detrimental effects of convergence bidding. WPTF adds that position limits will be most detrimental in the summer peak period because they will make it more difficult for the owners of older, lower capacity factor, higher heat rate generating units that are typically run only during the summer to hedge their units forced outage risk.[16] Also, WPTF contends that the Commission did not adequately address the technical merits of the comments put forth by parties, such as whether there is a basis for different position limits at the intertie nodes than for internal nodes.[17]

Commission Determination

17. The Commission finds that the rehearing requests regarding the position limits that will be in place at the beginning of the convergence bidding process are fully addressed in the Convergence Bidding Order and provide no reason to alter the Convergence Bidding Order's determination on position limits.

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[12] *Id.*

[13] *Id.* at 6 (citing Convergence Bidding Order, 133 FERC ¶ 61,039 at P 122).

[14] *Id.* at 7.

[15] Convergence Bidding Order, 133 FERC ¶ 61,039 at P 124.

[16] WPTF Rehearing Request at 8.

[17] *Id.* at 9-10.

18. The Commission recognizes that CAISO cannot identify all potential *unintended* consequences that convergence bidding could have on its market or demonstrate that they are necessary to protect against market manipulation, the exercise of market power or reliability problems. Although efforts have been taken in the design phase to ensure that convergence bidding will not lead to additional problems, the position limits act as an additional safeguard against unforeseen problems.

19. As the Commission stated in the Convergence Bidding Order, CAISO does provide reasonable explanations for the reduced internal position limits and position limits at the intertie.[18] Such reasons include avoiding lifting the position limits during the first summer and compiling and analyzing data regarding the effects of convergence bidding. CAISO also explained why additional time for position limits at the interties is justified. Such reasons include guarding against reliability concerns involving increased reliance on resource adequacy resources, and exercising caution with larger intertie transactions. By including position limits at the outset of convergence bidding, CAISO may be able to locate a potential problem before it becomes very large. To identify potential problems, CAISO still requires a period of time over which to gather and analyze data.

20. Also, as the Commission stated in the Convergence Bidding Order, if the potential problems do not develop during the initial implementation of convergence bidding, market participants can be more confident of the market design going forward.[19] Even though market participants may behave differently when all position limits are lifted, the experience of the limited convergence bidding should shed light on some of the potential challenges that convergence bidding may pose.

21. Although WPTF contends that convergence bidding is not a new market design feature, we note that it is new to the CAISO market and that gradually implementing such a feature is a way to guard against unexpected results. This caution is prudent, regardless of the changes to the market since the 2000-2001 energy crisis. Also, as the Commission stated in the Convergence Bidding Order, although other RTOs and ISOs with convergence bidding features have not included initial position limits, other ISOs and RTOs provide other bidding restrictions.[20]

22. The Commission previously addressed concerns that position limits will not allow the CAISO market to experience all of the benefits of convergence bidding, stating that

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[18] Convergence Bidding Order, 133 FERC ¶ 61,039 at P 124-25.

[19] *Id*. P 126.

[20] *Id*. P 100, 128.

"CAISO's proposed position limits are a reasonable balance between the potential benefits of implementing convergence bidding and introducing a new market design feature that attempts to avoid unintended consequences."[21] If there are no problems during the position limit period, the more robust convergence bidding will proceed on schedule. Further, the Commission noted that although the position limits have set expiration periods, CAISO has committed to revise those periods if it learns during the implementation process that there are any issues that require the limits be changed.[22] Thus, any concerns about the automatic expiration of the position limits are addressed.[23]

23. The Commission rejects WPTF's claim that there is no reason to avoid lifting the convergence bidding position limits during the first summer season.[24] The summer season presents unique challenges to the CAISO system because of the increased electricity demand. Implementing a convergence bidding market design without position limits during that first summer adds more challenges to that season. Implementing a more limited version of convergence bidding will allow all parties to become more accustomed to the market element.

b. CRRs and Level of Congestion

24. Powerex claims that the Commission erred in the Convergence Bidding Order by approving CAISO's proposed CRR settlement rule without directing CAISO to modify the rule so as not to apply where the combined physical and virtual accepted bids are exposed to the same or more congestion than the CRRs held. Powerex contends that this finding is not supported by evidence and is inconsistent with CAISO's stated purpose for instituting an adjustment or claw-back rule in the first place, i.e., to discourage CRR holders from engaging in convergence bidding activity in a way that enhances the value of their CRRs.

25. Powerex argues that a settlement rule that adjusts CRR revenues even where an entity has scheduled physically on a transmission path on which it holds CRRs and where its combined physical and/or virtual schedule is equal to or greater in size than the CRRs it holds does not deter adverse incentives to engage in strategic convergence bidding that could affect CRR value. Powerex contends that in such a case, the entity will already have felt any impact that its virtual bids have on congestion when it physically schedules

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[21] *Id*. P 122.

[22] *Id*. P 127.

[23] *Id*.

[24] *Id*. P 124.

along that path. Thus, according to Powerex, the entity's virtual bids cannot create any net financial advantage for it, and the adverse incentives CAISO seeks to address do not exist.

26. Powerex claims application of the settlement rule in these circumstances will have the effect of discouraging market participants from: (1) procuring CRRs; (2) physically scheduling to use their CRRs; (3) subsequently offering to reduce their physical day-ahead market awards in the Hour-Ahead Scheduling Process (HASP); and/or (4) submitting virtual bids where no inappropriate incentives exist.

27. Powerex claims that modifying the CRR settlement rule as requested will avoid imposing CRR settlement rule charges on an entity that has not intentionally engaged in "uneconomic" virtual bidding activity designed to increase the value of its CRRs, and will help maintain the appropriate balance between discouraging uneconomic behavior and encouraging liquidity that drives desired market outcomes.

Commission Determination

28. We deny Powerex's rehearing request and disagree that the CRR settlement rule will have adverse effects on physical transactions and CRR usage within CAISO. The CRR settlement rule is not designed to assess each CRR holder's overall market position, nor should it be. Instead, the CRR settlement rule requires that a CRR holder must return the portion of the CRR value that resulted through the CRR holder's own convergence bidding activities. Through returning this added value, the CRR settlement rule will be effective in deterring convergence bidding behavior designed to affect CRR value.

29. However, Powerex is arguing that the Commission should modify the CRR settlement rule so that it is not triggered until all the CRR holder's physical market positions are taken into account. We disagree that CAISO should be required to assess a CRR holder's overall market position to determine the net effect of convergence bidding practices. Further, even if CAISO attempted to evaluate a CRR holder's net market position, there is no guarantee that CAISO could accurately consider all bilateral arrangements and how these transactions affect overall market results. We find that Powerex's requested modification could be overly burdensome and that the added complexity relating to implementing their request could result in the inconsistent application of the CRR settlement rule.

30. Additionally, a CRR holder's physical positions are independent of whether a CRR holder's convergence bidding activity increased the value of its CRR portfolio. The CRR settlement rule simply returns any added value associated with convergence bidding. The CRR settlement rule will be applied only when CRR values are influenced by convergence bidding behavior. Consistent with our prior ruling, we reaffirm that this process will effectively deter market behavior that affects convergence bidding when necessary and that its implementation will not adversely impact any particular market

participant.[25] The market results associated with physical transactions are consistent with the results that would have occurred absent convergence bidding effects on CRR values.

31. Finally, Powerex argues that the CRR settlement rule will have an adverse impact on market related activities, such as procuring CRRs and physically scheduling power in a manner consistent with awarded CRR. We are not persuaded that the CRR settlement rule will have any such market impacts. For example, Powerex fails to make any meaningful demonstration that CRR nominations will be influenced by the CRR settlement rule. The CRR release process is intended to provide load serving entities with a hedge against congestion charges that they will actually be incurred during the process of serving their load. The CRR settlement rule only adjusts CRR values when these values have been influenced by convergence bidding transactions, which are not physical in nature. Powerex has failed to make any meaningful demonstration that physical transactions and the effectiveness of CRRs as a congestion hedge will be adversely impacted by the CRR settlement rule. Instead, we find that the CRR settlement rule will help ensure that physical scheduling practices are not adversely impacted by the implementation of convergence bidding. Accordingly, we deny Powerex's request for rehearing.

