UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator Corporation	**)** **)**	**Docket No. ER13-219-000**

ANSWER TO MOTIONS TO INTERVENE AND COMMENTS, MOTION TO FILE ANSWER, AND ANSWER TO PROTEST, OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

The California Independent System Operator Corporation ("ISO")[1] files this answer to the motions to intervene and comments submitted in this proceeding in response to the ISO's filing of a tariff amendment on October 29, 2012 to include greenhouse gas compliance costs in the calculations set forth in the ISO tariff for determining resource commitment costs, default energy bids, and generated bids ("October 29 tariff amendment").[2] The ISO also submits a motion to file an answer and its answer to the protest submitted by Calpine.[3]

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[1] Capitalized terms not otherwise defined herein have the meanings set forth in Appendix A to the ISO tariff, as revised by the proposed tariff changes contained in the tariff amendment submitted in this proceeding. Except where otherwise specified, references to section numbers are references to sections of the ISO tariff as revised by the proposals in the tariff amendment. The ISO is sometimes referred to as the CAISO.

[2] The following entities filed motions to intervene in the proceeding: the California Department of Water Resources State Water Project ("SWP"); Calpine Corporation ("Calpine"); Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California; City of Santa Clara, California, d/b/a Silicon Valley Power, and the M-S-R Public Power Agency; Electric Power Supply Association; J.P. Morgan Ventures Energy Corporation and BE CA LLC; Modesto Irrigation District; Northern California Power Agency; NRG Power Marketing LLC, Cabrillo Power I LLC, Cabrillo Power II LLC, El Segundo Power LLC, High Plains Ranch II, LLC, Long Beach Generation LLC, NRG Solar Alpine LLC, NRG Solar Borrego I LLC, NRG Solar Blythe LLC, NRG Solar Roadrunner LLC, and Avenal Solar Holdings LLC; Pacific Gas and Electric Company ("PG&E"); PacifiCorp; Portland General Electric Company; Powerex Corp.; and Southern California Edison Company. PG&E and SWP also filed comments, and Calpine also filed a protest.

[3] The ISO submits this answer pursuant to Rules 212 and 213 of the Commission's Rules of Practice and Procedure, 18 C.F.R. §§ 385.212, 385.213. The ISO requests waiver of Rule 213(a)(2), 18 C.F.R. § 385.213(a)(2), to permit it to make an answer to Calpine's protest. Good cause for this waiver exists here because the answer will aid the Commission in understanding

The comments submitted by PG&E and SWP and the protest submitted by Calpine raise issues regarding the October 29 tariff amendment that are of only limited scope. Indeed, PG&E and Calpine state their general support for the ISO's proposal to include greenhouse gas compliance costs in the tariff calculations.[4] As discussed below, the Commission should accept the October 29 tariff amendment as just and reasonable. The issues raised by PG&E and SWP in their comments do not require any tariff changes and should not require any further compliance obligation. Calpine's proposal – to require a three-day rolling average for calculating daily greenhouse gas costs – should be rejected as the ISO's proposal for a daily average is just and reasonable.

I. Answer

A. There Is No Need for the ISO to Produce a Technical Paper Regarding the Greenhouse Gas Emissions Rate It Will Receive from the California Air Resources Board.

Proposed tariff sections 30.4.1.1.1 and 39.7.1.1.1.1(b) state that the greenhouse gas emissions rate authorized by the California Air Resources Board ("CARB") will be a component of the new greenhouse gas cost adder to be used in calculating start-up costs, minimum load costs, and incremental fuel costs (under the variable cost option for determining default energy bids). PG&E argues that the Commission should require the ISO to produce a technical paper

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the issues in the proceeding, provide additional information to assist the Commission in the decision-making process, and help to ensure a complete and accurate record in the case. *See, e.g.*, *Equitrans, L.P.*, 134 FERC ¶ 61,250, at P 6 (2011); *California Independent System Operator Corp.*, 132 FERC ¶ 61,023, at P 16 (2010); *Xcel Energy Services, Inc.*, 124 FERC ¶ 61,011, at P 20 (2008).

