### 126 FERC ¶ 61,150 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Acting Chairman; Suedeen G. Kelly, Marc Spitzer, and Philip D. Moeller.

California Independent System Operator Corporation Docket Nos. ER08-1178-000

Docket Nos. ER08-1178-000 EL08-88-000

#### ORDER ON SECTION 206 INVESTIGATION, TECHNICAL CONFERENCE, ACCEPTING IN PART AND REJECTING IN PART TARIFF PROVISIONS, AND IMPLEMENTING TRANSITIONAL MEASURES

(Issued February 20, 2009)

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1. In Docket No. ER08-1178-000, the California Independent System Operator Corporation (CAISO) proposed revisions to the Exceptional Dispatch provisions of its Market Redesign and Technology Upgrade (MRTU) Tariff.<sup>1</sup> Specifically, the CAISO

<sup>&</sup>lt;sup>1</sup> See CAISO June 27, 2008 Amendment to Revise Exceptional Dispatch Provisions of the MRTU Tariff in Docket No. ER08-1178-000 (June Proposal).

proposed market power mitigation measures to apply to Exceptional Dispatch<sup>2</sup> instructions issued in circumstances where the CAISO asserted resources could exercise local market power. On October 16, 2008,<sup>3</sup> the Commission accepted and suspended for a nominal period the June Proposal to become effective upon implementation of the MRTU Tariff, subject to refund and the outcome of an investigation under section 206 of the Federal Power Act (FPA)<sup>4</sup> into the continued justness and reasonableness of the Exceptional Dispatch mechanism. To that end, the October 16, 2008 Order proposed a suggested remedy, as discussed further below, instituted a section 206 investigation in Docket No. EL08-88-000, and directed Commission staff to convene a technical conference, which was held on November 6, 2008.

2. In its post technical conference comments,<sup>5</sup> the CAISO submitted a revised proposal incorporating the Commission's proposed remedy and addressing issues raised at the technical conference (November Proposal).<sup>6</sup> For the reasons discussed below, we accept in part and reject in part the November Proposal, effective upon implementation of MRTU.<sup>7</sup> Specifically, we find Exceptional Dispatch to be a just and reasonable mechanism for maintaining grid reliability. We also accept the CAISO's proposal to mitigate Exceptional Dispatch in the limited circumstances in which the CAISO has made an adequate showing of the potential to exercise market power, and reject the proposed mitigation in all other instances. Also, we implement temporary measures for the first four months of MRTU start-up to facilitate a smooth transition. Finally, we fully

<sup>3</sup> Cal. Indep. Sys. Operator Corp., 125 FERC ¶ 61,055 (2008) (October 16, 2008 Order).

<sup>4</sup> 16 U.S.C. § 824e (2006).

<sup>5</sup> The November 5, 2008 Supplemental Notice added the deferred functionality filing, Docket No. ER09-213-000, to the technical conference. The deferred functionality filing was addressed in a separate order. *See Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,081 (2009).

<sup>6</sup> See CAISO's November 24, 2008 Comments in Docket Nos. ER08-1178-000 and EL08-88-000.

<sup>7</sup> We direct the CAISO to make an informational filing specifying the effective date of the tariff sheets being accepted herein prior to the implementation of MRTU.

<sup>&</sup>lt;sup>2</sup> The Exceptional Dispatch mechanism was included in the MRTU Tariff, which was conditionally accepted by the Commission in the MRTU Order. *See Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274 (2006) (MRTU Order), *order on reh'g*, 119 FERC ¶ 61, 076 (2007) (MRTU Rehearing Order), *order on reh'g and denying motion to reopen record*, 120 FERC ¶ 61,271 (2007).

expect that, as it gains experience with MRTU, the CAISO's reliance on Exceptional Dispatch will diminish until it is seldom used. Until that time, however, we find that the Exceptional Dispatch mechanism we conditionally approve today, in conjunction with other market redesign features, will help provide both generators and customers with an appropriate balance of incentives, proper price signals, and safeguards.

