# 144 FERC ¶ 61,047 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
 ER11-4100-002

 Corporation
 ER11-4100-003

 ER11-3616-003
 ER11-3616-004

 ER11-3616-005
 ER11-3616-005

#### ORDER ON COMPLIANCE AND REHEARING

(Issued July 18, 2013)

1. In this order, the Commission accepts in part and rejects in part the California Independent System Operator Corp.'s (CAISO) compliance filing to make CAISO's demand response program consistent with Commission Order No. 745. Also, since CAISO has revised its demand response compensation consistent with Commission Order No. 745, we grant CAISO's rehearing request regarding its reliability demand response resource (RDRR) proposal and direct a compliance filing to comply with Commission Order No. 719.

<sup>&</sup>lt;sup>1</sup> Demand Response Compensation in Organized Wholesale Energy Markets, Order No. 745, 76 FR 16,658 (Mar. 24, 2011), FERC Stats. & Regs. ¶ 31,322 (2011) (Oder No. 745), order on reh'g and clarification, Order No. 745-A, 137 FERC ¶ 61,215 (2011) (Order No. 745-A).

<sup>&</sup>lt;sup>2</sup> Wholesale Competition in Regions with Organized Electric Markets, Order No. 719, 73 FR 64,100 (Oct. 28, 2008), FERC Stats. & Regs. ¶ 31,281 (2008) (Order No. 719).

# I. Background

# A. Order No. 745 Compliance

- 2. On March 15, 2011, the Commission issued Order No. 745 directing certain modifications to the compensation of demand response resources in organized wholesale energy markets. Specifically, Order No. 745 requires each Regional Transmission Organization (RTO) and Independent System Operator (ISO) to pay a demand response resource the market price for energy, i.e., the locational marginal price (LMP), when two conditions are met. First, the demand response resource must have the capability to balance supply and demand as an alternative to a generation resource. Second, dispatching the demand response resource must be cost-effective as determined by a net benefits test in accordance with Order No. 745. The net benefits test is necessary to ensure that the overall benefit of the reduced LMP that results from dispatching demand response resources exceeds the costs of dispatching and paying LMP to those resources.
- 3. In order to implement the net benefits test, the Commission directed each RTO and ISO to develop a mechanism to approximate the price level at which dispatching demand response resources will be cost-effective. The Commission required each RTO and ISO to make a compliance filing by July 22, 2011, proposing tariff revisions necessary to implement the compensation approach adopted in Order No. 745, including the net benefits test. Order No. 745 also directed that the compliance filing either demonstrate that the RTO or ISO's current cost allocation methodology appropriately allocates cost to those that benefit from the demand reduction or propose revised tariff provisions that conform to this requirement.<sup>3</sup>
- 4. In response to Order No. 745, CAISO generally proposed to retain its already effective Proxy Demand Resource program. The Proxy Demand Resource program provided LMP compensation for demand resources during all hours. Thus, CAISO argued that it was consistent with Order No. 745. CAISO also proposed a net benefits test that determined two monthly threshold prices: one for off-peak hours and one for on-peak hours. CAISO set a bid floor for demand response resources at threshold prices, so bids by demand resources below the threshold price would be rejected.
- 5. CAISO's existing Proxy Demand Resource program also contained a mechanism known as the "default load adjustment." The default load adjustment

<sup>&</sup>lt;sup>3</sup> Order No. 745 at 102.

added the amount of energy provided by demand response into the total load of the host load serving entity. Since the energy was not consumed as a result of demand response, the host load serving entity paid for load it did not ultimately serve as a result of the default load adjustment.

- 6. In an order on December 15, 2011, the Commission found that CAISO did not provide adequate support that an allocation directly to the host load serving entities was consistent with the Commission's directive in Order No. 745 to allocate demand response costs which equal the energy market payments to demand response resources that are dispatched by CAISO proportionally to the entities that purchase from the energy market in the area where demand response reduced the marginal cost of electricity. The Commission, therefore, determined that CAISO's cost allocation methodology did not comply with the Commission's directives in Order No. 745 and directed CAISO to submit a compliant cost allocation methodology.<sup>4</sup>
- 7. The Commission also found that CAISO's proposal to install a bid floor at the net benefits test threshold price went beyond the scope of the Commission's directives in Order No. 745, and rejected the bid floor. The Commission found that Order No. 745 mandated full LMP compensation during the hours when the LMP was greater than or equal to the net benefits test threshold price, but did not direct RTOs and ISOs to reject bids below the threshold price and did not determine that only bids above the threshold price could result in cost effective demand response.

# B. Reliability Demand Response Proposal

8. On May 20, 2011, CAISO submitted a proposal to create a new RDRR product. Like proxy demand resources, CAISO proposed that reliability demand response resources be eligible to bid into and committed in the day-ahead market. CAISO also proposed that reliability demand response resources bid into the real-time market but would only be eligible to be dispatched when CAISO's system was near or at a system emergency. CAISO also proposed to use the default load adjustment to allocate the costs of the RDRR product. Finally, CAISO proposed

<sup>&</sup>lt;sup>4</sup> *Id.* PP 45, 46.

