

143 FERC ¶ 61,078  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

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

California Independent System  
Operator Corporation

Docket No. ER13-967-000

ORDER ACCEPTING TARIFF REVISIONS

(Issued April 29, 2013)

1. On February 21, 2013, pursuant to section 205 of the Federal Power Act (FPA),<sup>1</sup> and Part 35 of the Commission's regulations,<sup>2</sup> California Independent System Operator Corporation (CAISO) filed revisions to its open access transmission tariff (tariff) to implement stage two of its market power mitigation improvements.<sup>3</sup> In this order we conditionally accept CAISO's proposed tariff revisions to become effective May 1, 2013, as requested.

**I. Background**

2. CAISO's tariff includes provisions to mitigate the ability of suppliers to exercise local market power by unilaterally influencing the price of energy in CAISO's markets. The mitigation process is premised on the distinction between competitive and non-competitive transmission constraints. Energy bids may be subject to mitigation when a transmission constraint is deemed to be non-competitive.<sup>4</sup> To evaluate whether transmission constraints are competitive, CAISO currently utilizes both a static competitive path assessment and a dynamic competitive path assessment. CAISO conducts the static competitive path assessment on a quarterly basis through off-line studies using seasonal study data. Under the static competitive path assessment, CAISO only tests constraints that

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<sup>1</sup> 16 U.S.C. § 824e (2006).

<sup>2</sup> 18 C.F.R. Part 35 (2012).

<sup>3</sup> CAISO February 21, 2013 Filing in Docket No. ER13-967-000 (CAISO Proposal).

<sup>4</sup> CAISO Tariff, § 39.7.

were congested or managed for congestion in more than 500 hours in the prior 12 months.<sup>5</sup>

3. On March 1, 2012, the Commission accepted CAISO's proposal to revise and improve the accuracy and efficiency of its local market power mitigation process in two stages and accepted CAISO's stage-one tariff amendment.<sup>6</sup> In the stage-one tariff amendment, CAISO revised its local market power mitigation provisions as part of the day-ahead market run and the hour-ahead scheduling process to implement a mitigation methodology that identifies the non-competitive congestion component of each locational marginal price to determine whether the potential to exercise market power exists. Additionally, CAISO implemented an in-market dynamic competitive path assessment in the day-ahead local market power mitigation process.

4. For the second stage of CAISO's revisions to its local market power mitigation process, CAISO proposes to replace the static competitive path assessment with the dynamic competitive path assessment in the hour-ahead scheduling process and the real-time market. CAISO also proposes to use a default competitive assessment, in specific situations.

## **II. Notice and Responsive Pleadings**

5. Notice of the CAISO filing was published in the *Federal Register*, 78 Fed. Reg. 13,871 (2013), with interventions and protests due on or before March 14, 2013. Timely motions to intervene were submitted by California Department of Water Resources, State Water Project; Calpine Corporation; City of Santa Clara, California; Dynegy Moss Landing, LLC, *et al.*; Modesto Irrigation District; Northern California Power Agency; NRG Companies; and Pacific Gas and Electric Company. Southern California Edison Company (SoCal Edison) and Western Power Trading Forum (WPTF) filed comments. CAISO submitted an answer.

## **III. Discussion**

### **A. Procedural Matters**

6. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2012), the notices of intervention and timely, unopposed

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<sup>5</sup> CAISO Proposal at 4.

<sup>6</sup> *Cal. Indep. Sys. Operator Corp.*, 138 FERC ¶ 61,154 (2012) (March 2012 Order).

motions to intervene serve to make the entities that filed them parties to this proceeding.

7. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2012), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept CAISO's answer because it has provided information that assisted us in our decision-making process.