*c. **Information Release***

32. Financial Marketers claim CAISO failed to prove the justness and reasonableness of its proposal to release information regarding the net cleared virtual quantities at each node and intertie at the close of the real-time market for each operating day.[26] Financial Marketers contend that CAISO's proposed information release timeline is: (1) inconsistent with the information release policy established section 35.28(g)(4) of the Commission's regulations; (2) inconsistent with the information release timeline of every other ISO and RTO; and (3) inconsistent with the way CAISO treats, and would continue to treat, physical transactions.

33. Financial Marketers note that section 35.28(g)(4) of the Commission's regulations requires that each ISO and RTO release offer and bid data on a three-month lag basis in order to protect commercially sensitive information regarding bidding strategies. Financial Marketers further state that there is no special provision in the regulations

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[25] *Id.* P 156.

[26] As Financial Marketers acknowledge, Financial Marketers make nearly identical arguments in their protest. *See* Financial Marketers Comments at 2. We summarize and address both sets of comments here. We further note that CAISO responded to these arguments in its answer to protests and comments, stating that no new arguments against the accepted information release policy have been raised. CAISO Answer at 3.

providing for earlier releases of net virtual demand or net virtual supply on a nodal basis. Thus, Financial Marketers argue that the Commission's Convergence Bidding Order is contrary to the Commission's own regulations and policies.

34. Financial Marketers further state that CAISO has acknowledged that no other ISO or RTO posts nodal virtual bid information on a next-day basis. Financial Marketers state that CAISO has admitted that "the need for some sort of nodal data release, in addition to the 90-day lag data, is not apparent given that other ISOs have not implemented additional safeguards, like position limits that the [California] ISO has proposed for its design."[27] Financial Marketers contend that Midwest Independent Transmission System Operator (MISO) and the New York Independent System Operator (NYISO) do not post net virtual bid data on a nodal basis, while ISO New England posts nodal data but not until the first day of the fourth month following the operating month, and even then, it masks the Location ID, and PJM posts nodal data but only on a 6-month delay or lag. Financial Marketers argue that there is no justification for CAISO's proposal to release the net cleared virtual position at each node and intertie on a daily basis when no other ISO/RTO has needed to do so in order to secure the benefits of virtual trading.

35. Financial Marketers and WPTF submit that releasing the cleared virtual position at each node on a daily basis, without simultaneously releasing the physical data, would subject market participants engaged primarily or exclusively in virtual transactions to undue prejudice or disadvantage. Parties note that CAISO does not release cleared physical supply/demand data at a nodal level at the close of the real-time market, nor does CAISO propose to do so in the future. Financial Marketers contend that CAISO acknowledges that its proposal to release the net virtual position at each node at the close of the real-time market is expressly intended to allow load serving entities to "compete more effectively" with financial marketers.[28] Financial Marketers argue that a tariff provision cannot be lawfully justified based on claims that it will give one set of market participants an advantage that will allow them to "compete more effectively."

36. Financial Marketers contend that such a rationale cannot form a lawful basis for departing from the default three-month lag rule under the Commission's regulations and Order Nos. 719 and 719-A. Financial Marketers add that the Commission has rejected proposals to shorten the period for bid data disclosure where no legitimate,

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[27] Financial Marketers Rehearing Request at 8 (citing January 15, 2010 Draft Final Proposal on Data Release & Accessibility, Phase 2 Convergence Bidding Data at 5).

[28] *Id.* at 9 (citing Draft Final Proposal at 6).

nondiscriminatory justification for such shorter period has been demonstrated.[29] Financial Marketers argue that CAISO's proposal would place Financial Marketers and others engaged primarily or exclusively in virtual trading at a competitive disadvantage to generators and load serving entities in discovering the bidding strategies of their competitors.

37. Financial Marketers contend that aggregation of bid data into net cleared quantities at each node will not prevent the release of commercially sensitive information. According to Financial Marketers, such releases will allow other market participants to discover the bidding patterns and strategies of Financial Marketers and other convergence bidders because in a new market, convergence bidding at many nodes may be thin, allowing entities with market power to quickly discern new bidding patterns and then move to prevent those competitive threats. Financial Marketers argue that this early information release will give others a free-ride off the substantial investment in data collection and analysis, as well as the intellectual capital developed by companies engaged in convergence bidding. Financial Marketers argue that coupled with the position limits that the Commission has approved, CAISO's information release policy would diminish the value of investments made by Financial Marketers and others to identify arbitrage opportunities. Thus, Financial Marketers contend that CAISO's proposal would inhibit market entry and the development of convergence bidding. Financial Marketers note that the Commission recognized that earlier releases could give others a competitive advantage or eliminate a legitimate competitive advantage that other entities might have.[30]

38. WPTF argues that the Commission failed to address WPTF's proposed mitigation approach and the concern that it would be harmful to release cleared bids at a node that overwhelmingly reflected the bids of a single market participant. WPTF reiterates that virtual bidding at some locations may be limited to a single participant, for instance, one that has a physical position to hedge at that location.

39. WPTF claims that market participants with physical resources at a node will represent the majority of convergence bids at that node. Assuming the Commission does not grant rehearing on position limits, if the net cleared quantity at a generating node amounted to ten percent of the generation connected to that node, WPTF argues that

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[29] *Id.* at 10 (citing *ISO New England and New England Power Pool*, 118 FERC ¶ 61,224, at P 11-12 (2007)).

[30] *Id.* at 11 (citing *Wholesale Competition in Regions with Organized Electric Markets*, Order No. 719, FERC Stats. & Regs. ¶ 31,281 (2008), *order on reh'g*, Order No. 719-A, 74 Fed. Reg. 37,776 (July 29, 2009), FERC Stats. & Regs. ¶ 31,292, at P 157 (2009).

market participants would expect that cleared virtual quantity to be the result of bids submitted by the generating unit owner.[31] Similarly, Financial Marketers argue that certain market participants will be able to ride the coattails of others who do the legwork to identify profitable arbitrage opportunities.

Commission Determination

40. The Commission continues to find that the information release policy is just and reasonable and not unduly discriminatory. Consistent with the finding in the Convergence Bidding Order, the Commission finds that the release of the net cleared quantities of convergence bids at each node at the close of the real-time market for the trading day will provide transparency while not releasing commercially sensitive information.

41. Contrary to Financial Marketers' and WPTF's concerns, the Commission finds that the limited information that is released, as provided for in the tariff language, will not expose the identity or strategy of market participants. We reiterate that, even in instances when one party is responsible for much of the bids at one location, the identity of the bidders and the number of bidders is not released and only the net cleared virtual bid information is released. Contrary to WPTF's arguments, convergence bids are different from physical bids because they can come from varied locations and amounts regardless of existing actual resources. Therefore, the Commission does not find that it is discriminatory to release limited information on convergence bids, while not releasing physical information at load nodes.

42. Although Financial Marketers argue that CAISO's information release policy is inconsistent with the Commission's regulations, the Commission finds that CAISO's information release proposal is consistent with section 35.28(g)(4) of the Commissions regulations.[32] Section 35.28(g)(4) states that: (i) unless otherwise approved by the commission, "each Commission-approved independent system operator and regional transmission organization must release its offer and bid data within three months;" and (ii) Commission approved ISOs and RTOs must "mask the identity of market participants when releasing offer and bid data."[33] Consistent with the Convergence Bidding Order, the Commission finds that protestors' reliance on the cited Commission regulation and Order No. 719 and Order No. 719-A direction regarding the release of bid and offer data

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[31] WPTF Rehearing Request at 12.

[32] 18 C.F.R. § 35.28(g)(4)(i) (2010).

