146 FERC 61,218
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Cheryl A. LaFleur, Acting Chairman;
Philip D. Moeller, John R. Norris,
and Tony Clark.

California Independent System Operator Corporation — Docket No. ER14-1440-000

ORDER GRANTING WAIVER

(Issued March 21, 2014)

1. In this order, the Commission grants the second of two waiver requests filed by the California Independent System Operator Corporation (CAISO) on March 6, 2014. Both filings request waiver of tariff sections 39.7.1.1.1.3 (Calculation of Natural Gas Price) and 30.4.1.2 (Registered Cost Option) to provide temporary protection against potential adverse outcomes in CAISO's day-ahead market caused by sudden increases in natural gas prices. The first waiver, which was granted by the Commission on March 14, 2014, permits CAISO to use updated natural gas price data for settlement purposes when natural gas prices for the affected trading day equal or exceed 150 percent of the gas price calculated pursuant to CAISO's tariff.[1] CAISO's second proposed waiver is intended to supersede the first waiver and allows CAISO to use updated natural gas price data for market execution as well as for settlement purposes in the event of the aforementioned price increase. CAISO requests expedited action. As discussed below, the Commission finds good cause to grant the requested waiver.

I. **Background**

A. **CAISO's Tariff**

2. CAISO explains that the price of natural gas is a component of the start-up and minimum load costs of resources participating in its day-ahead market. On a 30-day basis, scheduling coordinators for resources providing offers in the day-ahead market may choose either the "proxy cost option" or the "registered cost option" for the purpose

[1] *California Indep. Sys. Operator Corp.*, 146 FERC ¶ 61,184 (2014) (March 14 Order).

of determining their start-up costs or minimum load costs. The proxy cost option uses formulas for start-up and minimum load based on the resource's actual unit-specific performance parameters and the natural gas price calculated pursuant to section 39.7.1.1.1.3 of the tariff.[2] Conversely, resources under the registered cost option are allowed to register fixed start-up and minimum load cost values for up to 150 percent of the projected proxy cost for a 30-day period.[3]

3. CAISO explains that, for resources under the proxy cost option, as part of the calculation for start-up and minimum load costs, CAISO determines the natural gas price by using the prices published in at least two of four natural gas price indexes identified in CAISO's tariff. This calculation takes place the day before the running of the day-ahead market.[4] CAISO explains that the result of this timing is that natural gas prices used in the day-ahead market are calculated based on prices published two days prior to the applicable trading day.[5]

4. Resources under the registered cost option are allowed to register fixed start-up and minimum load cost values for up to 150 percent of the projected proxy cost for a 30-day period. Resources are required to remain under the registered cost option for a minimum of 30 days. However, if the daily proxy cost calculation exceeds its registered cost, resources under the registered cost option are allowed to switch to the proxy cost option and remain under the proxy cost option for the remainder of the applicable 30-day period.[6]

5. CAISO explains that natural gas prices can also affect resources' variable-cost default energy bids[7] and generated bids[8] calculated for the day-ahead market because

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[2] CAISO tariff section 30.4.

[3] *Id.*

[4] CAISO tariff section 39.7.1.1.1.3.

[5] CAISO transmittal at 2, 11 and n. 5. For example, CAISO's day-ahead market for the February 6 trading day, which was executed on February 5, utilized gas prices published on February 4 for gas deliveries for February 5. CAISO transmittal at 11.

[6] CAISO tariff section 30.4.1.2.