<sup>&</sup>lt;sup>5</sup> *Id.* P 31.

<sup>&</sup>lt;sup>6</sup> For a more complete description of the RDRR Proposal *see Cal. Indep. Sys. Operator Corp.*, 138 FERC ¶ 61,117, at PP 7-13 (2012) (RDRR Order).

to allow reliability demand response resources, like proxy demand resources, to be counted as resource adequacy resources.

- 9. CAISO stated that the creation of the RDRR product would enable numerous emergency-triggered retail demand response programs to be integrated into CAISO's energy markets. However, entities under contract with emergency triggered retail demand response programs would retain the ability to dispatch these resources to respond to local transmission and distribution emergencies, and these resources would be ineligible to set the market price during those instances.<sup>7</sup>
- 10. CAISO also proposed certain restrictions and requirements for reliability demand response resources. For resources to register as a reliability demand response resource, CAISO proposed to require that such resources reach their maximum load curtailment within 40 minutes and have a minimum load curtailment of .5 MW. In the real-time market, CAISO proposed that reliability demand resources should bid at least 95 percent of the bid cap. CAISO stated that this bid requirement is intended to reflect the high value of reliability demand response resources during emergency and near-emergency conditions.
- 11. In an order issued on February 16, 2012, the Commission rejected CAISO's RDRR proposal. The Commission found that the RDRR proposal was designed to allow resources to participate in CAISO's day-ahead and real-time energy markets and was subject to the requirements of Order No. 745. The Commission found that since it had rejected CAISO's cost allocation methodology for its earlier filing to comply with Order No.745, which relied on the default load adjustment, CAISO's RDRR program should also be rejected because it too relied on the same cost allocation methodology. The Commission directed CAISO to remove references to the RDRR program in its tariff on compliance.

#### II. Procedural Matters

12. CAISO's filing in response to the directions in the Compliance Order and the RDRR Order was filed on March 14, 2012, with comments and motions to

<sup>&</sup>lt;sup>7</sup> Reliability Demand Response Proposal, Attachment E at 5.

 $<sup>^8</sup>$  Cal. Indep. Sys. Operator Corp., 138 FERC  $\P$  61,117 (2012) (RDRR Order).

<sup>&</sup>lt;sup>9</sup> RDRR Order at P 30.

intervene due on or before April 4, 2012. California Department of Water Resources and State Water Project (SWP) filed comments on April 4, 2012. CAISO filed an answer on April 18, 2012. 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 assisted us in reaching our determination.

#### **III.** Substantive Matters

#### A. <u>CAISO Compliance Filing</u>

- 13. On March 14, 2012, CAISO made a filing in response to the Commission's directives in both the Compliance Order and the RDRR Order. In response to the Commission's direction on cost allocation, CAISO proposes to remove the application of the default load adjustment to periods when the LMP is at or above the threshold price. 12
- 14. In response to Commission directions on the net benefits test in the Compliance Order, CAISO proposes to: (1) remove certain tariff provisions related to the bid floor; (2) revise its tariff to include a detailed methodology regarding the calculation of the supply curves used in the net benefits test; and (3) revise its tariff to provide that CAISO will post a detailed methodology for its net benefits test, along with a justification of threshold prices for the previous 12 months, on its website. In response to the Commission's directive in the RDRR Order, CAISO also proposes to remove references to the RDRR product for the CAISO Tariff.
- 15. In a deficiency letter issued on August 27, 2012, the Commission requested further information on CAISO's proposed cost allocation methodology with the removal of the default load adjustment for periods where the LMP is at or above the threshold price. CAISO explained in its response that the costs of demand response would be allocated through the real-time energy offset charge assessed to all load serving entities based on a *pro rata* share of their measured demand in the

<sup>&</sup>lt;sup>10</sup> CAISO also made an errata filing on March 15, 2012, with comments and notice to intervene due on April 5, 2012.

<sup>&</sup>lt;sup>11</sup> CAISO made an errata filing on March 15, 2012 to correct an error in the March 14, 2012 filing.

<sup>&</sup>lt;sup>12</sup> CAISO Filing at 6.

real time market settlement interval during which the demand response takes place. <sup>13</sup>

CAISO justifies its allocation of demand response costs based on 16. four relevant characteristics of its market. <sup>14</sup> First, CAISO states that transmission constraints are not severe most of the time, and demand response in one area tends to affect the LMP in multiple areas. Second, CAISO argues that demand response resources are located throughout California and will continue to be well dispersed as retail programs integrate into the wholesale market. CAISO contends this dispersed nature will make simultaneous demand reductions in multiple zones common. CAISO also states that demand resources participate in the load balance equality constraint<sup>15</sup> and impact the flow on transmission constraints, so these resources impact both local and system-wide prices. Therefore, CAISO maintains that demand response impacts the LMPs across California's entire system, even when binding transmission constraints arise between regions in the system. Third, CAISO argues that it would be very difficult to identify and allocate specific costs based on an analysis of nodal prices on a sub-regional basis. CAISO states that active power provided by generators or demand response can serve load located anywhere throughout the network. Finally, CAISO argues that the analysis to determine how a demand reduction in one area impacts LMPs in another area is extremely complex.

