

151 FERC ¶ 61,108  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Norman C. Bay, Chairman;  
Philip D. Moeller, Cheryl A. LaFleur,  
Tony Clark, and Colette D. Honorable.

California Independent System  
Operator Corporation

Docket No. ER15-1229-000

ORDER ACCEPTING PROPOSED TARIFF REVISIONS

(Issued May 11, 2015)

1. On March 12, 2015, the California Independent System Operator Corporation (CAISO) filed under section 205 of the Federal Power Act (FPA)<sup>1</sup> revisions to its tariff to modify the bid cost recovery provisions relating to multi-stage generating resources and base schedules submitted to the Energy Imbalance Market. In this order, we accept CAISO's proposed tariff revisions for filing, effective March 13, 2015, as requested.

**I. Background**

2. CAISO's tariff provides for resources scheduled in the CAISO markets to recover their start-up, minimum load, and energy bid costs through bid cost recovery payments when market revenues do not cover these costs.<sup>2</sup> As discussed in more detail below, CAISO currently calculates bid cost recovery separately for the day-ahead and the real-time markets. When a resource incurs start-up and minimum load costs in both day-ahead and real-time markets, CAISO's bid cost recovery rules include provisions for allocating these commitment costs to the day-ahead or real-time markets based on how the commitment costs were incurred in each market. A resource may be committed in multiple markets and be eligible for bid cost recovery when CAISO commits the resource based on the resource's market bids. However, when a resource submits a self-schedule

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<sup>1</sup> 16 U.S.C. § 824d (2012).

<sup>2</sup> The rules relating to bid cost recovery eligibility, payment, and allocation are set forth in section 11.8 of CAISO's tariff.

or a base schedule in the Energy Imbalance Market,<sup>3</sup> the resource is not eligible for bid cost recovery.<sup>4</sup>

3. In 2010, the Commission accepted CAISO's proposal to amend its bid cost recovery rules to account for the costs associated with multi-stage generating resources' various configurations<sup>5</sup> and account for the ability of multi-stage generating resources to move between different configurations.<sup>6</sup> CAISO's proposal included, among other things, revised tariff provisions to allow a multi-stage generating resource to submit separate start-up and minimum load costs for different configurations. CAISO also proposed new rules to specify how it would determine whether the commitment costs for the day-ahead or real-time market would apply given the market interval, the type of commitment, and the resource's configuration.

4. Subsequently, in 2013, the Commission accepted CAISO's proposal to calculate bid cost recovery amounts separately between the day-ahead and real-time markets, eliminating its then current practice of netting a resource's day-ahead costs and revenues against that resource's real-time costs and revenues.<sup>7</sup> Specifically, as related to multi-stage generating resources, CAISO proposed rules to capture transition costs (i.e., the costs and revenues associated with a multi-stage generator's actual movement between the two configurations) and consider only the incremental minimum load costs associated with committing a multi-stage generating resource in one configuration in the day-ahead market and subsequently committing that resource in a different configuration in the real-time market. CAISO also revised its bid cost recovery rules to allow negative minimum load costs (i.e., cost savings) in bid cost recovery calculations when CAISO commits a multi-stage generating resource in real-time to a lower output configuration than that committed in the day-ahead market.

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<sup>3</sup> CAISO March 12, 2015 Filing (CAISO Filing) at 3.

<sup>4</sup> *Id.* at 2.

<sup>5</sup> A multi-stage generating resource is a generating unit that, because of its technical characteristics, can be operated in various mutually exclusive configurations.

<sup>6</sup> *California Indep. Sys. Operator Corp.*, 132 FERC ¶ 61,087 (2010).

<sup>7</sup> *California Indep. Sys. Operator Corp.*, 145 FERC ¶ 61,254 (2013).

5. In June 2014, the Commission conditionally accepted CAISO's proposal to implement a real-time market for imbalance energy, i.e., the Energy Imbalance Market.<sup>8</sup> Under CAISO's current tariff, resources participating in the Energy Imbalance Market are eligible to recover energy bid costs associated with their real-time schedules; however, CAISO's tariff does not permit these resources to recover start-up or minimum load costs because CAISO treats Energy Imbalance Market base schedules as self-schedules, which, as mentioned above, are not eligible for bid cost recovery. Thus, CAISO's tariff ensures that multi-stage generating resources participating in the Energy Imbalance Market cannot over-recover minimum load costs when they self-schedule at a configuration higher than that indicated in their base schedule. CAISO's current tariff does not, however, contemplate the inclusion of decremental minimum load costs associated with a resource operating at lower configuration than that indicated in the base schedule.<sup>9</sup>