#### I. <u>Background</u>

#### A. <u>Capacity Procurement Prior to MRTU</u>

3. On April 26, 2001, the Commission established a prospective mitigation and monitoring plan for the California wholesale electric markets.<sup>8</sup> One of the fundamental elements of the plan was the implementation of a must-offer obligation. The must-offer obligation requires most resources serving California markets to offer all of their capacity in real time, during all hours, if they are available and not already scheduled to run through bilateral agreements.<sup>9</sup> During the first few years of the must-offer obligation, resources were not guaranteed additional compensation beyond earned energy and ancillary services revenues. Because uncontracted resources, i.e., resources lacking a service contract or reliability must-run agreement, were forced to provide resource adequacy-type reliability services without any guaranteed fixed cost recovery, the mustoffer obligation was found unjust and unreasonable.<sup>10</sup> To remedy the problem, the Reliability Capacity Service Tariff (RCST)<sup>11</sup> was introduced to compensate resources that were called upon under the must-offer obligation for their capacity services. Specifically, the RCST worked with the must-offer obligation to provide a backstop capacity procurement mechanism to the CAISO that included provisions establishing the following: (1) a daily must-offer capacity payment rate; (2) an RCST capacity payment

<sup>9</sup> Prior to MRTU implementation, the CAISO will continue to rely upon its mustoffer obligation to ensure reliable grid operations.

<sup>10</sup> Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp., 116 FERC ¶ 61,069, at P 35-38 (2006).

<sup>11</sup> Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp., 118 FERC ¶ 61,096 (2007), order on reh'g, 121 FERC ¶ 61,276 (2007), order on clarification, 122 FERC ¶ 61,091 (2008).

<sup>&</sup>lt;sup>8</sup> San Diego Gas & Elec. Co. v. Sellers of Energy and Ancillary Servs., 95 FERC
¶ 61,115 (2001), order on reh'g, 95 FERC ¶ 61,418 (2001), order on reh'g, 97 FERC
¶ 61,275 (2001), order on reh'g, 99 FERC ¶ 61,160 (2002), pet. granted in part and denied in part sub nom. Public Utils. Comm'n of the State of Cal. v. FERC, 462 F.3d 1027 (9th Cir. 2006).

that would result from a Significant Event designation; (3) a monthly RCST capacity payment due to a designation resulting from a deficiency in resource adequacy demonstrations; and (4) monthly capacity payments to frequently mitigated units. In addition, the RCST established cost allocation methodologies and rules by which the CAISO can procure RCST capacity.

4. On March 28, 2008, the CAISO filed the Transitional Capacity Procurement Mechanism (TCPM) to replace the RCST. The TCPM is a mandatory backstop capacity procurement mechanism that, like the RCST, is designed to work with the must-offer obligation. The TCPM acts as a bridge between the RCST and the Interim Capacity Procurement Mechanism (ICPM), which will replace the TCPM upon implementation of MRTU. On May 30, 2008, the Commission issued an order conditionally accepting the TCPM, subject to modification, effective June 1, 2008.<sup>12</sup>

#### B. <u>Proposed Capacity Procurement Under MRTU</u>

5. To ensure reliable grid operations, the MRTU Tariff includes the following capacity procurement processes: (1) resource adequacy; (2) reliability must-run; (3) ICPM; and (4) Exceptional Dispatch. On October 16, 2008, the Commission accepted the ICPM, which, in contrast to its predecessors, is a voluntary backstop capacity mechanism.<sup>13</sup> The ICPM is designed to allow the CAISO to procure capacity to meet reliability criteria or otherwise maintain reliable grid operations.<sup>14</sup> Under its backstop capacity procurement mechanism, the CAISO may designate resources to maintain reliable grid operations in the following circumstances: (1) if a load serving entity has not procured the full amount of its local or system-wide resource adequacy requirements; (2) when the portfolio of resources procured by all load serving entities in an area is insufficient to meet the reliability criteria for the area; or (3) if an ICPM Significant Event<sup>15</sup> occurs that creates a need to supplement resource adequacy resources.

<sup>12</sup> Cal. Indep. Sys. Operator Corp., 123 FERC ¶ 61,229, at P 1 (2008) (TCPM Order).

<sup>13</sup> Cal. Indep. Sys. Operator Corp., 125 FERC ¶ 61,053 (2008) (ICPM Order).

<sup>14</sup> See CAISO February 8, 2008 Amendments to Implement an Interim Capacity Procurement Mechanism in Docket Nos. ER08-556-000 and ER06-615-020.

<sup>15</sup> ICPM Significant Events are defined as "a substantial event, or combination of events, that is determined by the CAISO to either result in a material difference from what was assumed in the resource adequacy program for purposes of determining the [resource adequacy requirements], or produce a material change in system conditions or in CAISO [controlled grid operations], that causes, or threatens to cause, a failure to meet

(continued...)