# **Comments**

17. SWP argues that CAISO's cost allocation proposal does not proportionally allocate those costs to the load that benefits from demand response. SWP argues that cost should be allocated specifically to load that benefits from verifiably decreased LMPs. SWP states that LMPs may be increased or decreased on an

<sup>&</sup>lt;sup>13</sup> CAISO September 26, 2012 Deficiency Response at 4. CAISO tariff section 11.5.2.

<sup>&</sup>lt;sup>14</sup> CAISO September 26, 2012 Deficiency Response at 9-11.

<sup>&</sup>lt;sup>15</sup> The load balance equality constraint is the constraint by which CAISO ensures that total system supply matches total system load in producing a solution to the optimization of CAISO's market. The shadow price of this constraint is the energy market clearing price, the system-wide component of LMPs. *Id.* Abdul-Rahman Test at 4.

<sup>&</sup>lt;sup>16</sup> SWP Comments at 2.

unequal basis by the dispatch of demand response resources. SWP also states that loads in low LMP areas may be disadvantaged since these loads sell demand response at the relatively low nodal LMP, while they buy electricity at the higher load aggregation point level.

#### **CAISO Answer**

- 18. In its answer to SWP's comments, CAISO states that the Commission should ignore SWP's reiteration of arguments that were rejected in the Compliance Order. CAISO states that SWP's contentions regarding the mismatch between LMP prices and the price paid by retail load were previously made and that the Commission did not direct CAISO to address them in a compliance filing.
- 19. CAISO also argues that its cost allocation methodology satisfies Order No. 745. CAISO states that demand in its balancing authority area is scheduled at the area-wide load aggregation points, and that demand response, like generating resources, will influence prices paid at these load aggregation points. Accordingly, CAISO argues that the cost of demand response resources will be allocated to the load that benefits through the system-wide energy price and through regional benefits from reduced losses and congestion.<sup>17</sup>

#### **Commission Determination**

20. CAISO proposes to remove the application of the default load adjustment for periods where the LMP is at or above the monthly threshold price. Rather, CAISO proposes to allocate demand response costs to all load through the realtime energy offset charge because, due to the characteristics of its system, this cost allocation appropriately allocates costs to the load that benefits from the demand reduction. Thus, the Commission finds CAISO's cost allocation method is consistent with Order No. 745 because it allocates the cost to those who benefit from demand response. As CAISO explains, load throughout CAISO benefits from demand response through the system-wide energy price and through regional benefits from reduced losses and congestion because demand response resources in different areas of CAISO participate in balancing CAISO's load and supply and impact transmission flows throughout the CAISO system. Thus, demand response resources impact LMPs throughout the CAISO system. Also, CAISO notes that demand response resources are distributed throughout its system, and CAISO predicts that they will continue to be well dispersed. So the price impact of demand response resources will be relatively evenly distributed throughout

<sup>&</sup>lt;sup>17</sup> CAISO Answer at 4-5.

- CAISO. Thus, CAISO proposes to allocate costs to those who benefit from lower prices produced by dispatching demand response, and we accept CAISO's cost allocation methodology as reasonable.
- 21. SWP argues that CAISO should allocate demand response costs on a more granular basis. SWP states that LMPs may be increased or decreased on an unequal basis based on the nodal dispatch of demand response. However, CAISO has explained how demand response resources impact LMPs throughout its system. Thus, it has shown that demand response costs should be distributed throughout the system, since Order No. 745 directs that demand response costs should be distributed proportionally to the entities that purchase from the relevant energy market where demand response reduced the marginal cost of energy.
- 22. SWP also argues that resources in low LMP areas may be discriminated against since they are compelled to buy high and sell low due to the more granular market for selling energy compared to the broader default load aggregation point market for buying energy. To the extent SWP's argument concerns energy supply being compensated nodally and energy demand paying at the default load aggregation point, it is beyond the scope of this compliance proceeding.
- 23. CAISO proposes to add to its tariff a commitment to post information regarding its net benefits test on its website. Specifically, CAISO will post the methodology of its net benefits test along with supporting documentation for threshold prices. CAISO proposes to add a detailed description of its methodology used for generating both the supply curves used in its net benefits test and the monthly threshold prices. CAISO also proposes to eliminate the provision rejecting bids lower than the monthly threshold price. These revisions are in response to Commission direction in the Compliance Order and comply with that direction. Accordingly, the Commission accepts these provisions.
- 24. Finally, the Commission finds CAISO's revisions removing references to the RDRR product from its tariff conform with the Commission's direction in the RDRR Order. However, since we grant CAISO's rehearing request regarding the RDRR Order, as discussed below, we do not accept these proposed revisions.