## II. CAISO's Filing

6. CAISO states that, following the implementation of the new bid cost recovery rules on May 1, 2014, its Department of Market Monitoring identified the potential for multi-stage generating resources to over-recover minimum load costs when these resources are self-scheduled in the day-ahead market and later committed in the real-time market by CAISO.<sup>10</sup> CAISO explains that the potential for over-recovery exists because, under its current tariff, CAISO calculates a multi-stage generating resource's minimum load costs as the difference between its real-time and day-ahead schedules *only* when the resource is committed by CAISO. Thus, if a multi-stage generating resource submits a day-ahead self-schedule but is committed by CAISO in the real-time market, that resource receives bid cost recovery for its full real-time minimum load costs, rather than the difference between its real-time minimum load costs and its day-ahead self-schedule.

7. CAISO asserts that the potential for over-recovery also exists when a multi-stage generating resource moves from a higher day-ahead configuration to a lower real-time configuration as a result of a self-schedule. CAISO explains that its tariff does not include decremental minimum load costs—i.e., the cost savings associated with a resource being dispatched in the real-time market at a configuration lower than that indicated in its day-ahead self-schedule—in the calculation of that resource's minimum

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<sup>8</sup> *California Indep. Sys. Operator Corp.*, 147 FERC ¶ 61,231 (2014).

<sup>9</sup> CAISO Filing at 5.

<sup>10</sup> CAISO states that it determined that only minimal amounts of over-recovery had actually occurred and planned to address this issue in an upcoming tariff amendment, although that opportunity did not materialize until now. *Id.* at 6-7.

load costs.<sup>11</sup> CAISO states that this problem extends to the calculation of bid cost recovery for multi-stage generating resources participating in the Energy Imbalance Market because Energy Imbalance Market base schedules are currently treated as real-time market self-schedules. Thus, CAISO states that its existing tariff provisions for decremental minimum load costs do not apply because bid cost recovery rules only apply to resources committed by CAISO.<sup>12</sup>

8. To address these issues, CAISO proposes to add a new subsection to tariff section 11.8.1.3, Multi-Stage Generating Resource Start-Up, Minimum Load, or Transition Costs, to describe how it will determine which minimum load costs will apply to all of the various commitment and configuration permutations for multi-stage generating resources.<sup>13</sup> First, CAISO proposes to calculate minimum load costs for multi-stage generating resources that are committed by CAISO in the day-ahead market, including those committed in the integrated forward market and the residual unit commitment process, based on the resource's configuration committed in that market, pursuant to current tariff sections 11.8.2.1 and 11.8.3.1.<sup>14</sup> Second, to calculate a multi-stage generating resource's minimum load costs eligible for bid cost recovery in the real-time market, CAISO proposes to start with the minimum load costs associated with the resource's configuration committed in the real-time market, irrespective of whether the resource is committed by CAISO or has submitted a self-schedule.<sup>15</sup> Then, if the multi-stage generating resource submits a real-time self-schedule, CAISO proposes to subtract from this value the maximum of either (1) the minimum load costs associated with the resource's day-ahead configuration, regardless of whether the resource was committed by CAISO or submitted a self-schedule, or (2) the minimum load costs associated with the resource's real-time, self-scheduled configuration.<sup>16</sup> Alternatively, if the multi-stage generating resource does not submit a real-time self-schedule, CAISO proposes to subtract the minimum load costs attributable to the resource's day-ahead configuration, regardless of whether it is committed by CAISO or submits a self-schedule.<sup>17</sup> In

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<sup>11</sup> *Id.* at 5, n.9.

<sup>12</sup> *Id.* at 22, 25; *see* CAISO Tariff § 11.8.1.4.1.2.

<sup>13</sup> CAISO also proposes to remove references to minimum load costs that will be superseded by the revisions proposed in the instant filing. *Id.* at 26-27.

<sup>14</sup> Proposed CAISO Tariff, § 11.8.1.3.2(a).

<sup>15</sup> *Id.* § 11.8.1.3.2(b)(i).

<sup>16</sup> *Id.* § 11.8.1.3.2(b)(ii)(a).