[4] PG&E at 3; Calpine at 1-2. SWP does not express general opposition to the ISO's proposal.

that states when and how the ISO will receive the greenhouse gas emissions rate from the CARB and how that rate will be used.[5]

PG&E provides no convincing reason why the ISO should produce such a technical paper or why the Commission would need such a paper to find the ISO's proposed tariff amendment is just and reasonable. When and how the ISO will receive the greenhouse gas emissions rate from the CARB is an implementation detail that does not affect the use of that rate, or the justness or reasonableness of that rate, in the calculation of costs pursuant to tariff sections 30.4.1.1.1 and 39.7.1.1.1.1(b). The ISO is working with the CARB to ensure that it timely receives the emissions rate.[6]

Likewise, there is no need for the ISO to state in a technical paper how the greenhouse gas emissions rate will be used. Sections 30.4.1.1.1 and 39.7.1.1.1.1(b) specify exactly how the ISO will utilize the emissions rate received by the CARB. The rate has no use to the ISO other than as a component of the calculations set forth in these tariff sections.

B. There Is No Need for the ISO to Produce a Technical Paper Regarding Greenhouse Gas Price Indices.

Proposed tariff section 39.7.1.1.1.4 states that the ISO will calculate, on a daily basis, a greenhouse gas allowance price. The daily price will be used for the day-ahead market for the next trading day as well as the real-time market for the current trading day. The daily greenhouse gas price index will be calculated

5 PG&E at 3.

6 The provision of accurate greenhouse gas information is very important to the ISO. *See* transmittal letter for October 29 tariff amendment at 6 & n.22.

using at least two prices from two or more publications identified in the business practice manual that set forth indices of prices for greenhouse gas allowances.[7] PG&E argues that the ISO should produce a technical paper that states the specific indices the ISO will use and the methodology by which the ISO will determine the greenhouse gas allowance price from the indices.[8]

PG&E does not explain why it believes the ISO should produce such a technical paper or how such a paper would be required as part of the Commission's consideration of the ISO's proposed tariff amendment. On November 9, 2012 (ten days before PG&E filed its comments in this proceeding), the ISO posted for stakeholder review proposed revisions to the business practice manual that set forth implementation details related to the tariff changes set forth in the October 29 tariff amendment.[9] The revised business practice manual includes details regarding the specific indices and methodology for determining the greenhouse gas allowance price pursuant to the indices.[10] The ISO will identify the specific publications in the business practice manual. The business practice manual is the more appropriate location for details such as the name of the indices and other implementation details that may need to be changed quickly. For example, the ISO has learned from experience in

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7 The ISO also proposes to include similar provisions in tariff section 39.7.1.1.1.3, which sets forth the calculation of the natural gas price.

8 PG&E at 3-4.

9 *See* http://www.caiso.com/Documents/BPMChangeManagementProposedRevisionRequestsStatusNov9_2012.htm (ISO market notice that included electronic link to proposed revisions to Business Practice Manual for Market Instruments).

10 *See* proposed Attachment K to revised Business Practice Manual for Market Instruments.

calculating the daily natural gas price indices that publications change names or go out of business. Therefore, it is appropriate for the ISO to have the flexibility to update the manual quickly. In addition, flexibility is particularly appropriate in the area of greenhouse gas costs due to the absence of historic information and the need to make midcourse corrections concerning implementation details in a faster and more efficient manner.