[33] *Id.* § 35.28(g)(4)(ii).

within three months is misplaced.[34] We, again, note that such directions concern the release of more detailed offer and bid data, not simply the net of the cleared quantities of virtual awards at each node. Similarly, the daily market report that includes a summary of information regarding submitted and cleared physical and virtual bids proposed by CAISO and employed by other ISOs, to which no parties objected, concerns information that is not offer and bid data.[35]

43. Although Financial Marketers' argue that CAISO's information release proposal is inconsistent with other RTOs and ISOs, and CAISO has not adequately justified the proposed approach to release information, the Commission notes that while some ISOs delay releasing certain nodal information regarding virtual bids, CAISO nets virtual supply and virtual demand (unlike ISO New England and PJM Interconnection) so individual bidding patterns are even more concealed.[36]

d. <u>Cost Allocation</u>

44. Financial Marketers argue that no integrated forward market (IFM) or residual unit commitment (RUC) uplift costs can be lawfully allocated to convergence bids because CAISO has provided no evidence that convergence bidding will result in a greater overall amount of IFM and RUC costs for the market; or the proposed allocation would align market benefits and burdens. According to Financial Marketers, the Convergence Bidding Order errs in holding that CAISO's proposed allocation of IFM and RUC uplift costs to convergence bids is "an effort to reasonably assign uplift costs to the entities that cause them."[37]

45. Financial Marketers maintain that there has been no showing that virtual transactions as a whole will cause an increase in RUC and IFM uplift costs over any billing period, and the more likely result is that the introduction of convergence bidding will cause a reduction in IFM and RUC costs. Financial Marketers claim that CAISO acknowledges that virtual demand will *reduce* RUC commitment costs and virtual supply will *reduce* IFM commitment costs.[38] Financial Marketers note that CAISO stated,

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[34] Convergence Bidding Order, 133 FERC ¶ 61,039 at P 89.

[35] *Id.* P 76 n.48.

[36] *See* CAISO December 10, 2009 Data Release and Accessibility Initiative Phase 2: Convergence Bidding Data Release, slide 9 - 10.

[37] Financial Marketers Rehearing Request at 12 (citing Convergence Bidding Order, 133 FERC ¶ 61,039 at P 57).

[38] *Id.* (citing Convergence Bidding Order, 133 FERC ¶ 61,039 at P 26).

"Virtual demand has the effect of offsetting costs in RUC as units are committed in the IFM to meet the additional demand resulting from accepted virtual demand bids. Virtual supply, on other hand, reduces commitment costs in the IFM . . . ."[39] According to Financial Marketers, because convergence bids are at least as likely to reduce IFM and RUC uplift costs as to raise them, it would be inappropriate to allocate any such costs to convergence bids in the absence of cost of service evidence.

46. Financial Marketers allege that the Commission disregarded legitimate cost causation issues in the Convergence Bidding Order, based on assertions that "any further refinements to CAISO's uplift cost allocation proposal may not meaningfully or cost-effectively improve the accuracy of cost allocation and may unduly delay implementation of convergence bidding."[40] According to Financial Marketers, it is error for the Commission to allow any allocation of RUC and IFM uplift to convergence bids when CAISO has provided no evidence as to whether, and if so, to what extent, uplift costs will increase. Financial Marketers contend that the Convergence Bidding Order incorrectly justifies the CAISO proposal to allocate RUC and IFM costs on the grounds that CAISO's approach is "administratively workable" and something that can be applied quickly and efficiently.[41] Financial Marketers argue that the fact that an allocation proposal may be easy to administer does not establish that the allocation is just and reasonable and not unduly discriminatory.

47. Financial Marketers state that the Convergence Bidding Order mistakenly seeks to justify the CAISO's allocation of IFM and RUC uplift as representing a "reasonable balance between the diverse positions of the parties." Financial Marketers note that under section 205 of the FPA, the Commission has a duty to ensure the justness and reasonableness of charges and cannot avoid its responsibilities by electing to choose a middle ground between the parties.

48. Financial Marketers claim that it is possible to isolate the impact of virtual bids from the other factors that may affect unit commitment and the level of uplift costs. Financial Marketers suggest that CAISO can compare the level of IFM and RUC uplift incurred during the first year after convergence bidding is implemented to the level of such uplift incurred in prior years. Financial Marketers state that if the amount of uplift increases, then the amount of the increase would be the maximum amount potentially attributable to convergence bids. Financial Marketers contend that in an order

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[39] *Id.* at 13 (citing CAISO June 25, 2010 Tariff Amendment, at P 39) (June 25 Tariff Amendment).

[40] *Id.* (citing Convergence Bidding Order, 133 FERC ¶ 61,039 at P 57).

[41] *Id.* (citing Convergence Bidding Order, 133 FERC ¶ 61,039 at P 58).

concerning the rehearing of a MISO proposal, the Commission laid out what kind of cost causation evidence would be required to support an allocation of Revenue Sufficiency Guarantee (RSG) charges (a form of uplift) to virtual transactions:

> To ensure that cost responsibility follows cost incurrence, as required by traditional rate-making principles, we require the Midwest ISO to propose a charge that assesses RSG costs to virtual supply offers based on the RSG costs they cause. To develop this charge, the Midwest ISO should identify those costs caused by virtual supply offers, as determined by an analysis of the energy market with virtual supply offers compared to the energy market without virtual supply offers. Specifically, the Midwest ISO proposal should calculate the Reliability Assessment Commitment and real-time start-up, no-load and production costs not recovered by real-time revenues for each day -- in one case with virtual supply offers and another case assuming no virtual supply offers.[42]

Financial Marketers add that when MISO failed to provide the requested evidence, the Commission rejected MISO's proposal. [43]

49. Financial Marketers submit that the Convergence Bidding Order errs in failing to apply the same standard to CAISO's proposed allocation of IFM and RUC uplift. Financial Marketers argue that rehearing should be granted, and the proposed allocation rejected, because CAISO has provided no evidence as to how the level of IFM and RUC uplift costs with convergence bidding will compare to what the level has been (and would be) without convergence bidding.

50. Financial Marketers note that the Convergence Bidding Order states that there need only be an "articulable and plausible reason to believe that the benefits are roughly commensurate" with the costs.[44] Financial Marketers claim that there is no factual basis for such a belief. According to Financial Marketers, CAISO has neither alleged, nor proven, that convergence bidders would receive benefits from IFM and RUC unit commitments commensurate with the costs they would be allocated. Financial Marketers argue that IFM and RUC costs are incurred to ensure there is adequate committed capacity to meet the real-time requirements of load-serving entities, which provides no

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[42] *Id.* at 15 (citing *Midwest Independent Transmission System Operator, Inc.*, 117 FERC ¶ 61,113, at P 118 (2006)).

[43] *Id.* at 15-16 (citing *Midwest Independent Transmission System Operator, Inc.*, 118 FERC ¶ 61,213, at P 84, 87-88 (2007)).

[44] *Id.* at 14 (citing Convergence Bidding Order, 133 FERC ¶ 61,039 at P 58).

benefits to convergence bidders. Thus, Financial Marketers contend, load-serving entities should continue to bear the costs of IFM and RUC uplift.

51. Financial Marketers contend that convergence bids should not be treated the same as physical transactions for purposes of allocating IFM and RUC uplift. Financial Marketers submit that uplift costs are incurred for the benefit of load and, therefore, load should bear most, if not all of, the costs. Financial Marketers argue that because convergence bids do not benefit from the acquisition of physical electricity, they cannot be said to be a beneficiary of these costs. Also, Financial Marketers note that under CAISO's proposed tariff, virtual bids and offers will be submitted with an indication that identifies them as virtual rather than physical transactions.[45] Financial Marketers claim that because of the requirement that convergence bids be explicit, CAISO will have early notice of virtual transactions and can eliminate any impact on unit commitment costs. Thus, according to Financial Marketers, early notice of virtual transactions allows CAISO to commit less expensive generation resources with longer ramp times than CAISO could commit to address underscheduled load or load forecast errors, which should reduce RUC uplift costs. Thus, Financial Marketers contend that virtual transactions should not be allocated any portion of the uplift costs related to short-start units committed in real-time as a result of an RUC schedule.[46]

52. Because CAISO will be implementing explicit convergence bidding, Financial Marketers state that CAISO will know the amount of net virtual demand or net virtual supply at the close of the day-ahead market. Thus, according to Financial Marketers, CAISO will be able to take immediate steps to minimize the amount of uplift, if any, incurred due to convergence bids. Financial Marketers maintain that CAISO has no such opportunity with respect to the deviations of physical participants. Thus, Financial Marketers claim that it is appropriate that convergence bids be treated differently than the deviations of physical participants.

Commission Determination

53. The Commission rejects Financial Marketers' arguments against CAISO's proposed allocation of uplift costs. Although the cost allocation system is imperfect, it does balance the interests of parties and provide an administratively feasible process. The Commission has previously noted:

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[45] *Id.* at 17.