<sup>17</sup> CAISO, Proposed Tariff § 11.8.1.3.2(b)(ii)(b); *see* CAISO Filing at 27.

conjunction with these revisions, CAISO proposes to remove current tariff provisions that contemplate how it will calculate negative minimum load costs for resources that are decremented to a configuration in the real-time market which is lower than their day-ahead configuration.<sup>18</sup> CAISO explains that its proposed revisions will supersede the current tariff provisions and reflect all possible scenarios that include decremental minimum load costs.

9. With respect to multi-stage generators participating in the Energy Imbalance Market, CAISO also proposes to revise its tariff to clarify that it will treat all non-zero Energy Imbalance Market base schedules as integrated forward market base schedules for the purposes of calculating minimum load costs and bid cost recovery.<sup>19</sup> CAISO states that this proposed revision will account for negative minimum load costs when it commits a multi-stage generating resource participating in the Energy Imbalance Market at a configuration lower than that indicated in its base schedule. Here, CAISO explains that it will calculate minimum load costs the same way that it calculates minimum load costs for non-Energy Imbalance Market resources pursuant to proposed section 11.8.4.1.2, i.e., as the difference between the resource's real-time minimum load costs and the maximum of either (1) the minimum load costs associated with the resource's day-ahead configuration, regardless of whether the resource was committed by CAISO or submitted a self-schedule, or (2) the minimum load costs associated with the resource's real-time, self-scheduled configuration, as explained above.<sup>20</sup>

10. CAISO states that it analyzed the impact of the current tariff rules on minimum load cost settlements and estimates that, since May 1, 2014, the impact to the CAISO market is approximately \$2.5 million. CAISO states that approximately \$2 million of this estimate is attributable to the over-accounting of minimum load costs when a multi-stage generating resource was self-scheduled in the same configuration in both the day-ahead and real-time markets. CAISO adds that the remaining \$511,000 is attributable to the over-accounting of minimum load costs when a multi-stage generating resource was self-scheduled in the day-ahead market and was dispatched in the real-time market at a higher configuration. CAISO asserts that, even though it cannot be certain as to the exact magnitude of the impact, without the proposed revisions in the instant filing, the potential exists for market participants to change their bidding behavior to unfairly recover increased minimum load costs.<sup>21</sup>

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<sup>18</sup> CAISO, Proposed Tariff § 11.8.4.1.2.

<sup>19</sup> *Id.* § 11.29(f)(2); *see* CAISO Filing at 27.

<sup>20</sup> *Id.* at 25.

<sup>21</sup> *Id.* at 26.

11. CAISO requests waiver of the 60-day prior notice requirement to allow its proposed tariff provisions to become effective March 13, 2015, one day after filing.<sup>22</sup> CAISO states that this effective date is critical to ensuring that it can immediately settle bid cost recovery payments under the revised proposal for trading dates beginning on the requested effective date. In addition, CAISO states that its requested effective date will ensure that market participants do not modify their bidding behavior to exploit the opportunities identified in the instant filing to over-recover minimum load costs between the filing date and 60 days after filing.

### **III. Notice and Responsive Pleadings**

12. Notice of CAISO's filing was published in the *Federal Register*, 80 Fed. Reg. 14,998 (2015), with interventions and protests due on or before April 2, 2015. Timely motions to intervene were filed by Northern California Power Agency; Puget Sound Energy, Inc.; NRG Power Marketing LLC and GenOn Energy Management, LLC; Pacific Gas and Electric Company; San Diego Gas & Electric Company; the Modesto Irrigation District; the City of Santa Clara, California; and California Department of Water Resources State Water Project. Timely motions to intervene and comments were filed by PacifiCorp; the Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California (Six Cities); and Southern California Edison Company (SoCal Edison). On April 17, 2015, CAISO filed an answer to SoCal Edison's comments.

13. Commenters generally support CAISO's efforts to prevent the over-recovery of minimum load costs in real-time bid cost recovery calculations and CAISO's proposed effective date of March 13, 2015.<sup>23</sup> PacifiCorp states that the proposed tariff revisions will ensure that multi-stage generating resources do not receive excessive bid cost recovery, and will allow CAISO to apply the same minimum load costs treatment to multi-stage generating resources in the Energy Imbalance Market as it applies to multi-stage generating resources in CAISO.<sup>24</sup> Six Cities assert that the proposed tariff revisions are consistent with appropriate recovery of commitment costs resulting from CAISO dispatch and are necessary to prevent excessive bid cost recovery uplift.<sup>25</sup>

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<sup>22</sup> *Id.* at 28.