### **CAISO's Proposal**

8. As discussed above, CAISO proposes to implement the second stage of its local market power mitigation provisions. This stage includes the implementation of the dynamic competitive path assessment in the hour-ahead scheduling process and the real-time market power mitigation runs. Under the revised tariff provisions, CAISO will apply an automated market power mitigation process every 15 minutes in the real-time market, rather than using the hour-ahead local market power mitigation results for both the hour-ahead scheduling process and the real-time market. CAISO will designate a transmission constraint as non-competitive when available capacity from internal resources, excluding the amount of capacity that can be withheld by the potentially pivotal suppliers,<sup>7</sup> is less than the demand for counter-flow to that transmission constraint.

9. While CAISO asserts that implementing the dynamic competitive path assessment in the aforementioned markets will improve its ability to accurately mitigate local market power, CAISO explains that additional revisions are necessary to avoid the under-mitigation of market power activity in two scenarios. Specifically, CAISO identified two gaps that may result in bids not being subject to mitigation even though the bids were executed while the path was non-competitive: (1) in the event of market software failure, and (2) exceptional dispatches. CAISO proposes to employ a default competitive path assessment, based on the past 60-days of data from dynamic competitive path assessments, to resolve these two situations.<sup>8</sup>

10. CAISO notes that, given the proposed real-time application of the dynamic competitive path assessment, there is a possibility it could fail due to software

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<sup>7</sup> CAISO Proposal at 12. (In the hour-ahead scheduling process and the real-time market CAISO will consider ramping constraints on the physical resources belonging to potentially pivotal suppliers because these constraints reduce the amount of capacity that can be withheld.)

<sup>8</sup> CAISO Proposal at 4, 11.

issues. CAISO adds that the real-time local market power mitigation will occur four times per hour, increasing the likelihood that a software failure may occur in the real-time market, and providing very little time to attempt to correct any software failure that may occur. In order to address this issue, in the event that there is a failure in CAISO's market software, CAISO proposes to employ the default competitive path assessment to determine whether a path is competitive.<sup>9</sup>

11. CAISO also identified that the dynamic competitive path assessment may not be effective in determining whether a transmission constraint is non-competitive for the purposes of mitigating exceptional dispatches.<sup>10</sup> One instance under which CAISO mitigates exceptional dispatches is where the dispatch was made to address reliability requirements related to non-competitive transmission constraints.<sup>11</sup> CAISO states that exceptional dispatches used to address reliability requirements related to transmission constraints may relieve congestion in advance of anticipated problems on the system, and as a result, the dynamic competitive path assessment may designate a transmission constraint as competitive regardless of whether the constraint was actually competitive at the time the exceptional dispatch was performed. In order to ensure non-competitive exceptional dispatches are recognized by the dynamic competitive path assessment, CAISO proposes to implement the default competitive path assessment for the purpose of mitigating exceptional dispatches. CAISO argues that the default competitive path assessment process is more accurate than the previously used static competitive path assessment, and will increase the accuracy of exceptional dispatch mitigation.<sup>12</sup>

12. CAISO states that using the past 60 days of data for the development of the default competitive path assessment captures seasonal differences and hours of potential congestion, and is significantly more granular than the existing static competitive path assessment. In using the default competitive path assessment, CAISO will assume a constraint is non-competitive unless two criteria are met.<sup>13</sup>

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<sup>9</sup> *Id.* at 16.

<sup>10</sup> *Id.* at 7.

<sup>11</sup> *Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,150, at P 74 (2009).

<sup>12</sup> CAISO Proposal at 16.

<sup>13</sup> CAISO will assume the transmission constraints relating to Path 15 and Path 26 are competitive because these two paths connect to larger zones that have been observed to be competitive for energy under normal market and operating conditions.