#### B. RDRR Order Rehearing

25. CAISO requests rehearing of the RDRR Order, which rejected the RDRR proposal because it was based on the previous cost allocation methodology that did not comply with Order No. 745. CAISO argues that the RDRR proposal should be exempt from the requirements of Order No. 745. CAISO states that Order No. 745 does not apply to demand response programs that are administered for emergency conditions. CAISO states that even though the RDRR product would allow resources to participate in its day-ahead and real-time markets, the

RDRR product makes those resources subject to dispatch in the energy market and provides for compensation during emergency conditions.

- 26. CAISO also argues that the Commission provided no rational basis for rejecting all of its tariff revisions when only the cost allocation methodology failed to satisfy Order No. 745. CAISO states that its RDRR proposal concerned a variety of matters beyond those addressed by Order No. 745, and therefore argues that it cannot be the case that these tariff revisions do not comply with Order No. 745. Moreover, CAISO argues that the RDRR proposal had much in common with CAISO's Proxy Demand Resource program, which the Commission accepted. CAISO notes that the Commission has made no finding that the Proxy Demand Resources provisions are unjust and unreasonable, and, thus, has no basis for finding that similar tariff provisions are unjust and unreasonable.
- 27. CAISO also argues that the Commission mischaracterizes the default load adjustment. CAISO argues that the purpose of the default load adjustment is to eliminate the double payment to load that results from the real-time imbalance energy payment. CAISO states that its purpose is not to allocate any revenue shortfall.
- 28. Finally, CAISO argues that the RDRR Order imperils its reliability demand response settlement. CAISO argues that the settlement requires CAISO to develop a wholesale reliability demand response product, and that if such a product is rejected, the settlement will be imperiled and may prevent the participation of emergency triggered demand response programs in the wholesale market.

## **Commission Determination**

29. The Commission grants rehearing. Our rejection of the RDRR proposal was premised on the fact that CAISO did not have a cost allocation methodology for demand response resources participating in its markets that was consistent with Order No. 745. The Commission still finds that Order No. 745 applies to the RDRR proposal because the proposal creates a product designed to allow demand response resources to participate in CAISO's day-ahead and real-time markets. Further, the proposal allows demand response resources to submit bids for energy and to be committed in the day-ahead market regardless of whether any emergency operating conditions have been met. The RDRR proposal contained a non-compliant cost allocation methodology, so we could not accept it or allow the tariff provisions to become effective in CAISO's markets. In the Order No. 745

<sup>&</sup>lt;sup>18</sup> RDRR Order at P 30.

compliance proceeding, discussed above, CAISO proposed a compliant cost allocation methodology, and we accept it in this order. We will therefore reconsider CAISO's RDRR proposal in light of the fact that CAISO has now proposed a compliant cost allocation methodology.

# C. Reconsideration of RDRR Proposal

30. Aside from the cost allocation issues, some parties included other protests and comments regarding the original RDRR proposal. The Commission did not discuss those issues in the RDRR Order in light of its decision to reject the proposal due to its cost allocation and reliance on the default load adjustment, which did not conform to Order No. 745. Below we address those remaining protests.<sup>19</sup>

# 1. Reliability Demand Response Resource Dispatch

31. NRG opposes allowing Reliability Demand Response Resources to be dispatched by entities other than CAISO in real-time to mitigate local transmission and distribution system emergencies separate from the wholesale markets. NRG claims it will hamper the integration of demand response resources as full participants into the wholesale markets, mask locational price signals, and allow buyer-side entities to exercise market power to suppress prices.<sup>20</sup>

<sup>&</sup>lt;sup>19</sup> As noted in the RDRR Order, notice of CAISO's Filing was published in the *Federal Register*, 76 Fed. Reg. 30,934 (2011), with interventions and comments due on or before June 10, 2011. Timely Motions to Intervene were filed by Southern California Edison Company (SoCal Edison), NRG Power Marketing LLC, Cabrillo Power I LLC, Cabrillo Power II LLC, El Segundo Power LLC, Long Beach Generation LLC and NRG Solar Blythe LLC (collectively, NRG); Modesto Irrigation District; MSR Public Power Agency; the City of Santa Clara, California; the Public Utilities Commission of the State of California (CPUC); Northern California Power Agency. Electric Power Supply Association filed one day out of time. Timely motions to intervene and comments were filed by Pacific Gas and Electric Company (PG&E), California Department of Water Resources State Water Project (SWP). Timely motion to intervene and protest was filed by California Demand Response Advocates (DR Advocates). NRG Companies filed a protest, and CAISO filed an answer.

<sup>&</sup>lt;sup>20</sup> NRG Comments at 4.