[46] *Id.* (citing *Midwest Indep. Transmission Sys. Operator, Inc.*, 118 FERC ¶ 61,213 at 34-35).

> [i]t is well-established that the Commission is not required to allocate costs with exacting precision, nor are we obligated to reject any rate mechanism that tracks the cost causation principle less than perfectly.[47]

We reiterate here that cost causation principles are satisfied so long as there is an "articulable and plausible reason to believe that the benefits are roughly commensurate" with the costs.[48]

54. CAISO has demonstrated that convergence bidding will have an effect on unit commitment.[49] If there are net positive virtual supply bids coming out of the IFM, then there will be increased RUC commitment to fill in the supply. If there are net positive virtual demand bids that clear the IFM and the physical demand that clear the IFM plus net cleared virtual demand award results in the market clearing above the level of supply needed to serve real-time demand, then there will be unnecessary IFM commitment to meet that virtual demand. These actual unit commitments cause costs that would not otherwise have existed without virtual bids. CAISO's cost allocation method allocates those costs and provides virtual bidders credit for any costs that their bidding activity may have helped the system avoid. Contrary to Financial Marketer's allegations, virtual bids can lead to such physical commitment, so it is appropriate for convergence bidders to bear certain IFM and RUC uplift costs.

55. CAISO's cost allocation methodology seeks to allocate costs to market participants that contributed to the costs. For virtual bidders, CAISO's method looks to virtual bidding net bids in order to allocate costs. As the Commission has explained, CAISO's proposal nets system-wide convergence bids to better account for the net effect of virtual participants' activity on unit commitment.[50] CAISO also nets individual scheduling coordinators' convergence bidding positions to further isolate the impact that certain virtual bidding has on unit commitment. These netting methods allow CAISO to better focus on convergence bidding effects and better allocate costs to convergence bidders.

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[47] Convergence Bidding Order, 133 FERC ¶ 61,039 at P 58 (citing *Sithe/Independnce*, 285 F.3d 1, 5 (D.C. Cir. 2002); *see also Midwest ISO Transmission Owners*, 373 F.3d 1361, 1369 (D.C. Cir. 2004)).

[48] *Id*. (citing *Illinois Commerce Comm'n*, 576 F.3d 470, 477 (7th Cir. 2009)).

[49] *Id.* P 25.

[50] *Id*. P 60.

56. CAISO's cost allocation proposal also takes into account benefits that convergence bidding may have had on unit commitment and provides credit for such benefits. For instance, as discussed in the Convergence Bidding Order, CAISO considers whether measured demand exceeds day-ahead demand before applying IFM uplift costs to virtual demand.[51] If measured demand exceeds day-ahead demand, virtual demand properly signaled to the market that real-time demand would be greater and did not cause unnecessary additional unit commitment and did not cause uplift costs.[52] So, CAISO considered the entire market in order to see if this was the case before charging virtual demand uplift costs. Also, CAISO's market-wide netting is used to determine if there is more virtual demand or supply and only apply uplift costs to the excessive bidder. This is reasonable because of the offsetting effect that virtual supply and demand have on uplift costs between the IFM and RUC, so CAISO's cost allocation system considers that offsetting effect.[53]

57. Finally, Financial Marketers' efforts to compare MISO's convergence bidding cost allocation to CAISO's proposal are misplaced. CAISO's cost allocation plan considers the costs and benefits of convergence bidders through its proposal that is different from other ISOs and RTOs.[54] Under section 205 of the FPA, the filing party has the burden of demonstrating that the proposal is just and reasonable and not unduly discriminatory or preferential. CAISO has demonstrated in this proceeding that its cost allocation proposal provides a reasonable consideration of the costs and benefits of convergence bidders.

e. <u>Credit</u>

58. Financial Marketers claim the Convergence Bidding Order errs in disregarding Financial Marketers' arguments as a collateral attack because Financial Marketers raised their arguments at the first period when an actual tariff proposal was filed with the Commission. Financial Marketers claim that the Convergence Bidding Design Order made clear that it was an interim order only and that any request for rehearing would be premature.[55]

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[51] *Id.* P 63.

[52] *Id*.

[53] *Id*.

[54] CAISO's netting process and consideration of costs caused by virtual bidders is different from other ISOs. Convergence Bidding Order at P 36 (citing PG&E Comments at 21).

[55] Financial Marketers Rehearing Request at 18.

59. Financial Marketers state that under CAISO's proposal, each convergence bidder is required to post an amount of collateral that assumes that: (i) every MWh bid by the convergence bidder will clear; (ii) the convergence bidder will lose money on every one of its bids; and (iii) the spread between the day-ahead and real-time market for each bid will be an amount equivalent to the 95th percentile of the spreads between the day-ahead and real-time price at that node during the same three-month period of the prior year. Financial Marketers contend that there is no evidence demonstrating the amount of collateral CAISO would require is necessary to protect other market participants from mutualized default risk. On the contrary, Financial Marketers state that the experience of MISO, which uses the 50th percentile value to set references prices, demonstrates that the collateral requirement proposed by CAISO is excessive.

60. Financial Marketers submit that CAISO's proposed credit policy would result in overcollateralization, and the Commission cannot lawfully approve a credit policy that will result in an exorbitant amount of capital being tied up as collateral. First, CAISO's proposed credit policy would require financial traders to post collateral with CAISO in advance of trading, based on the total value of all bids/offers placed, not cleared. Financial Marketers argue that financial traders will not have all of their convergence bids clear, therefore, the amount of posted financial security will exceed an entity's actual convergence bidding exposure. Second, Financial Marketers state that CAISO's proposed credit policy builds in further layers of over-protection by assuming a worst case, theoretical scenario. Specifically, Financial Marketers argue that CAISO's proposed credit policy would assume that: (i) each convergence bidder has every MWh of its bids clear; (ii) the convergence bidder is on the losing side of each cleared transaction; and (iii) the divergence between the day-ahead and real-time market-clearing price for every one of its bids is among the largest recorded in any hour over the corresponding three-month period in the prior calendar year. CAISO's proposed credit policy assumes the price differential will be in the top five percent of those recorded looking at every hour over a three-month period.

61. Financial Marketers submit that CAISO's proposed policy adds another layer of overprotection by requiring a convergence bidder to provide more collateral as soon as the convergence bidder's estimated aggregate liability surpasses 90 percent of its aggregate credit limit (hereinafter referred to as the "90 Percent Trigger"). Financial Marketers argue that there is no reasonable basis for the Convergence Bidding Order's conclusion to claim that this proposal "strikes a balance" between limiting credit risk, and promoting vibrant convergence bidding.[56] Financial Marketers argue that there has been

[56] *Id.* at 20 (citing Convergence Bidding Order, 133 FERC ¶ 61,039 at P 211).

no showing that such an extreme amount of collateral is necessary to protect the market from default risk.[57]

62. According to Financial Marketers, using the 95th percentile price basis for establishing collateral requirements would be unreasonable, prevent or needlessly restrict market entry by convergence bidders, and would be extremely harmful to the market. By tying up capital, Financial Marketers contend it would unjustifiably limit the number and volume of convergence bids, diminishing the many benefits to the market that virtual trading can bring.[58]

63. Financial Marketers submit that CAISO should be directed to use the 50th percentile price value for establishing collateral requirements. Financial Marketers note that the Commission has held that the use of the 50th percentile value to set reference prices is reasonable.[59] Financial Marketers claim that the MISO has been using the 50th percentile value to set reference prices since April 2005 and has experienced no defaults or credit problems that could be attributed to the reference prices it uses. Thus, Financial Marketers contend that use of the 50th percentile is therefore time-tested and works.

64. In addition, after the real-time market clears, Financial Marketers claim CAISO would again be estimating the value of the convergence bids of each market participant, further reducing the risk of a default. As a result, according to Financial Marketers, a convergence bidder's available credit is subject to daily reduction, which greatly limits mutualized credit risk. Financial Marketers contend that the Convergence Bidding Order errs in basing its approval of CAISO's proposal on the fact that certain other ISOs and RTOs use a higher percentile price value than the 50th percentile. Financial Marketers claim the other percentile values used in other organized markets is a relic of early ISO policies and no showing has been made that such high percentile price values are needed to address any real default risk.

