

123 FERC ¶ 61,288  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;  
Sudeen G. Kelly, Marc Spitzer,  
Philip D. Moeller, and Jon Wellinghoff.

California Independent System Operator Corporation      Docket No. ER08-73-000

ORDER CONDITIONALLY ACCEPTING MITIGATION MECHANISM

(Issued June 20, 2008)

1. In this order we conditionally accept, subject to modification, the California Independent System Operator Corporation's (CAISO) proposal to mitigate the market power potential of start-up and minimum load bids under the registered cost option in the day-ahead and real-time energy markets, effective upon implementation of the CAISO's Market Redesign and Technology Upgrade (MRTU).<sup>1</sup>

**I. Background**

2. On September 21, 2006, the Commission accepted the CAISO's MRTU Tariff, which, among other things, contains terms, conditions and market rules for managing the electric energy market in California under MRTU.<sup>2</sup> Under MRTU, generating units and resource-specific system resources are eligible to recover start-up and minimum load costs in addition to compensation for energy generated above the minimum load operating level. This three-part cost recovery system is designed to encourage participants to submit cost information and bids that are more reflective of the actual

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<sup>1</sup> CAISO October 19, 2007 Transmittal Letter Accompanying Amendment to MRTU Tariff to Implement Caps on Start-Up and Minimum Load Costs, Docket No. ER08-73-000 (2007) (proposing new section 39.6.1.6 to the CAISO MRTU Tariff) (Transmittal Letter). We note that when this proposal was filed, the effective date of the tariff sheets implementing the proposal was March 31, 2008, which, at the time, was the date MRTU was scheduled to go into effect. Subsequent to this filing, MRTU was delayed. On January 14, 2008, the CAISO notified the Commission that it does not request an implementation date for this proposal prior to the date of the overall implementation of the MRTU program. CAISO January 14, 2008 Monthly MRTU Status Report, Docket No. ER06-615-000, at 3.

<sup>2</sup> *Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274 (2006) (September 2006 MRTU Order).

operational cost components of each resource, and to allow the CAISO to commit and dispatch generating resources more efficiently.<sup>3</sup> Bids for energy above minimum operating levels are subject to system level bid caps and locational market power mitigation rules. The locational market power mitigation rules are designed to limit the potential for exercise of market power within resource-constrained areas, or load pockets, where uncompetitive market conditions may exist.

3. While the CAISO will subject energy bids to local market power mitigation, its MRTU Tariff does not limit the submittal of uncompetitive, excessively high start-up and minimum load bids. Rather, the MRTU Tariff provides that a resource may semi-annually select one of two options to specify the resource's start-up and minimum load cost recovery for the day-ahead and real-time energy markets.<sup>4</sup> The proxy cost option<sup>5</sup> is a cost-based option, which includes a fuel cost component that is updated on a daily basis to account for changes in the cost of gas in the daily spot market. The registered cost option is a market-based option. Under this option, a resource submits start-up and minimum load bids but is not allowed to change this bid for the subsequent six months. The current MRTU Tariff indicates that these bids do not need to be related to actual costs.<sup>6</sup>

## II. CAISO's Filing

### A. Potential for Market Power

4. In the instant filing, the CAISO proposes to amend the MRTU Tariff to limit the level of start-up and minimum load bids under the registered cost option to prevent suppliers from exercising market power through submission of extremely high start-up and minimum load bids, particularly in constrained areas of the grid. According to the CAISO, the lack of mitigation measures for the registered cost option creates the

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<sup>3</sup> Transmittal Letter at 2.

<sup>4</sup> Section 30.2 of the MRTU Tariff.

<sup>5</sup> Section 30.4 of the current MRTU Tariff specifies that under the proxy cost (cost-based) option, start-up and minimum load costs will be formulaic values adjusted daily for fuel-cost variation and based on a resource's actual operating parameters (*e.g.*, start-up fuel consumption, heat rate at minimum operating level), and relevant fuel costs.

<sup>6</sup> Section 30.4 of the current MRTU Tariff specifies that under the registered cost (market-based) option, a resource may choose values for start-up and minimum load costs, without regard to the unit's performance parameters or underlying costs, that will be effective for the subsequent six-month period.

potential for suppliers to exercise local market power “in a number of ways.”<sup>7</sup> The CAISO states that when it initially designed MRTU, it presumed that generators choosing the registered cost option were not likely to submit excessively high start-up and minimum load costs. According to the CAISO, doing so could potentially price them out of the market, thereby making them effectively unavailable for selection under MRTU market rules for the minimum six-month period for which the unit’s registered costs would be in effect.