[7] CAISO uses default energy bids to mitigate bids of resources subject to local market power mitigation. The mitigated bid is substituted for use in the market clearing process and is also used to determine the resource's bid cost recovery compensation. CAISO tariff section 11.8. Default energy bids are also used to settle

(continued…)

CAISO uses the natural gas price index specified in section 39.7.1.1.1.3 in determining the start-up and minimum load costs associated with those bids.[9]

B. The Need for Waiver

6. CAISO explains that during this winter season, the market experienced abnormally volatile natural gas prices that have led to unrecoverable fuel costs. CAISO states that these inefficiencies are the result of sudden spikes in the price of natural gas on an applicable trading day that were not reflected in the stated indices published the day prior to running the day-ahead market. Because of this timing lag, the maximum allowable start-up and minimum load costs for proxy cost resources that were committed in the day-ahead market do not accurately reflect the significantly higher fuel costs for gas-fired resources. Likewise, significantly higher fuel costs would also not be fully recoverable under the maximum allowable start-up and minimum load costs for resources using the registered cost option. CAISO offers the February 6, 2014 gas delivery day as an example; on that day, natural gas prices increased approximately 300 percent above the pricing indexes published the day prior to the execution of the day-ahead market on February 5 for the February 6 trading day.[10]

C. CAISO's Waiver Request

7. CAISO asserts that waiver of CAISO's tariff is needed to temporarily protect resources submitting offers in the CAISO day-ahead market against potentially unrecoverable costs that they may incur as a result of sudden increases in natural gas prices. CAISO explains that the instant waiver, when triggered, will modify CAISO's cost inputs used in the day-ahead market and will therefore impact market results.[11]

8. Specifically, CAISO requests waiver of the requirement in section 39.7.1.1.1.3 that it determine natural gas cost prices based on at least two natural gas price indices

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exceptional dispatches and in the settlement of residual imbalance energy. CAISO tariff sections 11.5.6 and 11.5.5.

[8] CAISO generates cost-based bids when a scheduling coordinator does not submit a bid for a resource that is subject to a must-offer requirement. CAISO transmittal at 10.

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

[10] *Id.* at 11-12.

[11] *Id.* at 5.

published the day prior to running the day-ahead market, and instead use the most up-to-date natural gas prices which are published by the IntercontinentalExchange, Inc. (ICE) index.[12] CAISO explains that under normal conditions it will continue to calculate the daily gas price index pursuant to the requirements of section 39.7.1.1.1.3 for use in the next day's day-ahead market run, and it will continue to operate under the current tariff provisions in settling the day-ahead market.[13]

9. CAISO explains that it will monitor gas prices and if, prior to the close of the day-ahead market at 10:00 a.m., it has reason to believe that the gas prices published by the ICE index that day will exceed a certain percentage of the price index calculated the night before pursuant to the normal tariff provisions, it will hold open the day-ahead market until publication of the ICE index prices. CAISO explains that when the threshold is met, CAISO will notify the market and hold the day-ahead market open for up to two and one-half hours beyond the normal 10:00 a.m. close. This process will allow CAISO to incorporate the updated data and allow market participants to resubmit bids reflecting the updated gas price.[14]

10. CAISO also seeks waiver of the requirement in section 30.4.1.2 that resources under the registered cost option that switch to the proxy cost option remain under the proxy cost option for the remainder of the 30-day period. CAISO asserts that this waiver will permit resources subject to the registered cost option to recover higher start-up and minimum load costs only during periods of high gas price volatility. In particular, CAISO wishes to allow resources that switch from the registered cost option to the proxy cost option to revert back to the registered cost option effective as of the next day that gas prices decline to a level such that the proxy cost no longer exceeds that resource's registered cost.[15] CAISO further explains that it will implement this procedure by giving all scheduling coordinators representing resources under the registered cost option the choice to include them in a list of resources that will automatically be switched to the proxy cost option in the event that: (1) the gas price indices exceed the threshold; and

[12] CAISO states that using the ICE index prices to re-calculate the start-up and minimum load costs is appropriate because the publication of the ICE index is the only tariff-approved index that coincides with the 10:00 a.m. closing of CAISO's day-ahead market. *Id.* at 14-15.

[13] *Id.* at 13.

[14] *Id.* at 13-15.

[15] CAISO notes that resources may switch to the proxy cost for the remainder of their 30-day period. *Id.* at 16.