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[57] *Id.* at 21 (citing *Midwest Independent Transmission System Operator, Inc.*, 108 FERC ¶ 61,063, at P 430 (2004); *see also PJM Interconnection LLC*, 104 FERC ¶ 61,309, at P 19 (2003) ("In reviewing these [credit] filings, we must balance the goals of allowing the ISOs and RTOs to reduce their risk of exposure in the event of default while at the same time ensuring that the credit or collateral requirements are not so stringent that they unnecessarily inhibit access to the market place.")).

[58] *Id.* (citing *Policy Statement on Electric Creditworthiness*, 109 FERC ¶ 61,186, at P 19 (2004)).

[59] *Id.* at 22 (citing *Midwest Independent Transmission System Operator, Inc.*, 111 FERC ¶ 61,053, at P 168 (2005)).

Commission Determination

65. The Commission finds that, consistent with its findings in the Convergence Bidding Design Order, and the Convergence Bidding Order, CAISO's proposed credit policy strikes an appropriate balance in that it should adequately protect other market participants from financial risk, while not discouraging the active participation of convergence bidders in the CAISO energy markets.[60] The Commission finds that the level of credit required for financial bidders is appropriate and satisfies CAISO's existing credit policy, which requires each market participant to maintain an aggregate credit limit that equals or exceeds its estimated aggregate liability.[61]

66. In the Convergence Bidding Design Order, the Commission found that the use of "a 95th percentile reference price for determining credit requirements is appropriate."[62] As explained in the Convergence Bidding Design Order, and reiterated in the Convergence Bidding Order, the Commission has previously found the use of the 97th percentile value to be just and reasonable and not overly conservative for PJM and the New York ISO.[63] We again point out that CAISO's proposal is consistent with these previously approved percentile values, and based on the lack of evidence to the contrary, we disagree with Financial Marketers that CAISO's proposal is overly conservative, or a relic of early ISO policy.[64]

67. The Commission finds that, all RTOs and ISOs are not required to address credit risk in a uniform way, and are provided the flexibility to propose credit requirements that protect market participants in their region. Although, as Financial Marketers point out, MISO uses the 50th percentile value to set reference prices, it does not follow the CAISO's proposal is unjust and unreasonable.

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[60] Convergence Bidding Design Order, 130 FERC ¶ 61,122 at P 104; Convergence Bidding Order, 133 FERC ¶ 61,039 at P 211.

[61] CAISO Tariff § 12.1.

[62] Convergence Bidding Design Order, 130 FERC ¶ 61,122 at P 104.

[63] *Id.*

[64] We note that, in CAISO's conceptual filing on convergence bidding, CAISO stated that they intended to review the reference pricing methodology twelve months after convergence bidding is implemented and at least every three years thereafter. Convergence Bidding Design Order, 130 FERC ¶ 61,122 at P 98 (citing Conceptual Filing, Docket No. ER10-300-000 at 26-27 (filed November 20, 2009)).

68. As discussed in the Convergence Bidding Design Order, we reiterate that, with regard to what Financial Marketers refer to as the "90 percent trigger," which requests additional collateral when a scheduling coordinator's estimated aggregate liability exceeds 90 percent of the aggregate credit limit, is consistent with the means of calculating the credit requirements for market participants holding CRRs with terms of one year or less. Thus, we see no reason for removing this provision from the convergence bidding proposal.[65] We do not agree with Financial Marketers that CAISO's proposal would result in an over collateralization. Rather, we find that the proposal is reasonable and will adequately protect other market participants from financial risk, while not discouraging the active participation of convergence bidders in CAISO's energy markets.

2. Compliance Filing

69. CAISO's compliance filing was made pursuant to the Commission's direction, and protests and comments were filed concerning most parts of the compliance filing, as discussed below. All other parts of the compliance filing are accepted, including CAISO's removal and revision of certain suspension provisions, releasing certain flowgate constraint information and revisions regarding certain miscellaneous and typographical issues. We find that CAISO's modification to the Virtual Award Charge is beyond the scope of the compliance filing, but to accommodate implementing convergence bidding on February 1, 2011, the Commission considers the proposed Virtual Award Charge separately, as a new FPA section 205 filing.

a. Virtual Award Charges

70. CAISO proposes to modify Paragraph 9 of Part A of Schedule 1 of Appendix F of the CAISO Tariff regarding the Virtual Award Charge to comply with the Commission's directive to remove the ambiguity of the proposed tariff provision, which referred to the Virtual Award Charge as "a percentage of the Forward Scheduling Charge and Market Usage – Forward Energy services categories." CAISO proposes to replace "a percentage" with the specific percentage level of nine percent. CAISO states that this is the percentage that it determined should be used in the calculation of the Virtual Award Charge rate through the 2011 budget and grid management charge stakeholder process. CAISO claims that this percentage was presented for stakeholder review and input in a series of public meetings.

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[65] *Id*. P 104.

Comments

71. Financial Marketers contend that CAISO's Virtual Award Charge shifts a portion of grid management costs to traders that do not use the transmission system. Financial Marketers argue that those engaged in convergence bidding cannot be lawfully required to subsidize other market participants through this charge. Financial Marketers add that although CAISO asserts that it presented its proposal to certain stakeholders in a series of public meetings, only a small segment of convergence bidders currently participate in the stakeholder process because the market is not yet open to them. Thus, Financial Marketers state that no determination as to reasonableness should be based on stakeholder support, and it is no surprise that incumbent market participants would support a proposal to shift grid management costs.

72. Financial Marketers maintain that CAISO provides no explanation of how it developed the nine percent figure, nor does it provide any evidence that convergence bids are projected to cause any increase in grid-management related costs. Financial Marketers add that CAISO also fails to provide evidence regarding the specific magnitude of costs involved, or of the amount expected to be assigned to each cleared MWh of virtual supply or demand. Thus, Financial Marketers submit that CAISO's proposal must be rejected or become effective subject to hearing and refund.

73. Financial Marketers contend that CAISO's compliance filing falls short of providing the information, evidence, and cost support required for a FPA section 205 filing. Financial Marketers argue that CAISO made no effort to comply with the FPA section 205 filing requirements set forth in section 35.13 of the Commission's regulations.[66] For example, Financial Marketers state that CAISO has failed to provide: (1) a "complete derivation and explanation of all allocation factors" as required by section 35.13(a)(2)(B)(2) of the Commission's regulations; (2) rate design calculations and narrative explanations as required by section 35.13(a)(2)(B)(4) of the Commission's regulations; (3) the cost support required for allocations under section 35.13(h)(36) of the Commission's regulations; (4) cost evidence to support the reassignment of grid management costs; and (5) any evidence showing that its proposed shifting of costs is necessary to align benefits with burdens.

Answer

74. CAISO contends that the Commission should accept the Virtual Award Charge as just and reasonable. CAISO claims that it has demonstrated the justness and reasonableness of the nine percent level for the Virtual Award Charge. CAISO explains that the nine percent charge should be used through the 2011 budget and grid

[66] Financial Marketers Comments at 7 (citing 18 C.F.R. § 35.13 (2010)).

management charge stakeholder process and that this percentage was presented for stakeholder review and input in a series of public meetings.[67] CAISO points to meeting notes in which it explained how it reached the proposed nine percent charge.[68]

75. CAISO explains that the nine percent figure was determined based on the assumption that the implementation of convergence bidding will cause CAISO to experience an increase of approximately ten percent in the MW volume of cleared virtual and physical bids in 2011 as compared to 2010.[69] Thus, the MW volume of cleared virtual and physical bids in 2011 is anticipated to be 110 percent of the MW volume of cleared physical bids in 2010. CAISO continues that it derived the nine percent figure by dividing the ten percent increase for 2011 by the 110 percent volume figure for 2011.[70]

76. CAISO claims that since Financial Marketers chose not to participate in the stakeholder process in which the nine percent figure was developed, it is now unreasonable for them to protest the decisions without acknowledging the explanations provided in the process.[71]

Commission Determination

77. In the Convergence Bidding Order, the Commission did not make a determination regarding the level of the Virtual Award Charge because CAISO did not file that with the Commission.[72] CAISO stated that it would file the tariff language to implement the exact level of the Virtual Award Charge in a subsequent proceeding.[73] In the Convergence Bidding Order the Commission did direct CAISO to address the existing ambiguity in its tariff language, which stated that the Virtual Award Charge is "a percentage of the Forward Scheduling Charge and Market Usage – Forward Energy services categories."[74]

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[67] CAISO Answer at 8.