5. After conducting further analysis of the issue, however, the CAISO determined that a variety of bidding strategies could be employed to exercise locational market power through excessively high start-up and minimum load costs. The CAISO states, for example, that extremely high start-up and minimum load costs could allow a unit to be withheld for economic reasons, which in turn could result in other resources in the generator’s portfolio earning high locational marginal prices (LMP), as prices are driven up by withholding. According to the CAISO, under other market conditions and bidding strategies, a generator could profit directly by having a unit with extremely high start-up and minimum load costs dispatched for reliability purposes. In addition, the CAISO asserts that, extremely high start up and minimum load costs for units under resource adequacy agreements could have the effect of excluding this resource adequacy capacity from the residual unit commitment (RUC) process under MRTU.<sup>8</sup> The CAISO explains that units are selected in the RUC process based on three components: start-up and minimum load costs plus RUC availability bids. The CAISO states that resource adequacy units are required to have a RUC availability bid of zero and do not receive a RUC availability payment. Nevertheless, capacity under resource adequacy contracts could be effectively excluded from the RUC process as a result of extremely high start-up and minimum load costs.

6. Furthermore, although a resource may be unavailable for selection due to its registered start-up and minimum load costs, under MRTU market rules, the resource can always self-commit. By self-committing, the resource becomes a price taker, i.e., unable to set the applicable LMP, but receive the LMP, and is dispatched regardless of its start-up and minimum load costs. By self committing, a resource could therefore avoid pricing itself out of the market during hours when it may not be profitable to exercise local market power through extremely high start-up and minimum load costs. Thus, according to the CAISO, the ability to self-commit a unit provides generation owners with a

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<sup>7</sup> Transmittal Letter at 2.

<sup>8</sup> Under MRTU, if the CAISO determines after the close of the day-ahead market that it does not have sufficient resources committed to meet its next day’s forecasted load, it will run a RUC process to commit additional capacity to be available in real time. *See generally* September 2006 MRTU Order, 116 FERC ¶ 61,274 at P 130-191.

mechanism that can be used to “switch” extremely high start-up and minimum load costs “on” or “off” as needed in order to implement strategies for exercising various degrees of local market power throughout the year.

7. The CAISO adds that its review of market rules employed by other independent system operators (ISOs) with locational marginal pricing reveal that each limits the potential for local and system market power that would result from extremely high start-up and minimum load bids.<sup>9</sup> The CAISO concludes that, while the degree to which local market power might be exercised through very high start-up and minimum load costs under MRTU depends on a variety of conditions that may be difficult to assess at this time, the potential for such bidding strategies does exist under current MRTU market rules and warrants mitigation.

**B. Proposal to Mitigate Market Power**

8. In the instant filing, the CAISO proposes to calculate bid caps for the registered cost option through use of a projected proxy cost to mitigate the market power potential of excessively high start-up and minimum load bids.<sup>10</sup> Projected proxy costs would be calculated whenever a Scheduling Coordinator selects the registered cost option.

9. The CAISO proposes that for units within local capacity areas, where the potential for exercise of market power is greatest, start-up and minimum load costs under the registered cost option may not exceed 200 percent of the unit’s projected start-up and minimum load costs. For units outside of local capacity areas, start-up and minimum load costs under the registered cost option may not exceed 400 percent of the unit’s projected start-up and minimum load costs.

10. Under the CAISO’s proposed approach, natural gas prices used in calculating caps for gas-fired units would be based on applying the highest average monthly price of monthly forward gas contracts at Henry Hub<sup>11</sup> for the six-month period during which the registered cost option is in effect. These prices would be applied to the fuel consumption

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<sup>9</sup> See Transmittal Letter at 4.

<sup>10</sup> Projected proxy cost is a calculation of a resource’s start-up and minimum load costs for a prospective six-month period used to determine maximum registered cost values (bid caps) for the resource. The projected proxy cost would be based on a resource’s operating parameters and stored in the CAISO’s master file. See MRTU Tariff, Appendix A, Master Definitions Supplement.

<sup>11</sup> Henry Hub is the pricing point for natural gas futures contracts traded on the New York Mercantile Exchange (NYMEX). See MRTU Tariff, Appendix A, Master Definitions Supplement. Henry Hub is located in Louisiana, near the Texas border.

parameters used for calculating a resource's proxy cost, as set forth in the CAISO's Business Practice Manuals.<sup>12</sup> The derived cap for a resource, based on these projected costs, would then remain at that level for the next six months.<sup>13</sup> For non-gas fired units, the CAISO states that projected start-up and minimum load costs would be calculated using the information contained in the Master File<sup>14</sup> for those units.