Specifically, CAISO will consider: (1) whether congestion occurred on the transmission constraint in ten or more hours for which the transmission constraint was tested for competitiveness; and (2) whether the transmission constraint was deemed competitive in 75 percent or more of the instances in which the transmission constraint was binding when tested.<sup>14</sup>

13. CAISO asserts that the thresholds proposed to determine competitiveness strike a just and reasonable balance between the risk of over mitigation and the risk of under mitigation. CAISO states that ten hours represents a meaningful number of hours that congestion occurred on the transmission constraint after a constraint was tested for competitiveness. CAISO also argues that, based on a statistical test performed by CAISO, it determined that it could be reasonably confident that a transmission constraint had been predominately competitive in recent history using the 75 percent threshold.<sup>15</sup>

14. Not all transmission constraints are modeled in the market software. Therefore, CAISO proposes to continue to deem these non-modeled constraints as non-competitive for the purposes of mitigation. CAISO states that issues related to non-modeled transmission constraints are beyond the scope of the proposed tariff amendments. CAISO notes that it is committed to incorporating more transmission constraints to reduce the incidence of non-modeled constraints.<sup>16</sup>

15. CAISO states that the proposed tariff changes represent a significant decrease in the thresholds used in the static competitive path assessment, reducing the frequency with which the constraints would be deemed non-competitive and thereby mitigated when they may in fact be competitive. Therefore, CAISO argues that the proposal is within the zone of reasonableness required by the FPA.<sup>17</sup> Although CAISO notes that stakeholders proposed the use of an off-line study for each exceptional dispatch performed, rather than using the default competitive path assessment, CAISO states that the data needed to apply the off-

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<sup>14</sup> CAISO Proposal at 17.

<sup>15</sup> *Id.* at 18.

<sup>16</sup> *Id.* at 22, n.79.

<sup>17</sup> *Id.* at 19 (citing *Calpine Corp. v. Cal. Indep. Sys. Operator Corp.*, 128 FERC ¶ 61, 271, at P 41 (2009) (“The courts and the Commission have recognized that there is not a single just and reasonable rate. Instead, we evaluate [proposals under FPA section 205] to determine whether they fall into a zone of reasonableness. So long as the end result is just and reasonable, the [proposal] will satisfy the statutory standard.”)).

line study approach would not be readily available, and even when it was available, the approach would be too difficult to apply. CAISO states that it is not required to use a more complicated methodology when a simpler methodology is just and reasonable.<sup>18</sup>

### Comments

16. SoCal Edison supports CAISO's proposal, including the use of the default competitive path assessment to mitigate exceptional dispatches. SoCal Edison agrees with CAISO that, because exceptional dispatches may relieve congestion prior to the dispatch, the dynamic competitive path assessment will not effectively be able to determine competitiveness of the constraints.

17. WPTF strongly supports using the dynamic competitive path assessment in all CAISO markets, arguing that it should lead to more accurate assessments of competitiveness. However, WPTF does not support the default competitive path assessment, and contends that the use of the default competitive path assessment will result in far more mitigation than is necessary.<sup>19</sup>

18. WPTF argues that the testing thresholds included in the default competitive path assessment are arbitrary. In particular, WPTF notes that CAISO's proposal to conduct the default competitive path assessment only when congestion occurs more than ten hours in the prior 60 days does not go far enough, and could lead to additional, unnecessary mitigation.<sup>20</sup> Further, WPTF notes that the ten-hour triggering threshold does not consider congestion managed through exceptional dispatch. Because the congestion managed by an exceptional dispatch does not count towards meeting the ten-hour threshold, the path will not be tested for competitiveness. As a result, exceptionally dispatched bids used to manage congestion will continue to be mitigated. WPTF states that this practice may result in more mitigation than necessary.<sup>21</sup>

19. WPTF also expresses concern regarding the volume of exceptional dispatches, which, as a percentage of load for February, April, May, June, August and October in 2012, was higher than any other year from 2009-2013.<sup>22</sup> WPTF

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<sup>18</sup> *Id.* at 22.

<sup>19</sup> WPTF March 24, 2013 Comments at 2-4, 9 (WPTF Comments).

<sup>20</sup> *Id.* at 6.

<sup>21</sup> *Id.* at 6.

<sup>22</sup> *Id.* at 7.

recognizes CAISO's intentions to reduce the frequency of exceptional dispatches, including the commitment to incorporate additional constraints, processes or products into its market. However, in the meantime, WPTF notes that CAISO will continue to consider non-modeled transmission constraints to be non-competitive. WPTF states that mitigating all non-modeled constraints may result in unnecessary mitigation.