[68] *Id*. at 8-9.

[69] *Id*. at 9.

[70] *Id*.

[71] *Id*. at 10.

[72] Convergence Bidding Order, 133 FERC ¶ 61,039 at P 218.

[73] June 25 Tariff Amendment at 35-36.

[74] Convergence Bidding Order, 133 FERC ¶ 61,039 at P 218 (quoting Proposed CAISO Tariff, Appendix F, schedule I, Part A, P 9).

The Commission found that the "a percentage" language could be read to provide CAISO too much discretion.[75] Here, CAISO proposes to revise its tariff to state that the Virtual Award Charge will be calculated using *nine percent* of the Forward Scheduling Charge and Market Usage Charge – Forward Energy service categories.[76] CAISO could have resolved the ambiguity contained in the subject tariff language by noting that the Virtual Award Charge would be "a percentage to be determined in a later filing." By proposing an exact level of the Virtual Award Charge, CAISO has exceeded the scope of the compliance filing.

78. Although CAISO characterizes its filing with the proposed nine percent Virtual Award Charge as a compliance filing, the proposed nine percent Virtual Award Charge exceeds the scope of the compliance filing and is therefore rejected as non-compliant. Also, CAISO's filing regarding the Virtual Award Charge does not meet the requirements to be considered just and reasonable. For instance, CAISO fails to justify how it arrived at the nine percent figure. As indicated in CAISO's supporting documents, CAISO assumes that convergence bidding will lead to a ten percent increase in MW volume of cleared virtual and physical bids, but CAISO provides no explanation for this assumption.[77] Therefore, the proposed Virtual Award Charge has not been shown to be just and reasonable, and may be unjust, unreasonable, unduly discriminatory or preferential, or otherwise unlawful. Accordingly, in the interest of assuring that convergence bidding begins on schedule, we will accept the proposed nine percent Virtual Award Charge for filing, to become effective on February 1, 2011, subject to refund and further order by the Commission, as ordered below. We will establish under FPA section 206 an investigation to evaluate CAISO's nine percent Virtual Award Charge[78] and direct CAISO to make a filing providing justification for the proposed Virtual Award Charge, in Docket No. ER11-2128-000, within 30 days of the date of the issuance of this order.

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[75] *Id*.

[76] *See* Proposed CAISO Tariff Appendix F, Schedule 1, Part A, P 9.

[77] November 15 Compliance Filing at 7 (citing CAISO "GMC Stakeholder Process 2011-2012 (Apr. 21, 2010) at slides 10-11, *available at* http://www.caiso.com/2778/2778dcf5ef60.pdf; CAISO "2011 Budget – Stakeholder Call" at slide 5 (Aug. 19, 2010), *available at* http://www.caiso.com/27f5/27f5bd5c3060.pdf; *Preliminary 2011 Budget and Grid Management Charge Rates* at Attachment D (Sept. 1, 2010), *available at* http://www.caiso.com/280d/280dd4391bb00.pdf).

[78] 16 U.S.C. § 824e (2006).

79. In cases where, as here, the Commission institutes a section 206 investigation on its own motion, section 206(b) of the FPA requires that the Commission establish a refund effective date that is no earlier than publication of notice of the Commission's initiation of its investigation in the *Federal Register*, and no later than five months subsequent to that date. In order to give maximum protection to customers, and consistent with our precedent,[79] we will establish a refund date at the earliest possible date. This date will be the date on which the notice of our investigation in this proceeding is published in the *Federal Register*, or the date CAISO's rates in Docket No. ER11-2128-000 become effective, whichever is later, but in the case of the latter, in no event later than five months from the date of publication of the notice. In addition, section 206 requires that, if no final decision has been rendered by the conclusion of the 180-day period commencing upon initiation of a proceeding pursuant to this section, the Commission shall state the reasons why it failed to do so and shall state its best estimate as to when it reasonably expects to make such a decision. We expect that we should be able to render a decision within five months of the date that CAISO submits the filing ordered below, or August 1, 2011.

b. Virtual Bids Submitted at Interties

80. In response to the Commission direction that CAISO modify section 30.9 of its tariff to make clear that virtual bids can be submitted at interties, CAISO proposes to clarify that virtual bids may be submitted at Eligible PNodes, including PNodes located at an intertie where virtual bidding is permitted, or Eligible Aggregated PNodes, including Aggregated PNodes located at an intertie where virtual bidding is permitted.

Comments

81. Powerex contends that CAISO's proposed change to tariff section 30.9 includes unnecessary qualifications. CAISO's proposed language states that virtual bids may be submitted at Eligible PNodes, "including PNodes located at an Intertie where virtual bidding is permitted." Powerex argues that the qualifier, "where virtual bidding is permitted," is unnecessary because, under the proposal, there are no interties where convergence bidding will not be permitted. Therefore, Powerex asks that the Commission instruct CAISO to modify proposed section 30.9 to delete the qualifier "where virtual bidding is permitted." Alternatively, Powerex states that CAISO could add language to this definition of Virtual Bids to specify that it permits virtual bidding "at

[79] *See, e.g., Canal Electric Co.*, 46 FERC ¶ 61,153 (1989), *reh'g denied*, 47 FERC ¶ 61,275 (1989).

an intertie where it also permits physical bidding," in order to clarify that CAISO does not intend to restrict virtual bidding at interties.[80]

Answer

82. CAISO responds that the Commission should accept the revisions to tariff section 30.9 because there are locations that are treated as interties for system modeling purposes, but not for scheduling purposes. CAISO notes that it will maintain a list of locations on Open Access Same-Time Information System (OASIS) at which virtual bidding is permitted.[81] CAISO maintains that the language "where virtual bidding is permitted," limits virtual bidding to the designated locations published on OASIS.[82] Additionally, CAISO notes that the definitions of the terms Eligible PNode and Eligible Aggregated PNode are consistent with the language in tariff section 30.9. The definitions, as accepted by the Commission in the Convergence Bidding Order, state that the locations include interties where virtual bidding is permitted.[83]

Commission Determination

83. The Commission finds that the proposed language in tariff section 30.9 clarifies, as directed, that virtual bids can be submitted at interties, and the Commission denies Powerex's request for further modifications.[84] The Commission finds that the language specifying that bids can be submitted at interties "where virtual bidding is permitted" is consistent with CAISO's definitions of the terms Eligible PNode and Eligible Aggregated PNode.[85] Further, the Commission finds that the qualifier "where virtual bidding is permitted," is useful to distinguish scheduling interties specified on OASIS from interties identified for modeling purposes.

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[80] Powerex Protest at 5-6.

[81] CAISO notes that in the market simulations conducted to prepare for the implementation of virtual bidding, the list of Eligible PNodes and Aggregated Eligible PNodes located at interties where virtual bidding is permitted are published and updated for market participants.

[82] CAISO Answer at 6.

[83] *Id.*

[84] Convergence Bidding Order, 133 FERC ¶ 61,309 at P 253.

[85] CAISO June 25, 2010 Tariff Amendment (June 25 Tariff Amendment).

c. OASIS-posted Information

84. The Commission directed CAISO to include a provision in its tariff describing the information it plans to release because such a provision will ensure that CAISO does not disclose commercially sensitive data.[86] In response to the Commission's direction, CAISO proposes to add new tariff sections 6.5.3.2.3 and 6.5.8.[87] Proposed tariff section 6.5.3.2.3 states that, after the results of the day-ahead market are published pursuant to section 6.5.3.2.2 of the tariff, CAISO will publish on its OASIS a daily market report that includes a summary of information regarding submitted and cleared physical quantities and virtual awards. Proposed tariff section 6.5.8 states that CAISO will post on OASIS the net cleared quantities of virtual awards at each Eligible PNode or Eligible Aggregated PNode by the close of the real-time market for each trading day.