11. The CAISO states that its Department of Market Monitoring (DMM) has performed analyses of the historical volatility of daily spot market gas prices in California relative to the forward price of monthly gas contracts at Henry Hub in order to assess the potential risk that extreme spikes in the daily spot market gas prices could cause actual start-up and minimum load costs of units to rise above the proposed caps. The CAISO states that the DMM determined that the 200 percent cap provides sufficient "headroom" to cover the maximum spike in gas prices that has occurred over the last five years, relative to the NYMEX futures prices in the preceding six months.

12. However, under the CAISO's proposal, if daily spot market gas prices increase to the point where a unit's start-up or minimum load costs (calculated based on daily spot market gas prices) exceed that unit's bid as submitted under the registered cost option, that unit could switch to the proxy cost option. However, once a unit has switched to the proxy cost option, that unit would be required to remain under the proxy cost option for the balance of the six-month period.

13. The CAISO asserts that a key advantage to its proposal is that the necessary start-up and other operating parameters used to calculate the projected proxy cost for all gas-fired units will already have been submitted by market participants and entered into the CAISO's Master File. Therefore, calculation of the registered cost option bid caps would utilize the same data as the proxy cost option but would substitute a different gas price.

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<sup>12</sup> All of the CAISO Business Practice Manuals are available at <http://www.aiso.com/17ba/17baa8bc1ce20.html>.

<sup>13</sup> As an example, the CAISO states that in order to calculate bid caps applicable for units starting the registered cost option in February 2008, the average prices for monthly NYMEX gas contracts at Henry Hub for the months February through July 2008 would first be calculated. The maximum of these six monthly average prices would be the gas price used in calculating the cap applicable for each unit starting the registered cost option in February 2008. The cap for these units would then remain fixed at that level for the six-month period from February through July 2008. The bid caps for any units submitting bids in subsequent months would be calculated in the same manner.

<sup>14</sup> The CAISO Master File is a file containing information regarding Generating Units, Loads and other resources. See MRTU Tariff, Appendix A, Master Definitions Supplement.

The CAISO adds that the substitute gas price would be derived from a basic formula that all market participants could easily calculate. Further, the CAISO states that the proposed gas price index is based on publicly available data that would be available well in advance of the time when start-up and minimum load costs would need to be submitted to the CAISO. The CAISO concludes that its proposed measures would mitigate the potential exercise of local market power while simultaneously providing suppliers with significant discretion in selecting their preferred start-up and minimum load costs levels.

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

14. Notice of the CAISO's filing was published in the *Federal Register*, 72 Fed. Reg. 60,838 (2007), with interventions and protests due on or before November 9, 2007. Timely motions to intervene were filed by Constellation Energy Commodities Group, Inc. and Constellation NewEnergy, Inc. (collectively the CEG Companies), the California Electricity Oversight Board (CEOB), Powerex Corp. (Powerex), the M-S-R Public Power Agency and the City of Santa Clara, California, doing business as Silicon Valley Power (collectively SVP/M-S-R), the California Department of Water Resources State Water Project (SWP), the Western Power Trading Forum (WPTF), NRG Power Marketing Inc., Cabrillo Power I LLC, Cabrillo Power II LLC, El Segundo Power LLC and Long Beach Generation LLC (collectively the NRG Companies), and the Northern California Power Agency (NCPA). SWP filed comments in support of the CAISO's amendment. Comments were also submitted by NCPA. Protests were filed by WPTF and the NRG Companies. Motions to intervene out-of-time were filed by Calpine Corporation (Calpine), Pacific Gas and Electric Company (PG&E) and Southern California Edison Company (SoCal Edison). The CAISO filed its answer on November 26, 2007.

### **IV. Discussion**

#### **A. Procedural Matters**

15. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2007), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

16. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. 385.214(d) (2007), the Commission will grant the late-filed motions to intervene of Calpine, PG&E and SoCal Edison, given their interest in the proceeding and the absence of undue prejudice and delay.

17. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. 385.213(a)(2) (2007), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept the CAISO's answer because it has assisted us in our decision-making process.