20. WPTF argues that CAISO should conduct an analysis using the dynamic competitive path assessment, after the exceptional dispatch, to determine whether a transmission path or constraint for which there was an exceptional dispatch was competitive. WPTF argues that because exceptional dispatches do not set prices, CAISO has more time to conduct the dynamic competitive path assessment. Therefore, WPTF states that CAISO should be able to utilize the dynamic competitive path assessment for exceptional dispatches and to determine whether to mitigate exceptional dispatch energy bids prior to issuing initial settlement statements three days after the relevant trade day. WPTF argues that, although CAISO claims that this process is too difficult to apply, such a claim is inadequate as it lacks justification.<sup>23</sup>

### **Answer**

21. CAISO reiterates that the proposed default competitive path assessment is within the range of reasonableness and is an improvement over the static competitive path assessment, and notes that WPTF acknowledges the improvement. CAISO argues that under the default competitive path assessment, more constraints will be evaluated and found to be competitive. CAISO states that it does not anticipate that the default competitive path assessment will have a large impact on mitigation. A constraint that is deemed to be non-competitive because it is untested will only trigger mitigation if there is an in-market failure of the dynamic competitive path assessment or a resource is exceptionally dispatched to manage the constraint.<sup>24</sup>

22. CAISO disagrees with WPTF's contention that it is justifiable to presume that constraints that do not meet the threshold would, if tested, be competitive. CAISO answers that although it is maintaining the presumption of non-competitiveness from the static competitive path assessment, CAISO is also relaxing the threshold requirements, which will allow more modeled constraints to

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<sup>23</sup> *Id.* at 9-10 (citing CAISO Proposal at 21-22).

<sup>24</sup> CAISO March 26, 2013 Answer at 3-5 (CAISO Answer).

meet the new threshold, rather than being deemed non-competitive. Therefore, CAISO argues that the proposal remains within the range of reasonableness.<sup>25</sup>

23. CAISO also argues that the presumption of non-competitiveness is just and reasonable for non-modeled constraints. CAISO states that non-modeled constraints fall into two categories: small constraints (69 kV and 115 kV) for which CAISO lacks sufficient information to include in a full network model; and complex constraints that its software may not fully model. CAISO notes that, for the small constraints, there is no reason to assume that these constraints would be competitive if tested, as it is unlikely that there would be competitive supply to resolve congestion. Additionally, CAISO argues that complex constraints are too difficult to model completely, but notes that the efforts to improve its modeling capabilities are ongoing and it recently launched a contingency modeling stakeholder initiative.<sup>26</sup> CAISO argues that, until it models the constraints, and can test them for competitiveness, it remains reasonable to treat them as non-competitive for creating the default competitive path assessment.<sup>27</sup>

24. Additionally, CAISO argues that its tariff amendment does not create any new type of exceptional dispatch, nor does it result in any increase in the amount of exceptional dispatch CAISO will perform pursuant to its existing tariff authority. Therefore, CAISO argues that the frequency of exceptional dispatch, and WPTF's associated data, are beyond the scope of this proceeding.<sup>28</sup> Rather, CAISO notes that it will explain the steps it has taken to reduce exceptional dispatch in the informational report the Commission directed CAISO to file in Docket No. ER12-2539.<sup>29</sup>

25. Finally, CAISO rejects WPTF's argument that CAISO should use the real-time dynamic competitive path assessment to conduct an off-line, after-the-fact study of the competitiveness of a constraint to determine whether to mitigate

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<sup>25</sup> *Id.* at 6.

<sup>26</sup> *Id.* at 7 (<http://www.caiso.com/informed/Pages/StakeholderProcesses/ContingencyModelingEnhancements.aspx> (last visited April 1, 2013)).

<sup>27</sup> *Id.* at 7.