Under the ICPM, a designation is for a minimum term of 30 days, during which the designated resource is required to offer into the MRTU markets. Specifically, a resource accepting an ICPM designation will receive a capacity payment and incur a daily obligation to submit economic bids or self-schedules into the CAISO's markets for the term of the designation.

Exceptional Dispatch provisions were accepted by the Commission in the MRTU 6. Order<sup>16</sup> to authorize the CAISO to manually commit and/or dispatch resources that are not cleared through market software in order to maintain reliable grid operations under unusual and infrequent circumstances. In addition to maintaining reliability, Exceptional Dispatch enables the CAISO to address other specific situations, including the following, that require dispatch of a resource outside of a market schedule: (1) addressing transmission-related modeling limitations; (2) performing ancillary services testing; (3) performing pre-commercial operations testing for resources; (4) mitigating overgeneration; (5) providing voltage support; (6) accommodating Transmission Ownership Rights and Existing Transmission Contract self-schedule changes after the market close of the hour-ahead scheduling process; and (7) reversing a commitment instruction issued through the integrated forward market that is no longer optimal as determined through the residual unit commitment process.<sup>17</sup> Under the MRTU Tariff, the CAISO may issue Exceptional Dispatch instructions for forced start-up, forced shut-down, operation at minimum operating level (PMin),<sup>18</sup> incremental energy, or decremental energy. Exceptional Dispatch is intended to take effect simultaneously with MRTU implementation.

#### C. <u>Exceptional Dispatch Mitigation Proposal</u>

7. In the June Proposal, the CAISO proposed tariff revisions to mitigate exceptional dispatches out of concern that resources could potentially exercise local market power when issued Exceptional Dispatch instructions, and also because it anticipates that

[reliability criteria] absent the recurring use of [non-resource adequacy resource(s)] on a prospective basis." *Id.* at 3.

<sup>16</sup> See MRTU Order, 116 FERC ¶ 61,274.

<sup>17</sup> See MRTU Tariff § 34.9.

<sup>18</sup> PMin is defined in Appendix A of the MRTU Tariff as the minimum normal capability of the generating unit. For readability it will be referred to herein as minimum operating level, which is the term the CAISO uses in the June Proposal. June Proposal at 3.

exceptional dispatches will be far more frequent<sup>19</sup> than originally expected when Exceptional Dispatch was proposed and accepted in the MRTU Order.<sup>20</sup> The CAISO argues that mitigation is appropriate because, although the MRTU market has local market power mitigation mechanisms in place, exceptional dispatches are settled out-of-market and, consequently, not covered by the mitigation provisions contained in the MRTU Tariff.<sup>21</sup>

8. The June Proposal provides additional rules that are designed to facilitate the recovery of fixed costs by providing supplemental revenues to resources that meet the following criteria. First, the resource must not be: (1) under a reliability must-run contract; (2) designated under ICPM; or (3) a resource adequacy resource or, if it is a partial adequacy resource, its non-resource adequacy capacity must be needed. Second, the resource must have a bid in the integrated forward market and hour-ahead scheduling process/real-time market for the applicable operating day or hour in which it is issued an Exceptional Dispatch instruction.<sup>22</sup> Third, the resource must not have accrued supplemental revenues in the past 30 days that are equal to or greater than the monthly

<sup>19</sup> See June Proposal at 6, 11, 19, 20-21.

 $^{20}$  When the Commission approved Exceptional Dispatch in the MRTU filing, it emphasized that Exceptional Dispatch instructions should "not become a frequent occurrence and should be reserved for genuine emergencies." MRTU Order, 116 FERC ¶ 61,274, at P 267.

<sup>21</sup> Because exceptional dispatches are issued outside of the MRTU software, resources that receive Exceptional Dispatch instructions are not subject to the market power mitigation and reliability requirement determination process, which the CAISO uses to mitigate the potential exercise of market power in its integrated forward market and real-time market. The CAISO anticipates that exceptional dispatches will typically be required to address a transmission constraint or generation unit operating constraint that was not captured in the models used in the integrated forward market, the residual unit commitment process, or the real-time market. This will include instances when the CAISO's market software is unable to dispatch a particular needed resource and the CAISO dispatchers need to manually send a dispatch instruction, which will then be incorporated in the MRTU software for the dispatch interval. June Proposal at 4.

 $^{22}$  *Id.* at 9, 11. According to the CAISO, providing supplemental revenues to resources that do not have bids in the market would create an incentive for resources to either exit the market in anticipation of an Exceptional Dispatch or force the CAISO to issue an Exceptional Dispatch that will provide the resource with a supplemental payment.