**B. Adequate Cost Recovery****1. WPTF/NRG Protest**

18. WPTF states in its protest that it supports the proposal to allow a Scheduling Coordinator to switch to the proxy cost option if, due to a gas price spike, the proxy cost would exceed the start-up or minimum load costs specified under a registered cost option. WPTF argues, however, that Scheduling Coordinators should not be locked into the proxy cost option for the balance of the six-month period if fuel prices subsequently decline. WPTF contends that a market participant limited to cost-based start-up and minimum load costs for the remainder of the six month period could be exposed to unrecoverable costs, given that the CAISO's proxy cost does not include certain fuel-related expenses such as gas imbalance penalties or non-fuel costs such as costs associated with accumulated wear and tear incurred over a number of start-ups. WPTF argues that exposure to unhedged costs such as these would encourage market participants to increase their market-based bids under the registered cost option to protect against the chance that they would need to switch to the proxy cost for the balance of a six-month term. WPTF states that this would result in market inefficiencies.

19. In support of its position, WPTF points out that the CAISO's reliability must-run (RMR) contract provides compensation for the risk of imbalance penalties and wear and tear from start-ups. WPTF requests that the Commission order the CAISO to amend its proposal to allow generators to return to the registered cost option for the balance of a six-month lock-in period in the event that fuel prices decline. NRG states in its protest that it adopts WPTF's arguments regarding the CAISO's proposed bid caps.

**2. CAISO's Answer**

20. The CAISO states that it proposed the option to switch to cost-based recovery in response to concerns of increased financial risk resulting from spot market gas price spikes. The CAISO points out, however, that even without caps on start-up and minimum load costs, units selecting the registered cost option would still face the risk that fuel prices could increase over the six month lock-in period to the point where their costs at spot market prices would exceed their bids. The CAISO states that allowing units to switch to the proxy cost option under these conditions essentially eliminates the risk associated with a market-based choice, even for those generators that submit costs below the registered cost option caps.

21. The CAISO states that the ability to switch between the proxy and registered cost options without limit, as proposed by WPTF and NRG, could result in the submittal of uncompetitively high start-up and minimum load bids from units under the registered cost option rather than their use of the proxy cost option. The CAISO argues that it would be unreasonable not only to eliminate all of the gas price risk inherently associated with the market-based option, but to eliminate the risk in a manner that creates the potential for

generators to exercise market power or to game market rules by switching back to the registered cost option when decreases in spot market gas prices cause their actual costs to drop below registered cost option levels.

22. In addition, the CAISO disagrees with WPTF's allegation that the proxy cost option does not provide adequate cost recovery. The CAISO states that in calculating the proxy cost option for generators, MRTU software would take into account gas, auxiliary electrical energy and operations and maintenance (O&M) costs incurred by generators during start-up and minimum load operations.<sup>15</sup> The CAISO states that in a compliance filing it would add this additional information to MRTU Tariff section 30.4 to clarify the costs included in the proxy cost option provision. The CAISO concludes that because recovery under the proxy cost option includes auxiliary power and O&M costs, there is no merit to the argument that it is necessary to allow units to switch freely between the two cost options in order to avoid exposure to unrecoverable costs.

### **3. Commission Determination**

23. The Commission conditionally accepts the CAISO's proposal to mitigate the market power potential of start-up and minimum load bids under the registered cost option, subject to modification, as discussed below. Start-up and minimum load bids under the registered cost option will be limited to 200 percent of projected costs for units in local capacity areas, and 400 percent of projected costs for units outside of these areas, as proposed by the CAISO.

24. At the outset, we note that no party, including WPTF and NRG, has disputed the CAISO's finding that bidding strategies could be employed to exercise varying degrees of local market power through excessively high start-up and minimum load costs. In addition, no party has disputed that the CAISO finds it necessary to mitigate this potential market power. Generation bids include a variety of competitive variables. Manipulation of bid parameters under certain market conditions in locally constrained areas could effectively result in the exercise market power. To guard against this, the MRTU Tariff already includes locational mitigation measures for energy bids above the minimum load level to limit market power within resource-constrained areas. In addition, the MRTU Tariff limits the start-up and minimum load cost recovery options to semi-annual selections.<sup>16</sup> The additional measures proposed in the instant filing will help prevent the exercise of market power in connection with registered cost option bids.

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<sup>15</sup> See MRTU Tariff section 39.7.1.1 ("Variable Cost Option").

<sup>16</sup> *Cal. Indep. Sys. Operator Corp.*, 105 FERC ¶ 61,140 (2003), at P 111 (October 2003 MRTU Order).

25. In addition, the mitigation measures the CAISO proposes were thoroughly vetted through the stakeholder process. We note that the CAISO issued several whitepapers on this issue, and modified its proposal based on market participant input.<sup>17</sup> Indeed, the price caps were set in part based on a survey of comparable caps in other ISOs, and buttressed by analysis of actual historical California gas data over the past five years.<sup>18</sup> Based on the evidence before us, these caps appear reasonable.