- 32. NRG objects to the possibility of a Reliability Demand Response Resource being dispatched outside the CAISO market and not being included in the CAISO market price. NRG argues that Order No. 745 requires that both Demand Response Providers and generators must be paid the LMP, and that CAISO's Reliability Demand Response Resource proposal appears to be in conflict with that requirement because some resources may be dispatched outside the CAISO market at a price other than the market clearing price. NRG states that CAISO is capable of reflecting these resources in its market pricing even if they are not actually dispatched by CAISO.<sup>21</sup> NRG states that if CAISO compels entities that use Reliability Demand Response for that purpose to notify CAISO immediately after the Reliability Demand Response Resources are used, CAISO could then adjust the relevant nodal prices in its market validation and price correction process to derive a proxy bid. NRG recognizes that details on how these resources would affect pricing would have to be developed, but that this would not serve as a barrier to allowing Reliability Demand Response Resources to set prices.
- 33. NRG notes that, with the exception of certain Reliability Demand Response Resources, all resources that count toward meeting California's Resource Adequacy requirements have an obligation to participate in the CAISO markets. NRG states that if Reliability Demand Response Resources submit bids that do not set the market price when dispatched, then they are not comparable to other Resource Adequacy resources.
- 34. NRG notes CAISO's statement that in order to allow Reliability Demand Response Resources to address local reliability issues, CAISO would have to exceptionally dispatch Reliability Demand Response Resources. NRG argues that CAISO should not exceptionally dispatch Reliability Demand Response Resources beyond what is absolutely necessary.<sup>22</sup>
- 35. Finally, NRG argues that denying the opportunity for Reliability Demand Response Resources to set the market price creates perverse incentives for Reliability Demand Response Resources to be used to suppress prices.<sup>23</sup> NRG argues that allowing utilities to affect wholesale prices under the guise of reliability would invite the abuse of buyer-side market power, which would

<sup>22</sup> Id. at 9-10 (citing Reliability Demand Response Filing, Attachment E at 5).

<sup>&</sup>lt;sup>21</sup> *Id.* at 7.

<sup>&</sup>lt;sup>23</sup> *Id.* at 10-11.

prevent stressed system conditions from being reflected in appropriately high prices.

#### **CAISO Answer**

- 36. CAISO argues that NRG's proposal should be rejected since allowing resources not dispatched by CAISO to set prices would add unnecessary complexity and cost. <sup>24</sup> CAISO states that the details of how they would account for such dispatches remain unresolved. CAISO further notes that these dispatches could have unintended consequences such as the issuance of more exceptional dispatches to allow utilities to address local system concerns.
- 37. CAISO states that there is no basis for concern that utilities could use buyer-side market power to suppress prices. CAISO states that utilities have longstanding emergency reliability demand response programs with triggers for when the dispatch of emergency demand response resources is appropriate. CAISO states that it is unaware of any potential for the exercise of market power under the dispatch of Reliability Demand Response Resources under those programs.

#### **Commission Determination**

- 38. We accept CAISO's RDRR proposal because it will provide access to wholesale energy markets for customers with reliability demand response resources, or their aggregators, and will be another tool for CAISO to address emergency and near-emergency situations. CAISO's RDRR proposal allows demand response resources that would otherwise not be able to participate in the CAISO market due to restrictions arising from their use in emergency- triggered local demand response programs. However, consistent with its current market design, if such a resource is dispatched outside of the CAISO market by entities other than CAISO (e.g. for a local emergency), the resource is not reflected in wholesale market prices.
- 39. NRG's proposal to add the step of deriving a proxy bid for these resources when they are dispatched outside the CAISO market has not been justified. As CAISO notes, such a change would add complexity and cost to its system, as CAISO would be required to fit resources selected for dispatch by an entity other

<sup>&</sup>lt;sup>24</sup> CAISO Answer at 3-4.

<sup>&</sup>lt;sup>25</sup> *Id.* at 5.

than CAISO into market prices. The way in which prices would be set by these resources is not straightforward, since these resources would not be dispatched by CAISO according to normal market processes. While CAISO would receive a notification that these resources had been dispatched, it would have to record their dispatch as an exceptional dispatch. As CAISO notes, this would increase the use of exceptional dispatch which may require after-the-fact price adjustments because CAISO would not receive information about these out-of-market dispatches as part of its normal market run processes. Further, determining proper compensation for these resources would be problematic because such resources would be dispatched and paid by an out of market entity, but also exceptionally dispatched by the CAISO and included in its market. The Commission finds that these additional complexities are not justified by the potential benefits suggested by NRG. Accordingly, the Commission will not require CAISO to alter its pricing policy for resources not dispatched by CAISO.

- 40. The Commission also disagrees with NRG's argument that if Reliability Demand Response Resource bids are not used to set prices when they are dispatched outside the CAISO market, to address local transmission and distribution system emergencies then they are not being treated comparably to other Resource Adequacy resources. Like other Resource Adequacy Resources, Reliability Demand Response Resources provide capacity into CAISO's market, and are eligible to set prices when their bids clear CAISO's market. Reliability Demand Response Resources submit economic bids, consistent with the CAISO Tariff, but those bids may not be used to set the market price if the resource is utilized outside the CAISO market. Just as CAISO's Resource Adequacy bidding requirements help ensure that Resource Adequacy resources are available to meet demands, in those limited instances where Reliability Demand Response Resources are not able to set prices in the CAISO market, the resources still reduce electricity consumption just as if they were dispatched by CAISO. At all other times, Reliability Demand Response Resources can set market prices.
- 41. Furthermore, not allowing Reliability Demand Response Resources to be dispatched by entities other than CAISO would cause much of the potential capacity that could be provided by Reliability Demand Response Resources to be unavailable to CAISO's markets, since many of these resources are already under contract that allow them to be dispatched by entities other than CAISO. Accordingly, the Commission finds that NRG's argument regarding the comparability of Reliability Demand Response Resources and other Resource Adequacy resources is unpersuasive.
- 42. Moreover, the Commission finds that NRG's concerns about buyer-side market power are incorrect. California utilities have long-employed emergency retail demand response to address local transmission and distribution issues, which