ICPM capacity payment that the resource would have been eligible for if it had been designated under the ICPM.<sup>23</sup>

#### D. The October 16, 2008 Order

9. In the October 16, 2008 Order, the Commission recognized the potential need to mitigate Exceptional Dispatch, but found that the June Proposal may not be just and reasonable because certain resources may not receive adequate compensation for the capacity services they provide.<sup>24</sup> Accordingly, the Commission accepted and suspended for a nominal period the June Proposal to become effective upon MRTU implementation, subject to refund and the outcome of an FPA section 206 investigation into the continued justness and reasonableness of the Exceptional Dispatch mechanism. The Commission instituted the section 206 investigation upon finding that, due to changes in circumstances, the Exceptional Dispatch provisions of the MRTU Tariff may no longer be just and reasonable.<sup>25</sup> Specifically, the Commission identified two main categories of changed circumstances: (1) the CAISO's significantly increased anticipated usage of Exceptional Dispatch; and (2) the evolution of the Commission's policy that non-resource adequacy resources should receive compensatory payment for the resource adequacy services they provide.<sup>26</sup>

10. The Commission proposed a remedy to address its concerns about Exceptional Dispatch that would: (1) provide non-resource adequacy resources with the offer of ICPM designation upon receiving their first Exceptional Dispatch instruction; and (2) limit the possibility of a resource receiving a double recovery by capping the total recovery for non-resource adequacy resources at the ICPM monthly rate.<sup>27</sup> The proposed remedy was intended to ensure that non-resource adequacy resources are appropriately compensated for the backstop capacity services they provide, while, at the same time,

 $^{23}$  *Id.* at 9.

<sup>24</sup> October 16, 2008 Order, 125 FERC ¶ 61,055 at P 97.

 $^{25}$  *Id*.

<sup>26</sup> See id. P 97-104.

<sup>27</sup> *Id.* P 107. In the ICPM Order, the Commission found the proposed price of \$41/kW-year, with the opportunity for resources to cost justify higher fixed costs, to be just and reasonable. We note that the ICPM is currently subject to rehearing in Docket Nos. ER08-556-001 and ER06-615-033, and that any discussion of the ICPM price is subject to the outcome of rehearing.

preserving the proper incentives for resources to participate in the voluntary ICPM program.<sup>28</sup>

11. Finally, to facilitate expeditious resolution of the section 206 investigation, the Commission established a technical conference for interested parties to discuss the June Proposal, the Commission's proposed remedy relating to Exceptional Dispatch compensation for non-resource adequacy resources, and the Exceptional Dispatch mechanism as a whole.<sup>29</sup>

#### II. Notice, Intervention, and Responsive Pleadings

12. Notice of the institution of the section 206 investigation and the refund effective date was published in the *Federal Register*, 73 Fed. Reg. 63,967 (2008). Timely motions to intervene and/or comments and protests were filed by the following: (1) Dynegy Morro Bay, LLC, Dynegy Moss Landing, LLC, Dynegy South Bay, LLC and Dynegy Oakland, LLC (Dynegy); (2) California Department of Water Resources State Water Project (SWP); (3) Mirant Energy Trading, LLC, Mirant Delta, LLC and Mirant Potrero, LLC (Mirant); (4) Northern California Power Agency (NCPA);<sup>30</sup> (5) Independent Energy Producers Association (IEP); (6) Modesto Irrigation District; (7) City of Santa Clara, California and the M-S-R Public Power Agency (Santa Clara); (8) Pacific Gas and Electric Company (PG&E); (9) the Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California (Six Cities); (10) Western Power Trading Forum (WPTF); (11) Calpine Corporation (Calpine); (12) Reliant Energy, Inc. (Reliant); (13) Public Utilities Commission of the State of California (CPUC); (14) the CAISO; (15) Shell Energy North America (U.S.), L.P. (Shell); (16) Southern California Edison Company (SoCal Edison); and (17) J.P. Morgan Ventures Energy Corporation (J.P. Morgan). Motions to intervene out-of-time in Docket No. EL08-88-000, the section 206 investigation proceeding, were filed by SoCal Edison; J.P. Morgan; and the Alliance for Retail Energy Markets. Motions to intervene out-of-time in Docket No. ER08-1178-000 were filed by SWP, Mirant, NCPA, IEP, J.P. Morgan, IEP, BE CA LLC., and Shell.<sup>31</sup>

 $^{28}$  *Id*.