(2) the updated proxy costs based on the most current ICE index for the listed resource exceed the resource's registered cost values. CAISO proposes that resources will continue to have their start-up and minimum load costs determined in this manner until gas prices decline to the point where the resources' proxy costs no longer exceed their registered costs.[16]

11. Moreover, CAISO requests a more limited waiver of section 39.7.1.1.1.3 with respect to the variable-cost default energy bids used in CAISO's local power market mitigation process. According to CAISO, it is not feasible to recalculate default energy bids prior to running the day-ahead market because the variable-cost default energy bids are produced by an independent entity and are delivered to CAISO each day. Thus, CAISO seeks the flexibility to, when the price increase threshold is met, settle resources subject to variable-cost default energy bids in the day-ahead market based on bids sent by the independent entity, which CAISO explains will reflect the increased gas prices as calculated based on the methodology set forth in section 39.7.1.1.1.3.[17]

12. CAISO proposes to set the initial natural gas price increase threshold that will trigger the use of ICE index prices at 150 percent or more of the gas price index calculated the previous evening (under the normal tariff methodology) based on ICE index prices on the day of execution of the day-ahead market. CAISO proposes to publish this threshold in its business practice manual. CAISO contends that this threshold is reasonable because it is analogous to the cost of fuel exceeding the maximum start-up and minimum load cost values that can be registered in the master file for a resource that has elected the registered cost option, i.e., 150 percent of the projected proxy cost. CAISO also states that by keeping this threshold in the business practice manual, if emergency circumstances so require, CAISO may promptly and unilaterally revise the threshold as appropriate. However, CAISO states that any revisions to the threshold will be promptly announced in a market notice and will be subject to stakeholder review either beforehand or subsequently.[18]

II. <u>Notice and Responsive Pleadings</u>

13. The filing was noticed on March 7, 2014, with comments, protests, or motions to intervene due on or before March 11, 2014. A notice of intervention and comments were filed by the California Public Utilities Commission (CPUC). Timely motions to

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[16] *Id.* at 15-17.

[17] *Id.* at 17.

[18] *Id.* at 17-18.

intervene were filed by Powerex Corp.; Edison Mission Energy; City of Santa Clara, California; Cogeneration Association of California; Modesto Irrigation District; Sunrise Power Company; Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California; Pacific Gas and Electric Company (PG&E), and; Dynegy Moss Landing, LLC and Dynegy Marketing and Trade, LLC. Motions to intervene and comments were filed by Northern California Power Agency (NCPA); Southern California Edison Company (SoCal Edison); NRG Companies and Dynegy Companies (NRG/Dynegy); Morgan Stanley Capital Group Inc. (Morgan Stanley); Electric Power Supply Association (EPSA) and the Independent Energy Producers Association (IEP); Calpine Corporation (Calpine); La Paloma Generating Company LLC (La Paloma); Western Power Trading Forum (Western Power); California Department of Water Resources State Water Project (SWP) and; High Desert Power Project, LLC (High Desert Power). A joint motion for leave to answer and answer was submitted by the Indicated CAISO Suppliers (Indicated Suppliers).[19]

Comments

14. Various commenters state that they support CAISO's waiver proposal because it will temporarily mitigate the impact of recent significant swings in natural gas prices on generators that have not been factored into the market dispatch algorithm or settlement.[20] CPUC argues that the waiver will ensure that resources are committed through the day-ahead market based on more accurate natural gas prices for the trading day. Further, CPUC explains that because this proposal will be implemented through CAISO's existing tariff authority for recovery of bid costs and exceptional dispatch settlement, it will help to ensure that market participants will recoup their cost of operation.[21]