26. Under similar circumstances, the Commission has allowed other ISOs to mitigate start-up and minimum load bids,<sup>19</sup> although the CAISO's local market power mitigation measures differ from those approved for other ISOs. Measures proposed by the CAISO in the instant filing can be implemented without software modification that could delay MRTU implementation. Accordingly, we find the CAISO's registered cost option bid cap proposal is a reasonable mitigation measure, given its transparency and ease of implementation.

27. We note that the CAISO states that this tariff provision "mirrors PJM market rules by allowing generation owners to choose either a daily cost-based option or a six month bid-based option for start-up and minimum load bids."<sup>20</sup> However, unlike the CAISO's registered cost option bid cap proposal, "PJM mitigates start-up and minimum load bids

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<sup>17</sup> See Department of Market Monitoring CAISO (DMM), Options for Bid Caps for Start-Up and Minimum Load Costs: Draft Revised Proposal (August 2007) available at <http://www.caiso.com/1c4a/1c4ad20636810.pdf>; DMM's Proposal on Bid Caps for Start-Up and Minimum Load Costs (June 2007) available at <http://www.caiso.com/1c08/1c08b3ec1a150.pdf>; DMM's Options for Bid Caps for Start-Up and Minimum Load Costs, Supplemental Report (May 2007) available at <http://www.caiso.com/1be1/1be1b86023e30.pdf>; DMM's Options for Bid Caps for Start-Up and Minimum Load Costs (Feb. 2007) available at <http://www.caiso.com/1c4a/1c4ad20936814.pdf>; see also Memorandum from CAISO DMM to CAISO Board of Governors, Decision on Bid Caps for Start-up and Minimum Load Bids under MRTU, at 4 (Aug. 2007), available at <http://www.caiso.com/1c4a/1c4ad20636810.pdf>; Market Surveillance Committee of the California ISO, Opinion on "Start-Up and Minimum Load Bid Caps Under MRTU," at 3 (Aug., 2007), available at <http://www.caiso.com/1c4a/1c4ad20936814.pdf>.

<sup>18</sup> See, e.g., DMM's May 16, 2007 Supplemental Report, available at <http://www.caiso.com/1be1/1be1b86023e30.pdf>.

<sup>19</sup> See, e.g., Transmittal Letter at 5 and footnote 4 (citing PJM Manual 11: Scheduling Operations at 23). New York ISO, New England ISO and Midwest ISO all impose limits on start-up and minimum load bids.

<sup>20</sup> *Id.* at 4 and n.5.

to cost-based levels on a unit-by-unit basis whenever a unit is dispatched due to a transmission constraint that is deemed to be non-competitive.”<sup>21</sup> The CAISO states that “implementing the more dynamic approach employed by PJM would require software modifications which could only be incorporated in a later release of the MRTU software.”<sup>22</sup> We take administrative notice that the CAISO Market Surveillance Committee published an opinion that “supports implementing [the PJM] mechanism in a future release of MRTU”<sup>23</sup> and finds that it is “the most suitable approach.”<sup>24</sup> The CAISO and stakeholders should consider incorporation of the necessary software modifications to implement the PJM mechanism in a future release of MRTU.

28. WPTF and NRG object to the requirement that if a supplier switches to the proxy cost option, it must continue to use this option for the remainder of the six-month bid period. Both WPTF and NRG contend that without the flexibility of being permitted to switch back to the registered cost option within the six-month period, a supplier would be exposed to costs unrecoverable under the proxy cost option. We disagree. We find that allowing the supplier to switch to the proxy cost option once during the six month period, in the event that its fuel costs rise above the level of its registered cost option bids, sufficiently removes a significant amount of the gas price risk inherent in the bid-based option and, therefore, provides the supplier with a reasonable safety net. Furthermore, the option to switch once to the proxy cost during the sixth month period is purely at the discretion of a resource. As such, a resource manages the timing of when and if it will move to cost-based start-up and minimum load recovery, fully aware that it must remain in that mode for the balance of that particular six-month period. In the Commission’s prior review and acceptance of the semiannual selection process, we found that this process was consistent with an order approving market-based rates for the PJM market in which the Commission determined that a fixed six-month period would deter gaming behavior.<sup>25</sup> We continue to view the semiannual selection period as a necessary deterrent to gaming behavior, and find that its removal would run contrary to the purpose of the bid cap mitigation, which is to inhibit the exercise of market power and bidding strategies that lead to market inefficiencies. As such, we deny the requests of WPTF and NRG to allow generators to return to the registered cost option within a six-month lock-in period.