Comments

85. WPTF states that the Commission cited tariff section 6.5.3.2.2 in its direction to include a provision in CAISO's tariff "describing the information it plans to release, consistent with the other information it plans to publish on OASIS."[88] WPTF notes that tariff section 6.5.3.2.2 sets forth a descriptive list of information and individual data components that CAISO will publish following the close of the Day-Ahead market. WPTF argues that CAISO's proposed tariff section 6.5.3.2.3 does not describe the information CAISO plans to release, stating only that the daily market report will include a "summary of information regarding submitted and cleared physical quantities and Virtual Awards." WPTF requests that the Commission direct CAISO to provide a similar level of detail in proposed tariff section 6.5.3.2.3 as is provided in section 6.5.3.2.2.

Answer

86. CAISO answers that WPTF's request that CAISO's tariff provide more detail regarding the information to be released on OASIS is beyond the scope of the Commission's compliance directive. CAISO claims that the Commission's determination did not make any finding that the new tariff provisions contained in tariff section 6.5.3.2.3 must be in the same format as section 6.5.3.2.2.[89] CAISO argues that

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[86] Convergence Bidding Order, 133 FERC ¶ 61,039 at P 90.

[87] Although CAISO's compliance filing transmittal letter cites to proposed tariff section 6.5.7, it is clear that it means to refer to proposed tariff section 6.5.8.

[88] WPTF Comments at 2-3 (citing Convergence Bidding Order, 133 FERC ¶ 61,039 at P 90).

[89] CAISO Answer at 12.

the language proposed in section 6.5.3.2.3 satisfies Commission direction and matches the level of detail regarding the daily market report that CAISO explained it would provide in the June 25, 2010 convergence bidding proposal.[90]

87. CAISO notes that the business practice manual (BPM) for market participants provides additional details regarding a number of information related provisions of tariff section 6.5.[91] Consistent with this approach, CAISO states that it intends to add further detail to the BPM for market participants regarding the daily report set forth in tariff section 6.5.3.2.3 and plans to implement this change before the start of virtual bidding on February 1, 2011.[92]

Commission Determination

88. The Commission finds that CAISO's proposed tariff sections 6.5.3.2.3 and 6.5.8 mostly comply with the Commission's directives to include tariff provisions describing the information it plans to release, while ensuring that CAISO does not disclose commercially sensitive information, subject to a compliance filing discussed below.[93] The Commission notes that the information released under tariff section 6.5.8 at the close of the real-time market for each trading day provides sufficient detail to increase transparency while protecting the bidding strategies of individual market participants.

89. We find that tariff section 6.5.3.2.3 is not sufficiently detailed to ensure that commercially sensitive information is withheld. The proposed tariff language does not specify that the identity of individual market participants will not be exposed. Section 6.5.8 states that it will post on the OASIS only "net cleared quantities of Virtual Awards at each eligible PNode or Eligible Aggregated PNode." To ensure that CAISO does not release commercially sensitive information, under tariff section 6.5.3.2.3, the Commission directs CAISO to submit a compliance filing within 30 days of the date of this order that specifies, in more detail, the information that will be released in the daily market report, consistent with tariff section 6.5.8.

90. The Commission finds that the information released pursuant to tariff section 6.5.3.2.3 addresses a wholly different set of market data than section 6.5.3.2.2, and therefore we find that WPTF's request is beyond the scope of the compliance filing

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[90] *Id*. (citing June 25 Tariff Amendment at 45).

[91] *Id*. at 12-13 (citing Business Practice Manual for Market Instruments at section 12, *available at* https://bpm.caiso.com/bpm/bpm/version/000000000000110).

[92] *Id*. at 13

[93] Convergence Bidding Order, 133 FERC ¶ 61,039 at P 90.

directives. Further, the Commission finds that, although the Convergence Bidding Order cited to section 6.5.3.2.2, the Commission did not require that CAISO provide tariff language that matched the level of detail included in section 6.5.3.2.2.[94]

91. In its answer, CAISO commits to add further detail to the BPM for Market Participants regarding the daily report in section 6.5.3.2.3. The Commission accepts CAISO's commitment to add further detail in the BPM for market participants and notes that all stakeholders have an opportunity to comment on the proposed changes. The Commission finds the filing in compliance as modified above.

d. HASP and CAISO Directed Reductions

92. SWP notes that CAISO revised tariff section 11.8.6.6 to comply with the Commission's directives to integrate "the concept of adjustments made as a result of the new proposed [Hour-Ahead Scheduling Process (HASP)] intertie adjustment rule."[95] SWP argues that, as revised, tariff section 11.8.6.6 imposes additional uplift costs responsibilities on certain HASP reductions without exempting reductions made at CAISO's direction.[96] SWP argues that CAISO's proposed revision has a significant cost consequence. SWP contends that CAISO should clarify that entities that reduce loads or generation resources at the request or direction of CAISO will not be subject to greater real-time market bid uplift allocations.[97]

Answer

93. CAISO clarifies that additional costs will not be allocated to a load or generation resource pursuant to tariff section 11.8.6.6 if the day-ahead schedule is tagged and subsequently reduced at CAISO's request. However, CAISO explains that if the day-ahead schedule is not tagged and is subsequently reduced at CAISO's request, additional costs will be allocated to the load or generation resources pursuant to tariff section 11.8.6.6. CAISO agrees with SWP that it is appropriate to include these clarifications in the tariff.

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[94] *Id*.

[95] SWP Comments at 2 (citing Convergence Bidding Order, 133 FERC ¶ 61,039 at P 251-52).

[96] *Id*.

[97] *Id.* at 1.

Commission Determination

94. The Commission agrees with CAISO and SWP that tariff section 11.8.6.6 should be clarified consistent with the explanation provided by CAISO in its answer. Accordingly, we direct the CAISO to submit a compliance filing within 30 days of the date of this order clarifying tariff section 11.8.6.6, consistent with CAISO's explanation.

e. CRRs

95. In response to the Commission's direction that CAISO define the threshold percentage value that will be used in assessing the impact that convergence bidding has on CRR revenue, CAISO proposes to modify tariff section 11.2.4.6(b) to specify that the threshold percentage is ten percent of the flow limit for each constraint, and to delete the tariff language providing CAISO with the ability to adjust the threshold percentage without changes to its tariff. CAISO adds that it will file a tariff amendment if it seeks to modify the ten percent threshold percentage in the future.

Comments

96. PG&E does not object to CAISO's proposal to use ten percent as the threshold for determining whether congestion on a constraint was significantly impacted by virtual awards to a scheduling coordinator representing a convergence bidding entity. However, PG&E states that CAISO has not provided support for the proposal and therefore argues that CAISO be required to submit a compliance filing one year after convergence bidding goes into effect evaluating whether any modification is needed to the proposed ten percent threshold.

97. Powerex argues that CAISO has not supported its proposal. In particular, Powerex argues that CAISO does not specify in the tariff, how it plans to implement the "shift factor" by which it will multiply a CRR holders virtual awards under its definition of flow impact.[98]

98. Powerex states that it is concerned that the shift factor relied upon to calculate the flow impact should be implemented consistently with other provisions of CAISO's tariff. Specifically, Powerex highlights tariff section 27.4.3.6 that establishes the effectiveness threshold at two percent for CAISO's software to consider a bid effective at managing congestion on a constraint. Powerex states that CAISO does not specify whether the shift factor used to calculate Flow Impact will be subject to the effectiveness threshold. Powerex argues that this creates uncertainty for market participants that may be

[98] Powerex Protest at 7.

inequitable if bids that are not effective at managing congestion, and therefore cannot impact congestion on a particular path, are included in the calculation of flow impact.[99]

99. Powerex requests that the Commission direct CAISO to provide further clarification on how it will implement the ten percent threshold that it proposes as a flow impact and modify its tariff to address this concern. Powerex recommends CAISO modify the current definition of flow impact to provide that the shift factor(s) used by CAISO in calculating a flow impact will be subject to the effectiveness threshold in tariff section 27.4.3.6.[100]

100. Also, Powerex highlights that CAISO's market includes an automated mechanism used in the HASP and real-time market that will adjust imports and exports where unscheduled flows after the day-ahead market are anticipated. Powerex notes that the adjustments at the interties are likely to reduce or fully alleviate congestion in the HASP from day-ahead physical and virtual bids. To the extent this occurs, Powerex states that it is not clear how or whether CAISO will account for this effect as part of its CRR settlement rule. Powerex argues that CAISO should not adjust an entity's CRR revenues where the reason for that adjustment is a reduction in the HASP congestion relative to the day-ahead congestion due to this automated adjustment. Powerex requests that the Commission direct CAISO to provide further information as part of an additional compliance filing.[101]

101. Powerex contends that the treatment of reductions in tagged schedules as virtual awards under tariff section 11.32 is likely to inhibit incremental and decremental bids into the HASP markets, which Powerex warns could undermine reliability. Specifically, Powerex expresses concern that section 11.32(iii) could undercut existing incentives for importers and exporters to submit decremental bids to CAISO, by subjecting them to CRR revenue adjustments.