If PG&E believes the business practice manual should include even more information, it had the opportunity to provide comments in the proposed revision request ("PRR") process for stakeholder review of the revised business practice manual posted on November 9, or in the future it can propose its own further revision to that business practice manual.[11] In any event, such information need not be produced in a technical paper for the ISO's proposal to be just and reasonable. Finally, the ISO is more than willing to provide more information or answer questions outside of this proceeding. The greenhouse gas compliance regime is a new program and the ISO and CARB are continuing to work together. Yet, the ISO must file the tariff amendments and have a Commission-approved tariff in effect as of January 1, 2013. The ISO is striking the right balance between providing an appropriate level of detail in the tariff and what is proposed for the business practice manual.

[11] *See* Business Practice Manual for BPM Change Management (setting forth process for revising Business Practice Manuals), available on the ISO's website at https://bpm.caiso.com/bpm/bpm/version/000000000000012.

C. There Is No Need for the ISO to Provide Further Explanation Regarding the Alternate Methodology for Establishing the Greenhouse Gas Allowance Price.

Proposed tariff section 39.7.1.1.1.4 states that, if one or more published prices are determined by the ISO not to reflect market fundamentals or if published prices are not available for an extended period, the ISO will establish the greenhouse gas allowance price using the alternate methodology specified in the business practice manual. SWP argues that the ISO seeks unfettered discretion to establish the greenhouse gas allowance price in such circumstances and that the ISO should explain to the Commission and stakeholders as soon as practicable how it will establish the greenhouse gas allowance price using the alternate methodology.[12]

The ISO expects that the narrow circumstances in which the alternate methodology will come into play may arise only rarely, if at all. The alternate methodology will serve solely as a default backstop to the generally applicable methodology for calculating the greenhouse gas allowance price set forth in tariff section 39.7.1.1.1.4. The ISO proposed to implement the alternate methodology in response to concerns expressed in the stakeholder process that the ISO should have reasonable flexibility to address the potential risk that published prices might not always reflect sufficient market liquidity or stability to be meaningful or might be unavailable for an extended period. If such an event were to occur, the tariff revisions would permit the ISO to establish a default greenhouse gas allowance price pursuant to the business practice manual using

[12] SWP at 1-2.

the best information available, which, because the greenhouse gas auction process has only just been implemented, is not known at this time.[13]

The stakeholders implicitly recognized that the ISO has no incentive to act with unfettered discretion to establish the greenhouse gas allowance price under the alternate methodology. The ISO will derive no benefit from the greenhouse gas allowance price, regardless of its level or how established. The greenhouse gas allowance price will be used solely as a component of the calculations of amounts to be paid to generators pursuant to the tariff changes proposed in the October 29 tariff amendment, and that price will be calculated on a non-discriminatory basis for all generators subject to California's cap-and-trade program. Thus, the Commission should disregard SWP's comments.

Moreover, like PG&E, SWP fails to mention the proposed revisions to the business practice manual that the ISO posted for stakeholder review on November 9 (ten days before SWP filed its comments). The revised business practice manual specifies that any greenhouse gas allowance price established under the alternate methodology will be determined in a two-step process. First, the ISO will use the greenhouse gas allowance price as calculated under the methodology set forth in tariff section 39.7.1.1.1.4 from the most recent day that the ISO determines to reflect market fundamentals. Second, if the ISO determines that no such price reflects market fundamentals, the ISO will establish the greenhouse gas allowance price at the market clearing price of the

[13] Transmittal letter for October 29 tariff amendment at 9.

most recent CARB greenhouse gas allowance auction.[14] Thus, the ISO has already explained how it proposes to establish the greenhouse gas allowance price in the narrowly defined circumstances in which the alternate methodology will apply.

If SWP believes the alternate methodology should be modified, it had the opportunity to provide comments in the PRR process for stakeholder review of the revised business practice manual posted on November 9, or in the future it can propose its own further revision to that business practice manual. Further, the ISO and stakeholders can consider whether to modify the alternate methodology in the future if it turns out not to produce satisfactory greenhouse gas allowance prices.

D. The ISO Should Not Be Required to Use Calpine's Proposed Methodology for Determining Greenhouse Gas Index Prices in Place of the Just and Reasonable Methodology Set Forth in the October 29 Tariff Amendment.