<sup>29</sup> *Id.* P 109.

<sup>30</sup> NCPA seeks intervention on behalf of itself and its pool members, which include the Cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto and Ukiah, the Plumas-Sierra Rural Electric Cooperative, and the Port of Oakland.

<sup>31</sup> All entities that were referenced as intervenors in the October 16, 2008 Order are automatically parties to the instant proceeding.

13. Notice of the November 6, 2008 technical conference was published in the *Federal Register*, 73 Fed. Reg. 63, 967 (2008), with post-technical conference comments due on or before November 24, 2008 and reply comments due on or before December 2, 2008.<sup>32</sup> On November 25, 2008, WPTF and the CAISO filed a joint motion requesting an extension from December 2, 2008 until December 9, 2008 to file reply comments. SoCal Edison filed comments in support of the request. On November 26, 2008 the Commission issued a notice granting the requested extension of time to file reply comments until and including December 9, 2008.

14. Reply comments were filed by the CAISO, Reliant, SWP, SoCal Edison, WPTF, Six Cities, Calpine, Dynegy, NCPA, J.P. Morgan, PG&E, and the CPUC.<sup>33</sup> Answers were filed by Six Cities and the CAISO.

## III. <u>Procedural Matters</u>

15. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2008), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2008), the Commission will grant the late-filed motions to intervene in Docket No. EL08-88-000 of Shell, SoCal Edison, J.P. Morgan, and Alliance for Retail Energy Markets, given their interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

16. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2008), the Commission will grant the late-filed motions to intervene in Docket No. ER08-1178-000 of SWP, Mirant, NCPA, IEP, J.P. Morgan and Shell, given their interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

17. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2008), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept the answers filed by Six Cities and the CAISO because they have provided information that assisted us in our decision-making process.

<sup>&</sup>lt;sup>32</sup> Supplemental notices of the technical conference were published in the *Federal Register*, 73 Fed. Reg. 65,600 and 67,152 (2008).

<sup>&</sup>lt;sup>33</sup> The CPUC's and J.P. Morgan's reply comments were filed one day out-of-time.

## IV. Discussion

# A. <u>Frequency of Exceptional Dispatch</u>

18. As originally proposed and approved, Exceptional Dispatch was intended to be a rare occurrence that would be "reserved for genuine emergencies where the CAISO needs to take actions outside of the market software for maintaining system reliability."<sup>34</sup> In the June Proposal, however, the CAISO repeatedly stated that Exceptional Dispatch instructions will be far more frequent than originally contemplated in the MRTU proceeding.<sup>35</sup> In the October 16, 2008 Order, the Commission cited this change in circumstances as one of the reasons it initiated this FPA section 206 investigation to examine the continued justness and reasonableness of the Exceptional Dispatch mechanism as a whole.<sup>36</sup>

# 1. <u>The CAISO's Proposed Use of Exceptional Dispatch</u>

## a. <u>The CAISO's November Proposal</u>

19. The CAISO states that although its goal is for Exceptional Dispatch to be rare and infrequent, due to limitations in the MRTU software and in light of experience gained with MRTU simulations, it will likely need to use Exceptional Dispatch more frequently during the initial stages of MRTU than previously anticipated, as emphasized in its June Proposal.<sup>37</sup>

20. The CAISO states that the most common limitation will involve transmission outages, both anticipated and unanticipated. The CAISO provides that even with planned outages, there may not be enough time to incorporate the configuration in the model because of the timing of the model update process, the timing of the outage, or the need to perform studies before certain outages can be modeled. In the case of emergency outages, the CAISO explains that the same considerations generally apply, however, there is no advance notice and even less time to incorporate an alternative configuration

<sup>34</sup> MRTU Order, 116 FERC ¶ 61,274 at P 267.

<sup>35</sup> June Proposal at 6, 11, 19, 20-21.

<sup>36</sup> October 16, 2008 Order, 125 FERC ¶ 61,055 at P 97, 99-100.