102. Powerex requests that the Commission direct CAISO to consider further clarifications to its tariff to exempt reductions to tagged day-ahead import and export schedules in the HASP from the CRR settlement rule and to conduct further stakeholder discussions regarding this issue. Specifically, Powerex argues that CAISO should not seek to discourage decremental adjustments to tagged day-ahead import schedules.

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[99] *Id.* at 8.

[100] *Id*.

[101] *Id.* at 8-9.

Answer

103. CAISO argues that the Commission should not require it to file any reports regarding the ten percent threshold. In the Convergence Bidding Order, CAISO points out that the Commission did not impose any reporting requirement with regard to the CRR settlement rule or direct CAISO to modify the threshold percentage value within any particular timeframe. Moreover, CAISO explained in its compliance filing that it will file a tariff amendment if it determines that a change to the ten percent threshold is justified. CAISO states that the Department of Market Monitoring will monitor the operation of the ten percent threshold to determine if it should be modified. CAISO states that if it decides to pursue a change to the flow limit threshold it will convene a stakeholder process and will file a tariff amendment to modify the threshold percentage as appropriate. Therefore, CAISO concludes that it is unnecessary to provide a report or tariff modifications within a particular timeframe.

104. CAISO agrees with Powerex's suggestion to change the definition of Flow Impact to state that the shift factors used by CAISO in calculating a Flow Impact will be subject to the effectiveness threshold set forth in section 27.4.3.6 of the CAISO tariff. CAISO agrees that Powerex's suggested change will provide helpful clarity on this matter. Therefore, CAISO proposes to make that tariff change in a further compliance filing.

105. CAISO contends that Powerex's request for further information regarding how the CRR settlement rule will interact with the process for automated adjustments in the real-time market goes beyond the directives in the Convergence Bidding Order and therefore goes beyond the scope of its compliance obligation. Nevertheless, CAISO explains that, far from inappropriately triggering the CRR settlement rule, the process will actually help prevent the inappropriate triggering of the CRR settlement rule, because the process correctly aligns limits with observed flows. Thus, CAISO's adjustment process in the real-time market makes the modeling of flows more accurate. As a result, CAISO expects that the process will make the CRR settlement rule more effective.

Commission Determination

106. We accept the CAISO's proposed tariff section 11.2.4.6(b) as compliant with Commission directive in the Convergence Bidding Order, and we agree with CAISO that additional reporting requirements are unnecessary. However, as CAISO indicates in its answer, we find that modification to the definition of Flow Impact will provide additional clarity and prove beneficial to market participants. Accordingly, we direct the CAISO to make a compliance filing within 30 days of the date of this order clarifying the definition of Flow Impact, as discussed above. Regarding any additional clarification relating to the CRR settlement rule, the Commission again finds that CAISO has sufficiently explained the process for adjusting CRR revenue and we decline to direct further compliance

obligations.[102] As noted by CAISO, the Commission did not impose reporting requirements with regard to the CRR settlement rule and we are not persuaded that such requirements are necessary at this time. Instead, we acknowledge CAISO's commitment to monitor the operation of the ten percent threshold to determine if it should be modified, and we expect CAISO to make a subsequent filing if changes to the ten percent threshold are required.

107. We disagree with Powerex that additional clarification is necessary on the automated mechanism used in the HASP and real-time to adjust imports and exports where there are anticipated to be unscheduled flows after the day-ahead market. There is nothing in the instant compliance filing that changes the impact that an automated adjustment will have on the CRR settlement rule. Therefore, we agree with CAISO that the request for additional clarification at this time goes beyond the scope of the compliance filing. Also, these adjustments are designed to better align modeled and actual power flows. Therefore, they more accurately model actual congestion. We find that Powerex has not demonstrated that this will have any meaningful detrimental impact on the application of the CRR settlement rule, and we decline to issue a further compliance directive on this matter.

108. Finally, we will not direct CAISO to reconsider exempting reductions of tagged day-ahead import and export schedules in the HASP from the CRR settlement rule. The instant compliance filing does not change the CRR settlement rule in any manner that would warrant the Commission reevaluating its prior ruling, which accepted the proposed treatment of tagged interchange transactions.[103]

f. AC Current Solution and Nodal MW Constraint

109. Powerex notes that CAISO's tariff section 30.10(i) states that the megawatt limit for each Eligible PNode associated with a physical supply resource "will be equal to a factor multiplied by the PMax of the physical supply resource." Powerex argues that CAISO should be required to provide clarification as to what factor it will use in this calculation. Powerex notes that this tariff section was not revised on compliance.

Answer

110. CAISO argues that the Commission accepted section 30.10 of the CAISO tariff as originally proposed, subject only to the CAISO's correction on compliance of a minor typographical error. CAISO claims that Powerex had the opportunity to present

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[102] Convergence Bidding Order, 133 FERC ¶ 61,039 at P 154.

[103] *Id*. P 134.

arguments in response to the proposed amendments, but Powerex declined to do so. By arguing now that the Commission should require additional tariff changes, CAISO states that Powerex is essentially asserting that the Convergence Bidding Order itself is in error. Therefore, CAISO concludes that Powerex's arguments on these issues constitute requests for rehearing.

Commission Determination

111. We agree with the CAISO that the instant filing is in compliance with Commission directive in the Convergence Bidding Order. We agree with CAISO that Powerex had the opportunity to raise issues relating to the clarity of tariff section 30.10 in its comments in response to CAISO's June 25 Tariff Amendment. Additionally, as explained by CAISO in its June 25 Tariff Amendment, "factors used in these calculations will be determined in accordance with a process set forth in the Business Practice Manuals."[104] We are not persuaded that any additional clarification is required at this time. Accordingly, we accept proposed tariff section 30.10 as filed.

The Commission orders:

(A) CAISO's compliance filing, with the exception of the proposed revision to Paragraph 9 of Part A, Schedule 1 of Appendix F of CAISO's Tariff, is hereby conditionally accepted, as discussed in the body of this order.

(B) Pursuant to the authority contained in and subject to the jurisdiction conferred upon the Commission by section 402(a) of the Department of Energy Organization Act and by the FPA, particularly section 206 thereof, and pursuant to the Commission's Rules of Practice and Procedure and the regulations under the FPA (18 C.F.R., Chapter I), the Commission hereby institutes a proceeding in Docket No. ER11-2128-000 concerning the justness and reasonableness of CAISO's Virtual Award Charge, as discussed in the body of this order. CAISO's proposed revision to Paragraph 9 of Part A, Schedule 1 of Appendix F of CAISO's Tariff is hereby accepted for filing to become effective on February 1, 2011, subject to refund, further justification by CAISO, and further Commission order. CAISO is hereby directed to submit its justification of the new nine percent Virtual Award Charge within 30 days of the date of this order, in Docket No. ER11-2128-000, as discussed in the body of the order.

(C) The Secretary shall promptly publish in the *Federal Register* a notice of the Commission's initiation of the investigation ordered in Ordering Paragraph (B) above, under section 206 of the FPA.

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[104] June 25 Tariff Amendment at 28.

(D) The refund effective date in Docket No. ER11-2128-000, established pursuant to section 206(b) of the FPA, shall be the date of publication in the *Federal Register* of the notice discussed in Ordering Paragraph (C) above, or the date CAISO's Virtual Award Charge becomes effective, whichever is later, but in the case of the latter, in no event later than five months from the date of publication of the notice.

(E) CAISO is hereby directed to submit a compliance filing within 30 days of the date of this order to address the compliance clarifications as discussed in the body of the order.

(F) Requests for rehearing of the Convergence Bidding Order are hereby denied, as discussed in the body of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.