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[19] The Indicated Suppliers are power marketers and generators participating in the California energy market, which include: NRG Companies (NRG Power Marketing LLC, GenOn Energy Management, LLC, Cabrillo Power I LLC, Cabrillo Power II LLC, El Segundo Energy Center LLC, El Segundo Power, LLC, NRG Delta LLC, NRG Marsh Landing LLC, NRG California South LP, High Plains Ranch II, LLC, Long Beach Generation LLC, NRG Solar Alpine LLC, NRG Solar Borrego I LLC, NRG Solar Blythe LLC, and NRG Solar Roadrunner LLC); Dynegy Companies (Dynegy Marketing and Trade, LLC and Dynegy Morro Bay, LLC); CalPeak Entities (CalPeak Power LLC, CalPeak Power-Panoche LLC, CalPeak Power-Vaca Dixon LLC, CalPeak Power-Enterprise LLC, and CalPeak Power-Border LLC); La Paloma Generating Company, LLC; and Shell Energy North America (US).

[20] CPUC at 2-5, SWP at 3, SoCal Edison at 2, High Desert at 4.

[21] CPUC at 4-5.

15. A number of commenters provide supporting comments for CAISO's waiver proposal, but argue that their proposal does not go far enough to solve the problem.[22] Moreover, some commenters request that the Commission direct CAISO to conduct a stakeholder process to address the tariff mechanisms for cost recovery.[23] Western Power requests that the Commission direct CAISO to conduct the stakeholder process by June 2014, for implementation by fall of 2014.[24]

16. Several commenters argue that the underlying problem is built into CAISO's existing tariff mechanism and should be fixed permanently.[25] For example, Calpine explains that if the same-day market cost of gas is greater than the two-day lagged proxy price, the CAISO optimization software will over-commit generation resources to minimum load because the artificially low cost of such commitments will erroneously appear optimal. Calpine asserts that similar, but opposite, distortions occur when the same-day cost is less than the two-day lagged proxy gas cost.[26] Morgan Stanley and other commenters also argue that allowing scheduling coordinators to submit their own start-up and minimum load cost offers, subject to reasonable monitoring, would provide flexibility to accurately reflect natural gas prices.[27] Morgan Stanley also states that this would encourage efficient market dispatch by allowing scheduling coordinators to avoid the disconnect between prices they use to develop energy bid curves and the prices used to administratively calculate start-up and minimum load cost.[28]

17. Indicated Suppliers argue that the natural gas pricing volatility of this past winter illustrates imperfections in the tariff that can result in under-recovery of fuel costs by

[22] EPSA and IEP at 2, High Desert at 4-5, NCPA at 3. Commenters assert that the Commission should grant the CAISO Indicated Suppliers' waiver proposal submitted in Docket No. ER14-1428-000. On March 14, 2014 the Commission denied the waiver petition in Docket No. ER14-1428-00. *See Indicated CAISO Suppliers*, 146 FERC ¶ 61,183 (2014).

[23] Calpine at 2, SWP at 3, Western Power at 9, La Paloma at 13.

[24] Western Power at 9.

[25] Western Power at 5-6, EPSA and IEP at 8, Morgan Stanley at 5-6.

[26] Calpine at 1-3.

[27] Calpine at 2, Western Power at 5-6, Morgan Stanley at 5-6.

[28] Morgan Stanley at 5-6.

generators. They contend that significant flaws in the registered cost and proxy cost methods warrant more permanent changes. In particular, Indicated Suppliers assert that the registered cost and proxy cost methods are flawed because they do not account for natural gas prices in the intra-day market, where many natural gas-fired generators, particularly those that typically only run out of merit order, must buy gas. Indicated Suppliers further argue that CAISO's waiver request for up-to-date index prices and allowing generators to switch between proxy cost and registered cost methods does not address this issue.[29]