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<sup>21</sup> *Id.* (citing PJM Manual 11: Scheduling Operations at 23).

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

<sup>23</sup> Market Surveillance Committee of the California ISO, Opinion of “Start-Up and Minimum Load Bid Caps under MRTU,” at 2.

<sup>24</sup> *Id.* at 1.

<sup>25</sup> See October 2003 MRTU Order, 105 FERC ¶ 61,140 at P 111 (citing *Atlantic City Elec. Co.*, 86 FERC ¶ 61,248, at 61,904 (1999)).

29. We disagree with the WPTF's and NRG's assertion that the proxy cost does not include fuel-related and non-fuel costs. In its answer the CAISO has stated that MRTU software will include both gas costs as well as auxiliary electrical energy costs with respect to start-up costs. In addition, the MRTU software will calculate gas as well as operation and maintenance (O&M) costs when calculating minimum load costs incurred by generators. We note that the proxy cost represents the minimum amount that a supplier will be paid when committed to start up or operate at minimum load. We further note that, typically, committed generators will also be dispatched for energy (and perhaps ancillary services) for which they will be paid market clearing prices. Therefore, in practice, suppliers will be able to earn revenues in excess of start-up and minimum load costs. As such, we find that cost recovery under the proxy cost option is adequate. Also in its answer, the CAISO offered to add detail to MRTU Tariff section 30.4 to clarify that auxiliary power costs and O&M costs<sup>26</sup> are included in the proxy cost option. We direct the CAISO to include in its compliance filing this additional detail to MRTU Tariff section 30.4.

### C. Methodology/Definition of Projected Proxy Cost

#### 1. WPTF/NRG Protest

30. WPTF argues that the CAISO should use the highest forward gas price during the sixth month period to calculate the registered cost option bid caps instead of an "undefined and ambiguous" highest average of forward prices.<sup>27</sup> In addition, WPTF argues that the gas price used in the calculation of the projected proxy cost has a direct effect on the bid cap level, and consequently, on the revenues a supplier can recover from the CAISO's markets. WPTF requests that the Commission direct the CAISO to calculate the projected proxy cost using the *highest daily closing price* for the NYMEX Henry Hub gas futures contract reported during the 30-day period immediately preceding the six-month lock-in period, rather than the *maximum monthly average price of six monthly average prices*, as the CAISO proposes. WPTF further requests that language to this effect be included in the MRTU Tariff. In support of its position, WPTF argues that using the highest forward gas price would more effectively mitigate any increased risk of unanticipated gas price spikes.

31. In addition to taking issue with projected proxy cost proposed methodology, WPTF argues that neither the tariff definition provided by the CAISO nor the CAISO's transmittal letter adequately explains how the gas price will be derived. WPTF requests

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<sup>26</sup> According to the CAISO, O&M costs have a default value of \$2/MWh or \$4/MWh, respectively, for combustion turbine or reciprocating engine units.

<sup>27</sup> WPTF November 9, 2007 Filing at 6.

that, if the Commission does not accept the WPTF alternative projected proxy cost methodology, the CAISO be required to expressly set forth in the MRTU Tariff, rather than in a Business Practice Manual, how the highest average price underlying the projected proxy cost would be determined. The NRG Companies state that they support the WPTF protest.

## **2. CAISO's Answer**

### **a. Methodology**

32. In its response, the CAISO states that details of how the projected proxy cost will be calculated have been included in a draft of the Business Practice Manual for Market Instruments as posted on the CAISO's website on November 15, 2007. The CAISO states that, as shown in the Business Practice Manual for Market Instruments, it will calculate and update the projected gas price used to determine maximum start-up and minimum load bids under the registered cost option on a monthly basis using a two-stage process:

- 1) Daily closing prices for monthly NYMEX Gas Futures contracts at Henry Hub for each of the next six monthly contracts are averaged over the first 21 days of the month. A separate average is calculated for each of the six monthly contracts, based on the average closing price of the contract over the first 21 days (i.e., at the end of the month of May, six separate averages would be calculated for the daily closing prices over the first 21 days of May for monthly NYMEX natural gas contracts at Henry Hub for the contract months of June through October).
- 2) From the example stated above, the maximum of the six separate averages calculated for the contract months of June through October would be used as the projected price of gas in calculating start-up and minimum load caps for units submitting start-up and minimum load costs under the registered cost option any time from the end of May until the time when the cost would be updated at the end of the following month.