<sup>37</sup> CAISO November Proposal at 20. The CAISO claims that modeling-related limitations are reasonable, as its full network model and the MRTU software represent a significant advance compared to today's market design. *Id.* at 23.

into the full network model. The CAISO claims that some outages, whether planned or unplanned, are of such short duration that it is impracticable to model them.<sup>38</sup>

21. The CAISO also expects modeling limitations to cause an increased need to use Exceptional Dispatch to provide voltage support services. Voltage support requirements are not modeled in the full network model or MRTU software and may, therefore, require manual intervention. The CAISO explains that voltage support is not modeled because "the CAISO uses market dispatch software that relies on a [direct current (DC)] model of the grid, which does not include reactive power constraints. As a result, the CAISO may need to rely on [e]xceptional [d]ispatches to adjust the amount of voltage support on the grid in real-time."<sup>39</sup>

22. Additionally, the CAISO explains that capacity-based constraints are not modeled in the MRTU software, thereby increasing the need for Exceptional Dispatch. The CAISO states that it intends to explore options for future software enhancements related to capacity-based constraints, but admits that this issue cannot realistically be resolved in the next several months. To illustrate its point, the CAISO provides the example of requirements for capacity in the area south of Path 26 (Southern California) to protect that area against the loss of the Pacific DC Intertie.<sup>40</sup> The CAISO states that the current MRTU software lacks the capability to dispatch resources automatically to address a contingency on the Pacific DC Intertie because it is a DC line. The CAISO explains that the MRTU software is currently only capable of automatically dispatching resources to address contingencies on internal alternating current (AC) lines.

23. The CAISO notes that although it will likely have to issue more exceptional dispatches than previously expected, it anticipates that the total number of exceptional dispatches will amount to one percent or less of the thousands of automated daily

<sup>38</sup> *Id.* at 23-24.

<sup>39</sup> *Id.* at 24 (citing *Cal. Indep. Sys. Operator Corp.*, 119 FERC  $\P$  61,313, at P 444 (2007)). The CAISO understands that voltage support requirements are generally not modeled in the systems of other independent system operators (ISOs) and regional transmission operators (RTOs).

<sup>40</sup> The CAISO explains that the Pacific DC Intertie (also known as Path 65) is a high-voltage direct current transmission line that has a capacity of approximately 3100 MW and is used to transmit a significant amount of power between the Pacific Northwest and Southern California. The CAISO is responsible for a portion of the Pacific DC Intertie between Sylmar and the portion north of the California border. *Id.* at 25. dispatches.<sup>41</sup> The CAISO expects that most exceptional dispatches will occur in order to manage energy output in real-time, for reasons akin to the reasons that out-of-sequence dispatches are issued under the current market design,<sup>42</sup> and not for the purpose of committing resources.<sup>43</sup> Moreover, because there is usually sufficient capacity available from local resource adequacy resources to handle local area constraints, the CAISO anticipates that only a small portion of those exceptional dispatches that involve resource commitments are likely to involve non-resource adequacy resources. However, the CAISO notes that increased commitments of non-resource adequacy resources may occur in "shoulder" months, i.e., those months on either side of the peak season, due to higher levels of transmission maintenance outages during these months and a lesser quantity of available resource adequacy capacity.<sup>44</sup>

24. The CAISO explains that in an effort to reduce the need for Exceptional Dispatch, it has committed to exploring a number of potential improvements to MRTU functionality after implementation. For instance, the CAISO states that it has initiated a stakeholder process to develop the capability to model multi-stage resources. The CAISO submits that once developed and implemented, this software enhancement will improve the modeling of combined cycle units and other resource-specific operating constraints. The CAISO anticipates that this new functionality will dramatically reduce the number of exceptional dispatches.<sup>45</sup>

25. Finally, the CAISO explains that its authority to issue exceptional dispatches to avoid market disruptions will reduce the need for more significant interventions. The CAISO provides that under section 7.7.15 of the MRTU Tariff, it can issue an

<sup>41</sup> *Id.* at 20-21.

<sup>42</sup> The CAISO explains that specific reasons under the current market design and under MRTU for increased exceptional dispatches include managing forbidden operating regions and other ramping and resource-specific constraints, as well as managing unscheduled loop flows. *Id.* at 21.

<sup>43</sup> A commitment instruction requires a resource to turn from "off" to "on." A dispatch instruction requires a resource to change its current output level, e.g., to provide incremental energy.

<sup>44</sup> CAISO November Proposal at 21-22.

<sup>45</sup> *Id.* at 22.