may have the unintended consequence of suppressing price, but this does not constitute an exercise of buyer-side market power. Further, we note that the requirement that resources bid at 95 percent of the bid cap for real-time demand response under this program can help reduce any possible buyer-side market power. In addition, CAISO indicates that it is unaware of any potential for a party exercising buyer-side market power during the operation of the program. As a result, we find that CAISO's proposal does not introduce any new buyer-side market power concerns because the ability of a utility to dispatch emergency demand response resources is simply a continuation of an existing practice.

43. In response to NRG's comments concerning exceptional dispatch, it appears that CAISO does not intend to use exceptional dispatch frequently for Reliability Demand Response Resources. In fact, CAISO states it "will preserve its exceptional dispatch authority of reliability demand response product resources with the expectation that this capability will be used judiciously and infrequently." In fact, CAISO's statement cited by NRG as evidence that CAISO intends to employ exceptional dispatch to implement its RDRR product is, to the contrary, a warning of what would be necessary to include dispatches outside the CAISO market in setting CAISO market prices. 27

#### 2. Participating Load

- 44. SWP claims that, for unknown reasons, Participating Load is excluded from the definition of demand response in the instant proposal.<sup>28</sup>
- 45. Further, SWP states that it is concerned about CAISO's proposal to charge Reliability Demand Response Resources for energy consumption at the default load aggregation point level and compensate these resources at the more granular level. SWP notes that CAISO's market surveillance committee has warned that this aspect of the proposal invites gaming. SWP further states that this mismatch also raises concerns of undue discrimination of loads in low LMP areas.
- 46. SWP also requests that CAISO clarify two points. First, SWP requests that CAISO clarify how the costs of non-CAISO dispatches of Reliability Demand

<sup>28</sup> SWP Comments at 2.

<sup>&</sup>lt;sup>26</sup> Reliability Demand Response Filing, Attachment E at 5.

<sup>&</sup>lt;sup>27</sup> *Id*.

<sup>&</sup>lt;sup>29</sup> *Id.* at 2.

Response Resources will be allocated. Second, SWP questions the adequacy of the 40-minute ramping time required by proposed section 4.13.5.3. SWP questions whether dispatch decisions will continue to skew toward Participating Load because of their faster response time and availability.<sup>30</sup>

#### **CAISO Answer**

- 47. CAISO notes that SWP raised these same concerns during the Proxy Demand Response proceeding and that those arguments were rejected by the Commission.<sup>31</sup> CAISO also notes that in the same order the Commission found that CAISO had proposed reasonable market mitigation tools to address gaming concerns. CAISO states that it will apply those same tools to address any gaming concerns with Reliability Demand Response Resources.<sup>32</sup>
- 48. CAISO also responds to SWP's request for clarification regarding non-CAISO dispatches by stating that market participants will not bear any costs associated with such dispatches.<sup>33</sup>
- 49. CAISO argues that a 40-minute ramping requirement is not inconsistent with the use of Reliability Demand Response Resources as emergency resources.<sup>34</sup> CAISO emphasizes that the 40-minute timeframe was specified to allow each resource to uniquely describe its advance notification time and ramping period. CAISO states that this will allow it to translate these values into an equivalent start-up time and ramp rate, and dispatch these resources in emergencies in accordance with these values.
- 50. In response to SWP's question about whether dispatch decisions will skew towards Participating Load, CAISO states that it will appropriately consider the

<sup>&</sup>lt;sup>30</sup> *Id.* at 3-4.

<sup>&</sup>lt;sup>31</sup> CAISO Answer at 9 (citing SWP Comments, Docket No. ER10-765-000 (Mar. 9, 2010); SWP Comments, Docket No. ER10-765-000 (June 7, 2010)).

<sup>&</sup>lt;sup>32</sup> *Id.* at 10.

<sup>&</sup>lt;sup>33</sup> *Id.* at 11.

<sup>&</sup>lt;sup>34</sup> *Id.* at 12.

immediate response time of Participating Load, and the start-up time and ramp rate of Reliability Demand Response Resources in making dispatch decisions.<sup>35</sup>

51. In response to SWP's statement that Participating Load should be considered demand response, CAISO states that SWP is incorrect in assuming that because Participating Load is excluded from the tariff definition of "Demand Response Services" that CAISO does not consider Participating Load a type of demand response. However, CAISO argues that Participating Load differs from other types of demand response in significant ways, and should therefore be separated in the tariff.