As discussed above, proposed tariff section 39.7.1.1.1.4 states that the greenhouse gas allowance price will be calculated on a daily basis, using at least two prices from two or more publications identified in the business practice manual. Tariff section 39.7.1.1.1.4 also states that, for the day-ahead market, the daily index will reflect greenhouse gas allowances published on the day that is two days prior to the applicable trading day. For the real-time market, the daily index will reflect prices for greenhouse gas allowances published one day prior to the applicable trading day. Calpine argues that this approach is not just and

[14] *See* proposed section K.2 of Attachment K to revised Business Practice Manual for Market Instruments.

reasonable and proposes that the ISO should modify tariff section 39.7.1.1.1.4 to require the use of a rolling three-day average of each publication's daily index prices to calculate greenhouse gas allowance prices, at least for the first year of California's cap-and-trade program.[15]

For the reasons discussed in the October 29 tariff amendment and in this answer, it is just and reasonable for the ISO to use daily index prices to calculate the greenhouse gas allowance price. Despite Calpine's claim that its proposal – not the ISO's – is superior, the proper legal standard is whether the *ISO's* proposal is just and reasonable under section 205 of the Federal Power Act ("FPA").[16] "Pursuant to section 205 of the FPA, the Commission limits its evaluation of a utility's proposed tariff revisions to an inquiry into 'whether the rates proposed by a utility are reasonable – and not to extend to determining whether a proposed rate schedule is more or less reasonable to alternative rate designs.'"[17] Therefore, "[u]pon finding that CAISO's proposal is just and reasonable, [the Commission] need not consider the merits of alternative proposals."[18] As discussed below, Calpine provides no evidence to show that

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15 Calpine at 2-6.

16 16 U.S.C. § 824d. Under Section 15 of the ISO tariff, the ISO is the entity authorized to submit filings for Commission approval pursuant to Section 205 of the FPA.

17 *California Independent System Operator Corp.*, 141 FERC ¶ 61,135, at P 44 n.43 (2012), quoting *City of Bethany v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir. 1984). In that same order, the Commission also explained that the revisions proposed by the utility need "not be the only reasonable methodology" and that "even if an intervenor develops an alternative proposal, the Commission must accept a section 205 filing if it is just and reasonable, regardless of the merits of the alternate proposal." *California Independent System Operator Corp.*, 141 FERC ¶ 61,135, at P 44 n.43 (citing federal court and Commission precedent). *See also New England Power Co.*, 52 FERC ¶ 61,090, at 61,336 (1990), *aff'd, Town of Norwood v. FERC,* 962 F.2d 20 (D.C. Cir. 1992) (rate design proposed need not be perfect, it merely needs to be just and reasonable).

18 *California Independent System Operator Corp.*, 141 FERC ¶ 61,135, at P 44.

the use of daily index prices to calculate the greenhouse gas allowance price will be anything other than just and reasonable. Therefore, the Commission should accept the ISO's proposal as filed in the October 29 tariff amendment.

Calpine asserts that the Commission's *Policy Statement on Natural Gas and Electric Price Indices*,[19] as well as the Commission staff report ("Staff Report") issued in that same proceeding,[20] militate in favor of using a rolling average of daily index prices over multiple days as Calpine suggests.[21] But Calpine fails to cite to any directive in the Policy Statement or any finding in the Staff Report that indicates the ISO's proposed approach of using daily index prices, without a rolling average, is not just and reasonable.

In fact, neither the Policy Statement nor the Staff Report says anything about using a rolling average of daily index prices. Rather, the Staff Report states that price indices may be determined either by "averaging across several index developers for the same time period or averaging over several time periods from the same developer."[22] Calpine concedes that these are the "[t]wo pertinent uses of averaging [that] are recommended in the Staff Report."[23] Tariff section 39.7.1.1.1.4, as proposed by the ISO, satisfies the recommendation in the Staff Report to average across several index developers for the same time period. In particular, the tariff section states that the daily greenhouse gas price index will

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[19] 104 FERC ¶ 61,121 (2003) ("Policy Statement").