Exceptional Dispatch in the event of, or to prevent or minimize, a market disruption.<sup>46</sup> Therefore, the CAISO argues that it cannot use Exceptional Dispatch for this purpose when the CAISO market at issue is functioning properly. Moreover, the CAISO states that the intended use of Exceptional Dispatch in connection with this authority is to resolve situations in which the MRTU software is unable to reach a solution through its automated processes. Thus, the CAISO contends that the use of Exceptional Dispatch in such circumstances is appropriate because it allows the CAISO to take limited and targeted manual action in order to avoid results that would likely involve serious harm to market participants, and would almost certainly require a greater level of manual intervention, including extensive use of Exceptional Dispatch, to address the ensuing market failure.<sup>47</sup>

### b. <u>Comments and Protests</u>

26. Six Cities are "extremely concerned about and frustrated with the ever-changing and ever expanding menu of options available to the CAISO to obtain additional energy and/or capacity," beyond what is already required by the resource adequacy program.<sup>48</sup> Six Cities state that it appears that the CAISO intends to use Exceptional Dispatch to address events that are both foreseeable and preventable, rather than as a tool of last resort to address isolated, unanticipated reliability problems. Further, Six Cities allege that Exceptional Dispatch is a continuation of the must-offer obligation.<sup>49</sup>

27. J.P. Morgan is concerned about the CAISO's conclusion that the need to commit additional capacity to protect against the loss of the Pacific DC Intertie is expected to be rare. Further, J.P. Morgan cautions against relying on MRTU market simulation results to conclude that critical capacity-based reliability requirements will be regularly satisfied through the CAISO's day-ahead market and residual unit commitment processes. J.P. Morgan posits that such circumstances may not be rare, especially during off-peak

<sup>47</sup> *Id*.

<sup>48</sup> Six Cities November Comments at 2.

<sup>49</sup> *Id.* at 3. Despite its concerns, Six Cities do not support further delays in MRTU implementation and, therefore, do not support sweeping revisions to the accepted MRTU provisions.

<sup>&</sup>lt;sup>46</sup> A market disruption is defined as "[a]n action or event that causes a failure of the normal operation of any of the CAISO markets." *Id.* at 23. We note that the definition of "market disruption" is currently pending in Dockets Nos. ER06-615-023 and ER07-1257-005 and is subject to the outcome of those proceedings.

periods when market generation is at lower levels and resource adequacy resources are not self-scheduled or are out on maintenance.<sup>50</sup>

### c. <u>Reply Comments</u>

28. WPTF contends that the list of situations that require out-of-market Exceptional Dispatch is long and seems to be growing, despite the expectation that MRTU implementation would allow the CAISO to manage operating constraints through its markets. Thus, WPTF requests that the Commission press the CAISO to address the limitations in its MRTU systems as quickly as possible.<sup>51</sup>

29. WPTF objects to the CAISO's proposed use of Exceptional Dispatch to address modeling deficiencies related to the Pacific DC Intertie. WPTF claims that modeling the Pacific DC Intertie as a single radial injection grossly oversimplifies the real-world implications of operating that facility.<sup>52</sup> Further, WPTF states that the CAISO became aware of the implications of the loss of the Pacific DC Intertie on August 25, 2005, when the CAISO had to trip firm load in Southern California because the parallel AC Path 26 overloaded following the loss of the Pacific DC Intertie. WPTF offers that the CAISO took no action to accurately reflect this contingency in its MRTU proposal filed in February 2006.<sup>53</sup>

30. WPTF also objects to the CAISO's proposed use of Exceptional Dispatch to address transmission maintenance outages. WPTF asserts that this use of Exceptional Dispatch is unreasonable because the need to perform such maintenance is neither new nor unpredictable. Therefore, WPTF argues that transmission maintenance outages are more appropriately addressed through the resource adequacy program.<sup>54</sup>

31. SWP argues that "to the extent that 'market disruption' comprises a pricing outcome that the CAISO deems not to be the product of normal market operations," the CAISO should be required to explain the following: (1) how and why MRTU-compliant bidding would cause market disruptions; and (2) whether or how Exceptional Dispatch would be used to remedy such disruptions.<sup>55</sup> SWP further asserts that a properly

<sup>51</sup> WPTF Reply at 24.

<sup>52</sup> *Id.* at 19.

<sup>53</sup> *Id.* at 20.

<sup>54</sup> *Id.* at 23-24.

<sup>55</sup> SWP Reply at 4.