33. The CAISO explains that averaging closing NYMEX prices in the first stage of this process is designed to smooth out the effect of extreme day-to-day spikes in futures prices that may occur over the course of this 21-day period. The CAISO adds that the projected price of gas used in calculating start-up and minimum load bid caps is based on the maximum of the resulting six month averages to ensure that caps provide significant headroom above actual gas prices during most or all of the subsequent six month period. Further, the CAISO states that deriving the projected price of gas from the maximum of the resulting six month averages would provide appropriate protection against excessive start-up and minimum load costs that would reflect the exercise of market power.

34. The CAISO contends that its proposed process for calculating the projected proxy cost is preferable to the process advocated by WPTF, since the WPTF process would not provide the CAISO with sufficient time to calculate the projected price of gas. The CAISO further states that under its proposal, which utilizes closing NYMEX futures prices over the first 21 trading days of each month, the CAISO will have approximately five business days to complete the calculation process and post the projected price on its website. The CAISO argues that it would be administratively infeasible to implement the process proposed by WPTF. Specifically, the CAISO contends that it would be infeasible to utilize prices over the 30-day period immediately preceding the registered cost option bid due date for any month in the six month period during which the registered cost option would be in effect, as this would afford the CAISO virtually no time to perform and post the necessary calculations.

**b. Definition**

35. The CAISO contends that the proposed MRTU Tariff definition of projected proxy cost contains sufficient detail to adequately describe how the gas prices are used to calculate start-up and minimum load cost caps. The CAISO asserts that the definition of projected proxy cost states that start-up and minimum load cost caps are to be based on the highest average price for monthly forward gas contracts at Henry Hub for the relevant six month period. The CAISO further contends that the proposed definition satisfies the Commission's rule of reason, which requires the filing of only those practices that: 1) significantly affect rates and service; 2) are realistically susceptible of specification; and 3) are not so generally understood in any contractual arrangement as to make recitation superfluous.<sup>28</sup>

36. The CAISO asserts that additional details set forth in the Business Practice Manual for Market Instruments neither modify nor fundamentally expand upon this projected proxy cost methodology. The CAISO contends, rather, that the additional details included in the Business Practice Manual for Market Instruments clarify certain details consistent with the proposed definition of projected proxy cost provided in the MRTU Tariff Appendix A Master Definition Supplement. The CAISO concludes that its proposal to include certain details concerning the gas price determination in the Business Practice Manual for Market Instruments instead of the MRTU Tariff is consistent with the Commission's rule of reason, and therefore that the requests of WPTF and NRG should be denied.

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<sup>28</sup> CAISO November 26, 2007 Answer at 10 (citing *Prior Notice and Filing Requirements Under Part II of the Federal Power Act*, 64 FERC ¶ 61,139, at 61,988 (1993)).

### 3. Commission Determination

37. The Commission accepts the CAISO's proposal to develop the projected proxy cost using the highest average monthly price for monthly gas contracts over a forward-looking six month period at the time the bid is submitted. However, we find that as a mitigation measure under the registered cost option, any price indices used, including those developed for the purpose of calculating a bid cap via a projected proxy cost, should be representative of the natural gas prices experienced in the CAISO market.<sup>29</sup> Natural gas futures contracts with the delivery point at Henry Hub, located in Louisiana, are not sufficiently representative of natural gas prices for California or Western natural gas delivery points, and are, therefore, inappropriate. A more localized, California reference point would serve as a better benchmark for setting a just and reasonable cap. Accordingly, we direct the CAISO to submit a compliance filing within 30-days of the date of issuance of this order, modifying its proposal to incorporate a more geographically appropriate index to use as a proxy for natural gas prices under the registered cost option.

38. Finally, with respect to the definition of projected proxy cost, we agree with WPTF that the explanation as well as the methodology derivation needs to be clear in the MRTU Tariff. The explanation in the CAISO's answer is easier to follow and thus more transparent than the filing's transmittal letter and tariff provisions. While technical information is at times more appropriate in a reference manual, we note that such technical detail is used as operational data and intended to supplement, not complement,

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<sup>29</sup> Cf. *Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities*, Order No. 697, 72 Fed. Reg. 39,904, at P 542 (July 20, 2007), FERC Stats. & Regs. ¶ 31,252, *clarified*, 121 FERC ¶ 61,260 (2007), *order on reh 'g*, Order No. 697-A, 73 Fed. Reg. 25,832 (May 7, 2008), FERC Stats. & Regs. ¶ 31,268 (2008) (finding that "an index is acceptable benchmark evidence and mitigates affiliate abuse concerns so long as that benchmark price or index reflects the market price where the affiliate transaction occurs (i.e., is a relevant index)"); *Price Discovery in Natural Gas and Electricity Markets*, 109 FERC ¶ 61,184, at P 63 (2004) (recognizing differences between Eastern and Western electricity markets in adopting minimum criteria for use of an index point in a jurisdictional tariff).

information included in the tariff. If technical detail is needed to complete a definition or process, it must be included in the tariff.<sup>30</sup> We direct the CAISO to revise its definition accordingly, in the compliance filing.