[20] *Report on Natural Gas and Electricity Price Indices* (May 5, 2004) ("Staff Report").

[21] Calpine at 3, 6.

[22] Staff Report at 57.

[23] Calpine at 3.

be calculated using at least two prices from two or more publications identified in the business practice manual. Thus, the ISO will calculate the greenhouse gas allowance price using the average of at least two index prices for the same time period, *i.e.*, two days prior to the applicable trading day for the day-ahead market and one day prior to the applicable trading day for the real-time market.[24] This is a just and reasonable approach and is consistent with the Policy Statement and the Staff Report.[25]

Further, the Commission has found it just and reasonable for eastern independent system operators to use daily index prices – rather than require the use of rolling averages of daily index prices over multiple days – to incorporate the costs of greenhouse gas allowances incurred pursuant to the Regional Greenhouse Gas Initiative ("RGGI") as components of the calculations of variable generation costs under their tariffs. As explained in the white paper issued in the stakeholder process for the October 29 tariff amendment by the ISO's Department of Marketing Monitoring ("DMM"), ISO New England and the New York Independent System Operator ("New York ISO") each bases the

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[24] See also proposed section K.2 of Attachment K to revised Business Practice Manual for Market Instruments (stating that "[t]he index price used by the CAISO for calculations, known as the Greenhouse Gas Allowance Price, shall be the average of values sourced from at least two providers.").

[25] Calpine also asserts that the ISO should post conspicuously on its website the price index publications on which it will rely. Calpine at 3 n.9. The price index publications are listed in proposed section K.2 of Attachment K to the revised Business Practice Manual for Market Instruments. As stated therein, the ISO has identified Intercontinental Exchange (ICE), Platt's Daily, and Argus as its three industry sources for greenhouse gas trade prices. The Staff Report (at 59-60) recommended that all three of these price index publications be deemed to be in substantial compliance with the requirements of the Policy Statement. The Commission agreed with its Staff's recommendation. *Price Discovery in Natural Gas and Electric Markets*, 109 FERC ¶ 61,184, at P 39 (2004). The Commission also listed other price index publications that substantially comply with the Policy Statement. *Id.*

greenhouse gas allowance price used in its calculations on "a daily index of the spot market price for RGGI [greenhouse gas] allowances provided by a commercial service."[26] The ISO's understanding, based on the research performed by the DMM in connection with its white paper, is that none of the eastern independent system operators requires the use of a rolling average of daily index prices, and the ISO is not aware of any changes in their practice. The approach the ISO proposed in the October 29 tariff amendment is most similar to ISO New England's.[27] Thus, the ISO's proposal to use a daily price index, without using a rolling average over multiple days, accords with the just and reasonable existing practices of eastern independent system operators to incorporate the costs of greenhouse gas allowances incurred pursuant to the RGGI.

Calpine notes that, in the stakeholder process for the October 29 tariff amendment, the ISO originally proposed to use a 30-day rolling average of daily index prices but later proposed the approach reflected in tariff section 39.7.1.1.1.4.[28] The ISO did so because stakeholders pointed out, and the ISO agreed, that it would be appropriate for the calculations to reflect daily volatility in

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26 *California Greenhouse Gas Cap and Generator Variable Costs* at 10-11 (Feb. 10, 2012) (citing relevant provisions in ISO New England and New York ISO tariffs) ("DMM White Paper"). The DMM White Paper was provided as Attachment C to the October 29 tariff amendment. The DMM White Paper also explained that market participants in PJM "can use either procurement cost or the spot market price, for determining a [greenhouse gas] allowance price, but generally use daily spot market prices." *Id.* at 10 (citing relevant provisions in PJM operating manual).