<sup>23</sup> PacifiCorp April 2, 2015 Comments at 3 (PacifiCorp Comments); Six Cities April 2, 2015 Comments at 2 (Six Cities Comments); SoCal Edison April 2, 2015 Comments at 3 (SoCal Edison Comments).

<sup>24</sup> PacifiCorp Comments at 3.

<sup>25</sup> Six Cities Comments at 2.

14. SoCal Edison supports CAISO's efforts to prevent over-recovery by multi-stage generating resources, agrees that CAISO's proposal is reasonable, and recommends that the Commission accept the instant filing. However, SoCal Edison asserts that CAISO's proposed language lacks specific implementation detail, which it asserts "has led to many unintended payment calculations."<sup>26</sup> Thus, SoCal Edison states that implementation details should be incorporated as part of CAISO's tariff to ensure consistent bid cost recovery calculations.

15. In response to SoCal Edison's comments, CAISO states that its proposed tariff revisions will prevent the over-recovery of minimum load costs in the Energy Imbalance Market. CAISO asserts that its proposal to treat all Energy Imbalance Market base schedules as integrated forward market schedules prevents excessive bid cost recovery payments because included in the calculation of a multi-stage generating resource's bid cost recovery payments are the cost savings attributable to decrementing the resource to a configuration in the real-time market that is lower than that indicated in its base schedule. CAISO states that SoCal Edison's comments reflect a general concern that CAISO has not provided enough time to consider specific implementation scenarios regarding bid cost recovery issues during previous market simulations and development processes.<sup>27</sup> To address this concern, CAISO states that it will address bid cost recovery and variable energy resource settlements, provide concrete and high-level policy examples, and conduct working group sessions in its ongoing bid cost recovery stakeholder process.<sup>28</sup>

#### IV. Discussion

##### A. Procedural Matters

16. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2014), the timely, unopposed motions to intervene serve to make the entities that filed them parties to the proceeding.

17. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2014), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We accept CAISO's answer because it has provided information that assisted us in our decision-making process.

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<sup>26</sup> SoCal Edison Comments at 3.

<sup>27</sup> CAISO April 17, 2015 Answer at 2.

<sup>28</sup> *Id.* at 2-3.

## B. Commission Determination

18. We find that the proposed revisions to CAISO's bid cost recovery tariff provisions are just and reasonable and provide sufficient detail concerning how CAISO will calculate bid cost recovery payments for multi-stage generating resources given various configurations and commitment intervals. Specifically, CAISO's proposal helps prevent the opportunity for multi-stage generating resources that submit a self-schedule in the day-ahead market to over-recover minimum load costs when committed by CAISO in the real-time market. CAISO's proposal also allows for the inclusion of decremental minimum load costs in the calculation of a multi-stage generating resource's minimum load costs to include the cost savings associated with committing a resource at a lower configuration in the real-time market. These revisions extend to the calculation of bid cost recovery for a multi-stage generating resource participating in the Energy Imbalance Market that is committed at a configuration lower than that indicated in its base schedule.

19. SoCal Edison supports acceptance of CAISO's filing but raises concerns regarding the implementation details of CAISO's proposal. We find that CAISO has supported its current proposal as just and reasonable and we will not direct further tariff revisions at this time.<sup>29</sup> We note, however, that CAISO commits to future working group sessions for interested stakeholders in its ongoing bid cost recovery stakeholder process,<sup>30</sup> and we encourage SoCal Edison to pursue its concerns through that process.

20. Finally, we find that good cause exists to grant CAISO's request for waiver of the 60-day prior notice requirement because waiver will allow CAISO to immediately implement its proposed tariff revisions and prevent market participants from capitalizing on the opportunity to over-recover minimum load costs identified by CAISO in the instant filing.<sup>31</sup> Therefore, we accept CAISO's proposed tariff revisions for filing, effective March 13, 2015, as requested.

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<sup>29</sup> In any event, SoCal Edison does not identify the specific implementation details that it suggests CAISO include.

<sup>30</sup> CAISO April 17, 2015 Answer at 2-3.

<sup>31</sup> 18 C.F.R. § 35.11 (2014). See *Central Hudson Gas and Electric Corp.*, 60 FERC ¶ 61,106, *order on reh'g*, 61 FERC ¶ 61,089 (1992).

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The Commission orders:

CAISO's filing is hereby accepted, effective March 13, 2015, as discussed in the body of this order.

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.

Document Content(s)

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