#### **Commission Determination**

- 52. The Commission agrees with CAISO that while Participating Load provides a type of demand reduction, it is appropriate to include provisions regarding Participating Load in another part of the tariff. Proxy Demand Resources and Reliability Demand Response Resources are appropriately grouped together since they operate under programs that share similar bidding and dispatch characteristics. Participating Load has separate tariff provisions that specifically address those resources. Grouping Participating Load with Reliability Demand Response Resources and Proxy Demand Resources would only serve to confuse and complicate the tariff.
- 53. The Commission declines to address SWP's concerns regarding the "mismatch" between default load aggregation point and LMP prices because this issue is beyond the scope of this proceeding. The Commission already addressed and approved these pricing levels in the order on CAISO's Proxy Demand Resource filing.<sup>37</sup> In that order, the Commission found that CAISO had sufficient safeguards in place to guard against gaming by market participants.<sup>38</sup> The order also found that SWP's concerns about discrimination for loads in low-LMP areas implicated CAISO's entire LMP system and constituted a collateral attack on that pricing system.<sup>39</sup> The Commission also noted that SWP's concerns would be

<sup>&</sup>lt;sup>35</sup> *Id.* at 13.

<sup>&</sup>lt;sup>36</sup> *Id.* at 14-15.

<sup>&</sup>lt;sup>37</sup> Cal. Indep. Sys. Operator Corp., 132 FERC ¶ 61,045, at P 77 (2010).

<sup>&</sup>lt;sup>38</sup> *Id.* P 66.

<sup>&</sup>lt;sup>39</sup> *Id.* P 35.

resolved by increased granularity in the default load aggregation points scheduled to be instituted as the result of forthcoming market updates.<sup>40</sup> The Commission declines to revisit those findings in this order.

54. The Commission finds that CAISO has adequately explained its 40-minute ramp time, and the Commission will not require CAISO to alter its 40-minute ramping requirement. The Commission also finds that CAISO has sufficiently addressed SWP's clarification requests regarding the dispatch status of Participating Load and the cost impact of non-CAISO dispatches on CAISO market participants and will not require further clarification.

#### 3. Miscellaneous

- 55. PG&E supports CAISO's proposed RDRR proposal, but notes that the proposed tariff language contains some inconsistencies with respect to the statistical performance measurement for Proxy Demand Resources and Reliability Demand Response Resources.<sup>41</sup>
- 56. PG&E notes that CAISO's transmittal letter states that CAISO proposes to allow a Demand Response Provider representing either a Proxy Demand Resource or a Reliability Demand Response Resource to apply to use an alternate method for compiling settlement quality meter data when interval metering is not available. But, PG&E contends that CAISO's tariff section 10.3.6.1 states that "Scheduling Coordinators cannot submit estimated settlement quality meter data for Proxy Demand Resources." PG&E argues that this language is inconsistent with the transmittal letter and CAISO's intent and should be removed.

#### **CAISO Answer**

- 57. CAISO agrees that the subject sentence in section 10.3.6.1 should be deleted in a compliance filing.
- 58. CAISO also notes that it made several inadvertent errors in its filing: (1) a phrase inadvertently included in section 30.7.9 that reads "and, for a Reliability Demand Response Resource, the submitted shut down cost must be zero (0)"; (2) a comma between the words "Resources" and "must" in section 40.6.4.1 that

<sup>&</sup>lt;sup>40</sup> *Id.* P 77.

<sup>&</sup>lt;sup>41</sup> PG&E Comments at 3.

<sup>&</sup>lt;sup>42</sup> *Id.* at 3 (citing transmittal letter at 23).

CAISO intended to delete; (3) the missing phrase "(DRPA)" that the CAISO intended to include in the title of the defined term "Demand Response Provider agreement" in Appendix A; (4) the missing word "the" that CAISO intended to include in the phrase "pursuant to" in the definition in Appendix A of the term "proxy demand response resources"; (5) an incorrect definition of the term "reliability demand response resource" in Appendix A; (6) the struck-through letters "ic" that CAISO intended to delete from the word "Servicing" in the blackline for Section 4.1.1 of Appendix B. 14; and (7) the struck-through word "to" that the CAISO intended to delete immediately before the phrase "technical information" in the black-line for section 4.3.2 of Appendix B. 14. CAISO proposes to correct these errors in a compliance filing. 43

#### **Commission Determination**

59. The Commission accepts CAISO's proposed miscellaneous and typographical edits as they make the tariff language more clear and consistent and directs CAISO to include the revisions proposed in CAISO's answer with its refiling of the RDRR Proposal within 30 days of the date of this order. Further, the Commission notes that the issue regarding section 10.3.6.1 has already been resolved through tariff revisions submitted by CAISO and accepted by the Commission.<sup>44</sup> Accordingly, no compliance filing is necessary for that provision.