27 Transmittal letter for October 29 tariff amendment at 5; DMM White Paper at 12.

28 Calpine at 5.

the greenhouse gas allowance market.[29] The daily index price is the best indicator of what the price will be, *i.e.*, the spot price. The rationale for using the spot price of greenhouse gas allowances is that it reflects the current cost of procuring such an allowance, the replacement cost of using an allowance already held to generate, and the opportunity cost of not generating and selling the allowance.[30]

In addition, the ISO had observed that the experience in the secondary market for greenhouse gas allowances under the RGGI showed that a relatively stable and liquid secondary market developed within the first year.[31] Since traders would have the experience of that market, it stood to reason that the secondary market for California greenhouse gas allowances would develop even more quickly.[32]

Calpine is the only entity in this proceeding that raises an objection to the ISO's proposed use of a daily index price. No other entity in the proceeding claims that a daily index price is not just and reasonable. If Calpine is truly concerned about the consequences of using a daily index price, it can always decline to elect the variable cost option for calculating default energy bids under

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[29] Draft Final Proposal, Commitment Costs Refinements 2012, at 9 (Apr. 10, 2012) ("Draft Final Proposal"). The Draft Final Proposal was provided as Attachment D to the October 29 tariff amendment.

[30] DMM White Paper at 13.

[31] Draft Final Proposal at 9 (citing *Annual Report on the Market for RGGI CO_2 Allowances: 2010* at 5 (Apr. 2011), available on the website devoted to the RGGI at http://www.rggi.org/docs/MM_2010_Annual_Report.pdf).

[32] Draft Final Proposal at 9.

tariff section 39.7.1.1.1.4, and instead elect the negotiated rate option or the locational marginal price option for calculating default energy bids for itself.[33]

Further, the ISO anticipates that significant volatility in daily index prices will be a relatively unusual event. Averaging of at least two index prices from two or more publications pursuant to tariff section 39.7.1.1.1.4 can be expected to further reduce significant volatility in daily index prices. Moreover, if significant volatility were to occur, the ISO and stakeholders could consider at that time whether the tariff section should be revised to address it. However, Calpine provides no evidence to undermine the justness and reasonableness of the tariff section as proposed in the October 29 tariff amendment.

Calpine also suggests that the ISO should prepare and submit a compliance filing, in collaboration with the CARB and based on data submitted by price index developers and market participants, that evaluates the quality of price indices for greenhouse gas emission allowances.[34] There is no reason for such a compliance filing. The ISO and the DMM will closely monitor the markets, including the quality of price indices, and will be ready to act if conditions warrant such action.[35] Further, the CARB will have its own independent market monitor for the cap-and-trade market. As explained on the CARB's website, the market monitor's duties will include detection of any evidence of manipulation of greenhouse gas allowance prices and the associated indices, design flaws in the

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33 *See* ISO tariff section 39.7.1.

34 Calpine at 6.

35 *See* Draft Final Proposal at 9 (stating that additional monitoring and safeguards to protect against manipulation of greenhouse gas allowance prices will be an important protection).

market operating rules, or structural problems in the market, as well as preparing reports on market activity and trends.[36] Therefore, the ISO, the DMM, and the CARB's market monitor will provide ample monitoring of the quality of price indices for greenhouse gas emission allowances and any other issues.

II. Conclusion

For the reasons explained above and in the October 29 tariff amendment, the Commission should accept the tariff amendment as just and reasonable.

Respectfully submitted,

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Dated: November 28, 2012

[36] *See Facts About Cap and Trade: Market Oversight and Enforcement*, available on the CARB's website at http://www.arb.ca.gov/cc/capandtrade/market_oversight.pdf.

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon all of the parties listed on the official service list for the above-referenced proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Washington, D.C. this 28th day of November, 2012.

/s/ Bradley R. Miliauskas
Bradley R. Miliauskas