<sup>28</sup> *Id.* at 8.

<sup>29</sup> *Cal. Indep. Sys. Operator Corp.*, 141 FERC ¶ 61,069, at PP 43-45 (2012) (October 26 Order).

exceptionally dispatched energy bids.<sup>30</sup> CAISO argues that, while theoretically possible, the proposal is not practical as it requires a unique analysis of each exceptional dispatch. CAISO states that the default competitive path assessment provides a clear basis for identifying a constraint as competitive or non-competitive for the purposes of exceptional dispatch mitigation.<sup>31</sup>

## **B. Commission Determination**

26. We find that CAISO's proposed stage-two tariff amendments are just and reasonable and, therefore, accept them. We find that the proposed tariff revisions will improve the accuracy and efficiency of CAISO's local market power mitigation process. In particular, we find that CAISO's proposal to implement real-time mitigation and use the dynamic, rather than static, competitive path assessment in the hour-ahead scheduling process and real-time market will more accurately reflect the market conditions associated with individual transmission constraints.

27. We find that CAISO's proposal to implement the default competitive path assessment in the event that the dynamic competitive path assessment fails, and for the purposes of exceptional dispatch mitigation is just and reasonable. We also accept the thresholds utilized in the default competitive path assessment. The Commission has previously found that "statutory reasonableness is an abstract quality represented by an area rather than a pinpoint. It allows a substantial spread between what is unreasonable because too low and what is unreasonable because too high."<sup>32</sup> Therefore, we reject WPTF's contention that the threshold criteria used in the default competitive path assessment are not dynamic enough, and find that the proposed criteria are reasonable. The fact that there exists another means of assessing whether a path is competitive for the purpose of exceptional dispatch mitigation does not render the proposal unjust and unreasonable.

28. As WPTF acknowledges, CAISO's proposed default competitive path assessment is an improvement over the static competitive path assessment. In particular, the proposed criteria represent a significant improvement from the 500-hour threshold used in the static competitive path assessment. Using the proposed ten-hour threshold, rather than the previously-used 500-hour threshold, improves the accuracy with which paths are deemed competitive or non-

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<sup>30</sup> WPTF Comments at 9-10.

<sup>31</sup> CAISO Answer at 8-9.

<sup>32</sup> *Montana-Dakota Utils. Co. v. Northwestern Pub. Serv. Co.*, 341 U.S. 246, 251 (1951).

competitive and reduces the incidence that a competitive path may be deemed non-competitive because of the higher hourly threshold. Therefore, we find that the default competitive path assessment will improve the accuracy and efficiency of mitigation in CAISO's markets and find that it is just and reasonable. Although we accept the proposal to use a default competitive path assessment process at this time, we encourage CAISO to continue considering improvements to its market power mitigation processes in the future.

29. We recognize WPTF's concerns regarding the frequency of exceptional dispatches, but find that the extent of CAISO's reliance on exceptional dispatch is beyond the scope of the proceeding. We support CAISO's continuing efforts to reduce its reliance on exceptional dispatches, and note that the Commission previously directed CAISO to file an informational report by October 2013 describing the steps it has taken to reduce its reliance on exceptional dispatches.<sup>33</sup> Additionally, while we agree with CAISO that until it models all constraints, and can test them for competitiveness, it is reasonable to treat them as uncompetitive for creating the default competitive path assessment, we continue to support efforts to improve CAISO's modeling capabilities. Consistent with the Commission's finding in the October 26 Order, we acknowledge CAISO's stated intention to incorporate more transmission constraints to reduce the incidence of non-modeled constraints as part of its steps to reduce the frequency of exceptional dispatches.<sup>34</sup>

The Commission orders:

CAISO's proposed tariff revisions are hereby accepted, effective May 1, 2013, 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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<sup>33</sup> October 26 Order, 141 FERC ¶ 61,069 at PP 43-45.

<sup>34</sup> CAISO Proposal at 22.

Document Content(s)

ER13-967-000.DOC.....1-10