# 4. Compliance with Order No. 719

60. In Order No. 719, the Commission directed RTOs and ISOs to amend their tariffs and market rules as necessary to allow an aggregator of retail customers to bid demand response directly into the ISO's or RTO's organized market. 45 CAISO noted in its initial filing of the RDRR proposal that the Commission found that CAISO's tariff revisions to implement the Proxy Demand Resource product satisfy those Order No. 719 requirements. 46 Similarly, CAISO maintained that the proposed Reliability Demand Response Resource revisions to the CAISO tariff satisfy the requirements of Order No. 719.

<sup>&</sup>lt;sup>43</sup> CAISO Answer at 16-17.

<sup>&</sup>lt;sup>44</sup> See Cal. Indep. Sys. Operator Corp., 136 FERC ¶ 61,232 (2011).

<sup>&</sup>lt;sup>45</sup> Reliability Demand Response Filing at 26.

<sup>&</sup>lt;sup>46</sup> *Id*.

#### **Commission Determination**

- 61. On rehearing, we accept the CAISO RDRR proposal as compliant with Order No. 719, as related to Demand Response Providers' participation in the CAISO markets, subject to the compliance filing directed below. Order No. 719 was intended to remove barriers to participation for existing and new demand response resources in organized markets. We find that the Reliability Demand Response Resource proposal reduces barriers to participation by allowing Demand Response Providers to submit bids on behalf of retail emergency-triggered demand response programs, subject to CAISO's reasonable restrictions. CAISO's RDRR proposal also allows new and prospective demand response providers greater flexibility to participate in CAISO's market by allowing them to participate as either a Proxy Demand Resource or an emergency-triggered Reliability Demand Resource.
- 62. The Commission therefore directs CAISO to re-file its RDRR proposal in a compliance filing no later than 30 days from the date of this order, to reflect the clarifying revisions provided by CAISO in its responses to the Commission's two deficiency letters, <sup>47</sup> and, as further modified by CAISO's offer to make further edits, as discussed above.

#### The Commission orders:

(A) CAISO's compliance filing is hereby accepted in part and rejected in part, effective as of the date of this order, as discussed in the body of this order.

<sup>&</sup>lt;sup>47</sup> Specifically the compliance filing should reflect the revisions to CAISO tariff sections 4.5.1, 4.9.12, 4.13, 4.13.1, 4.13.2, 4.13.3, 4.13.4, 7.1.3, 10.3.2, 10.3.6, 11.1.5, 11.2.1, 11.5.2, 11.5.4, 11.6, 11.8, 30.6, 30.7.8, 30.7.9, 31, 31.2, 31.3.1, 33.4, 34.6, 34.9.1, 34.9.3, 34.18, 34.19.1, 34.19.2, 36.8.4, 40.4.4, 40.6.4, 40.6.12, and 40.8.1 as originally proposed on May 20, 2011. Such filing should also include new tariff sections 4.13.5, 10.1.7, 11.6.1, 30.6.1, 30.6.2, and 34.18.1, as well as the revisions to Appendix A as originally proposed but include the definitions of Proxy Demand Resource and Reliability Demand Response Resource as revised on September 21, 2011. Finally, the filing should also include CAISO tariff section 34.5 and Appendix B.14 as revised on December 19, 2011.

(B) CAISO's request for rehearing is hereby granted, as discussed in the body of this order, and CAISO is hereby directed to submit a compliance filing in this docket within 30 days of the date of this order, as discussed in the body of this order.

By the Commission. Commissioners Moeller and Clark are concurring with separate statements attached.

(SEAL)

Kimberly D. Bose, Secretary.

# UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator Corp. ER11-4100-002 ER11-4100-003 ER11-3616-003 ER11-3616-004 ER11-3616-005

(Issued July 18, 2013)

#### MOELLER, Commissioner, concurring:

I concur in today's order because it adequately addresses an efficient, reasonable manner for the CAISO to allocate demand response costs consistent with Order 745. However, I need to reiterate my concern about the customers who pay fixed retail rates and will not benefit from lower wholesale market prices. Until residential customers are allowed to manage their electricity consumption based on real time residential electricity rates, they will be shut out from the economic benefits of demand response. At the same time, these captive residential customers will foot the bill for the demand response benefits that accrue to industrial and commercial customers. Until regulators break the disconnect between wholesale electricity prices and retail electricity prices, residential consumers will be unable to contribute to (and benefit from) the value of peakshaving and load-shifting actions.

Accordingly, I respectfully concur.	
	Philip D. Moeller
	Commissioner

# UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator Corp. Docket Nos. ER11-4100-002

	ER11-4100-003
	ER11-3616-003
	ER11-3616-004
	ER11-3616-005
(Issued July 18, 2013)	
CLARK, Commissioner, concurring:	
While I agree that this decision comports with previous Commission orders on this topic, I write separately to reiterate my disagreement with the underlying decision in Order No. 745. A more economically appropriate demand response compensation construct would have helped mitigate the market distorting effects that may accrue to the California market as a result of today's order.	
For these reasons, I respectfully concur,	

Commissioner

Tony Clark

See my partial dissent in *Midwest ISO*, 143 FERC ¶ 61,146 (2013) (Moeller, Comm'r, dissenting and Clark, Comm'r, dissenting).