18. Morgan Stanley contends that CAISO's proposed waiver does not protect generators buying or disposing of gas in response to unanticipated dispatches or de-commitments by CAISO. Morgan Stanley asserts that generators are left exposed to buying or selling gas at prices that vastly exceed the compensation they will receive from the CAISO market.[30] Indicated Suppliers likewise argue that CAISO's proposal only provides partial relief for intra-day procurement costs and costs for disposing of unneeded natural gas, even if those generators were following CAISO's directions.[31] Similarly, La Paloma asserts that the Commission should not grant CAISO's proposal to use the ICE index to set a proxy price because the ICE index will not reflect the actual costs incurred by generators. For example, La Paloma explains using the ICE index ignores that generators may be required to incur additional costs beyond those required for the fuel that is actually used in the generation process.[32]

19. EPSA and IEP support CAISO's limited waiver request, but argue that the waiver will trigger only when prices spike 150 percent and will not provide relief to generators if the price increases by only 140 percent. La Paloma raises similar protests to the 150 percent trigger. Western Power argues that CAISO's proposed 150 percent trigger threshold either should be eliminated or drastically reduced, or that CAISO should provide a secondary mechanism for suppliers to recover unreimbursed costs when the threshold is not reached.[33]

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[29] Suppliers at 3-4.

[30] Morgan Stanley at 4.

[31] *Id*. at 5-6.

[32] La Paloma at 8.

[33] WPTF at 7- 8.

20. Western Power protests that CAISO's proposed waiver, if granted, should not be included in CAISO's business practice manual because it significantly affects a supplier's rates, terms and conditions. It also argues that the proposed waiver is too vague for parties to evaluate comprehensively. Therefore, Western Power requests that the Commission direct CAISO to include any threshold for the trigger in the tariff and to submit a compliance filing providing more specific details about the waiver and how it will be implemented.[34]

III. Discussion

A. Procedural Matters

21. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure,[35] the notice of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

B. Substantive Matters

22. The Commission finds good cause to grant the requested waiver of sections 39.7.1.1.1.3 (Calculation of Natural Gas Price) and 30.4.1.2 (Registered Cost Option) for the purpose of market execution and settling transactions, effective from the date of this order through April 30, 2014. This waiver supersedes the waiver granted in the March 14 Order. The Commission has previously granted requests for waivers of tariffs in situations where, as relevant here: (1) the waiver is of limited scope; (2) the waiver addresses a concrete problem must be remedied; and (3) the waiver does not have undesirable consequences, such as harming third parties.[36]

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[34] *Id*. at 9.

[35] 18 C.F.R. § 385.214 (2013).

[36] *See, e.g., PJM Interconnection, L.L.C.*, 146 FERC ¶ 61,041, at P 5 (2014) (*PJM I*); *PJM Interconnection, L.L.C.*, 146 FERC ¶ 61,078, at P 38 (2014) (*PJM II*); *New York Indep. Sys. Operator, Inc.*, 146 FERC ¶ 61,061, at P 20 (2014) (*NYISO*); *New York Indep. Sys. Operator, Inc.*, 144 FERC ¶ 61,147, at P 8 (2013); *New York Indep. Sys. Operator, Inc.*, 139 FERC ¶ 61,108, at P 14 (2012); *PJM Interconnection, L.L.C.*, 137 FERC ¶ 61,184, at P 13 (2011); *ISO New England Inc.*, 134 FERC ¶ 61,182, at P 8 (2011); *California Indep. Sys. Operator Corp.*, 132 FERC ¶ 61,004, at P 10 (2010); *accord ISO New England Inc. – EnerNOC, Inc.*, 122 FERC ¶ 61,297 (2008); *Central Vermont Public Service Corp.*, 121 FERC ¶ 61,225 (2007); *Waterbury Generation LLC*, 120 FERC ¶ 61,007 (2007); *Acushnet Co.*, 122 FERC ¶ 61,045 (2008).

23. We find that CAISO's requested waiver satisfies the aforementioned conditions. First, CAISO's request is limited in scope in that it seeks a one-time waiver of two specific tariff provisions in CAISO's tariff. Additionally, the waiver seeks to use a gas price index that is already approved in section 39.7.1.1.1.3 of CAISO's tariff. The waiver is also limited to the period from the date of this order through April 30, 2014. Further, the waiver will apply only in the day-ahead market and will be used only during significant events. We find that the proposal is appropriately limited in scope.