**D. Cost Allocation and the MSSA**

**1. NCPA Protest**

39. NCPA is requesting intervention on behalf of itself and its pool members who are signatories to the metered subsystem aggregator agreement (MSS Aggregator Agreement) with the CAISO.<sup>31</sup> NCPA states that it does not object to the CAISO's filing and supports the idea of a mechanism to mitigate excessive start-up and minimum load costs. NCPA notes that the CAISO appears to support the NCPA's concern that, absent sufficient price discipline, significant cost impacts to market participants could occur as a result of the CAISO's collection of payments to cover generator start-up and minimum load costs. NCPA further states, however, that the CAISO's current proposal does not mitigate NCPA's concerns, as raised by NCPA in earlier pleadings pending before the Commission,<sup>32</sup> regarding the potential for allocation of a share of these start-up and minimum load costs to NCPA, contrary to the terms of its MSS Aggregator Agreement with the CAISO.

**2. Commission Determination**

40. We reject as beyond the scope of this proceeding NCPA's argument that allocation of start-up and minimum load costs to NCPA is contrary to the terms of its MSS Aggregator Agreement with the CAISO and that the CAISO's current proposal does not mitigate NCPA's concerns. In the current proceeding, the Commission rules on the

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<sup>30</sup> See *Cal. Indep. Sys. Operator Corp.*, 122 FERC ¶ 61,271 (2008) (assessing whether certain business practice manual provisions significantly affect rates, terms and conditions, and, therefore, must be included in the MRTU Tariff); see also *City of Cleveland v. FERC*, 773 F.2d 1368, 1376 (D.C. Cir. 1985) (requiring utilities to file "only those practices that affect rates and service significantly, that are reasonably susceptible of specification, and that are not so generally understood in any contractual arrangement as to render recitation superfluous").

<sup>31</sup> NCPA explains that the MSS Aggregator Agreement, approved as a settlement agreement by the Commission in August, 2002, establishes the relationship between NCPA, its member Cities, and the CAISO.

<sup>32</sup> See NCPA November 9, 2007 Protest at 3 (citing *Cal. Indep. Sys. Operator Corp.*, Docket Nos. ER06-615-011 and ER07-1257-000, NCPA pleadings of September 7, 2007 at 3-10 and October 11, 2007).

CAISO's proposal to impose limitations on start-up and minimum load bids in the day-ahead and real-time energy markets as a mitigation measure against the potential exercise of local market power. NCPA has already raised its argument regarding the potential allocation of a share of these costs to MSS entities in a September 7, 2007 protest to the CAISO's August 3, 2007 MRTU compliance filing, in Docket Nos. ER06-615-011 and ER07-1257-000.<sup>33</sup> The Commission will address NCPA's concerns in that proceeding. It is well-settled that the Commission has broad discretion over the scope of inquiry in a particular proceeding, and may determine whether certain issues are better addressed in a separate proceeding.<sup>34</sup> Accordingly, we will not address NCPA's concerns in this proceeding.

The Commission orders:

(A) The Commission hereby conditionally accepts, effective upon implementation of MRTU, the CAISO's proposal to mitigate the market power potential of start-up and minimum load bids under the registered cost option, as discussed in the body of this order.

(B) The Commission hereby directs the CAISO to submit a compliance filing within 30 days of the date of this order, as discussed in the body of this order.

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.

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<sup>33</sup> In that proceeding, the CAISO filed with the Commission modifications to its MRTU Tariff dealing with, among other things, allocation of net real-time market and integrated forward market bid cost uplift, including a proposal for allocating bid recovery costs to metered subsystem (MSS) entities such as NCPA. NCPA, as a load-following MSS entity and signatory to an MSS agreement with the CAISO, protested the CAISO's bid cost recovery allocation proposal.

<sup>34</sup> See, e.g., *Mobil Oil Exploration v. United Distrib. Cos.*, 498 U.S. 211, 239 (1991) ("An agency employs broad discretion in determining how to handle related, yet discrete, issues in terms of procedures . . . [such as] where a different proceeding would generate more appropriate information and where the agency was addressing the question.") (citations omitted).