24. The waiver also addresses a concrete problem that must be remedied that CAISO is addressing by allowing gas-fired generators the opportunity to recover their start-up and minimum load costs based on data that more accurately reflects current natural gas pricing. In addition, the waiver allows the more accurate gas pricing data to be included in the day-ahead market runs. This corrects market signals through transparent market pricing, improving on the settlement approach approved in the March 14 Order. Moreover, we find that this limited waiver will not have undesirable consequences. No party asserts that undesirable consequences would result from granting this waiver. Although CAISO acknowledges that the waiver may result in increased costs borne by load serving entities, consistent with the Commission's findings in *PJM II* and *NYISO*, increased costs to load as a result of more accurate cost recovery calculations do not amount to a legally cognizable harm.[37]

25. With respect to arguments by protestors that CAISO has not provided sufficient justification for setting the initial price increase threshold at 150 percent of the prior day's price indices, as observed by the Commission in the March 14 Order,[38] the 150 percent threshold proximately coincides with the maximum allowable cost recovery afforded to resources that select the registered cost option. Because this waiver will permit resources to switch back to the registered cost option on all days when the price increase threshold has not been met, it enhances the ability of resources to recoup their start-up and minimum load costs without upsetting CAISO's current market design. We also find it reasonable to use the ICE index, given that the close of the day-ahead market coincides with the time the index is regularly published, and therefore it is the index that will most accurately reflect the price of natural gas at the time of the day-ahead market.[39] To be

[37] *See PJM II*, 146 FERC ¶ 61,078 at P 15; *NYISO*, 146 FERC ¶ 61,061 at P 7.

[38] March 14 Order, 146 FERC ¶ 61,184 at P 21.

[39] The Commission has previously concluded that actions by the price index developer, ICE, were in substantial compliance with the Commission's standards. *Price Discovery in Natural Gas and Electric Markets*, 109 FERC ¶ 61,184, at PP 25-27 (2004). We also note that the ICE index has previously been approved for inclusion in the CAISO tariff.

clear, the Commission is not approving a wholesale alteration of CAISO's current tariff cost recovery methodologies in this order, nor would this be the appropriate occasion for doing so.

26. With respect to Western Power's comments that including the price increase threshold in CAISO's business practice manual is not the appropriate approach, we again disagree. As we found in the March 14 Order, maintaining the threshold in the business practice manual is temporary and allows flexibility to immediately announce a change in the threshold to the market, if necessary.[40]

27. Finally, several commenters note that part of the underlying concerns that prompted this waiver request is the inefficient dispatch of resources by CAISO due to resources' start-up and minimum load costs appearing inexpensive relative to energy bids. Commenters also suggest that revisions to CAISO's market design are necessary to enhance resources' ability to recover their actual fuel costs. We find that these comments address issues that are beyond the scope of CAISO's waiver request and propose to revise the market mechanisms in CAISO's existing tariff. We note that CAISO has committed to commencing a stakeholder process in April 2014 to address stakeholders' concerns. We encourage stakeholders to raise all relevant issues during the stakeholder proceeding. Some potential long-term solutions stakeholders could consider are, for example: 1) latency issues associated with default energy bids; 2) disparities between energy bid curves and start-up and minimum load costs; and 3) minimizing reliance on out-of-market payments.

<u>The Commission orders</u>:

CAISO's request for waiver of tariff sections 39.7.1.1.1.3 and 30.4.1.2 from the date of this order until April 30, 2014 is hereby granted, as discussed in the body of this order.

By the Commission.

(S E A L)

Nathaniel J. Davis, Sr.,
Deputy Secretary.

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[40] *See* March 14 Order, 146 FERC ¶ 61,184 at P 22.