<sup>&</sup>lt;sup>50</sup> J.P. Morgan November Comments at 9.

functioning MRTU market should enable the market to determine what price levels are acceptable to market participants and should obviate the need for "administratively defined abnormalities."<sup>56</sup>

32. The CAISO affirms that it will make every effort to address any issues with MRTU (e.g., by updating the full network model or addressing MRTU market software problems) as promptly as it can. However, the CAISO asserts that it is unrealistic to assume that such issues can always be addressed quickly. The CAISO provides that it will monitor the need for Exceptional Dispatch, especially during the first two years after MRTU implementation, in order to determine where improvements can be made and whether mitigation should be retained.<sup>57</sup>

### d. <u>Commission Determination</u>

33. The Commission finds that the Exceptional Dispatch mechanism is necessary to ensure reliable operations of the CAISO's grid. While we share parties' concerns that the number of situations that will require manual, out-of-market intervention is significantly larger than originally proposed, despite the fact that MRTU was intended to manage these constraints through an automated market mechanism, we do not find the CAISO's proposed reliance on Exceptional Dispatch to be unjust or unreasonable. Further, we expect reliance on Exceptional Dispatch to decrease as the CAISO gains operations and modeling experience. For example, the CAISO states that it is committed to exploring improvements to MRTU functionality and enhancements to the full network model that will reduce the need for Exceptional Dispatch. Specifically, the CAISO notes that it has initiated a stakeholder process to develop the capability to model multi-stage generating units, and that it is exploring options to incorporate the modeling of constraints such as the Pacific DC Intertie.<sup>58</sup> The CAISO anticipates that these improvements will dramatically reduce the number of exceptional dispatches. We acknowledge that the CAISO is working to resolve issues that will reduce the need for Exceptional Dispatch. In addition, as discussed in detail below, we note that we are requiring the CAISO to continue to pursue, through stakeholder processes, the development of market products to

<sup>&</sup>lt;sup>56</sup> *Id.* SWP notes that even if MRTU falls short, the CAISO has proposed other safeguards against unacceptable pricing outcomes.

<sup>&</sup>lt;sup>57</sup> CAISO Reply at 26.

<sup>&</sup>lt;sup>58</sup> See November Proposal at 26.

address voltage support and dispatch involving Path 26.<sup>59</sup> Further, we find that although the anticipated increase in the frequency of exceptional dispatches is a significant departure from what we originally approved, sufficient steps have been taken to ensure that resources subject to Exceptional Dispatch are appropriately compensated.<sup>60</sup>

34. Finally, the CAISO must comply with reporting requirements regarding its use of Exceptional Dispatch. These reporting requirements are extensive, and will ensure both transparency in use of Exceptional Dispatch and that the CAISO will not develop an over-reliance on Exceptional Dispatch, since it will have to explain the reason for all exceptional dispatches.<sup>61</sup>

## 2. <u>Selection of Resources for Exceptional Dispatch</u>

## a. <u>Comments and Protest</u>

35. The CPUC proposes the following default requirements to be employed by the CAISO when it selects resources for Exceptional Dispatch: (1) resource adequacy units should always be called on before non-resource adequacy units; (2) when energy services are provided under Exceptional Dispatch, units with bids in the market should always be considered first and selected on a least-cost basis; and (3) ICPM offers should only be offered to units without bids in the market.<sup>62</sup>

## b. <u>Reply Comments</u>

36. The CAISO argues that the CPUC does not explain why it believes that its proposed selection rules should always apply or why the CAISO's proposed priorities contained in section 34.9 of the MRTU Tariff are not sufficient. The CAISO notes that

<sup>61</sup> See infra P 263.

<sup>&</sup>lt;sup>59</sup> See infra P 44-45. We note that not only would a more robust full network model and enhanced software functionality, along with the use of competitive market products to procure capacity services where appropriate, reduce the CAISO's reliance on Exceptional Dispatch, but these improvements could also have other positive market impacts. Among other things, these improvements could help generate locational marginal prices that would send the proper price signals to encourage demand response. Greater demand response participation in the market would, in turn, ultimately reduce the need for Exceptional Dispatch.

<sup>&</sup>lt;sup>60</sup> See the discussion of Exceptional Dispatch compensation beginning at P 145.

<sup>&</sup>lt;sup>62</sup> CPUC November Comments at 4.

the proposed priorities are as follows: (1) the CAISO will consider the effectiveness of a resource along with start-up costs and minimum load costs when issuing exceptional dispatches to commit a resource to operate at minimum load; (2) the CAISO will also consider energy bids, if available and as appropriate, when it issues Exceptional Dispatch instructions for energy; and (3) the goal of the CAISO will be to issue Exceptional Dispatch instructions on a least-cost basis. According to the CAISO, it proposes to employ priorities that allow for more flexibility than those suggested by the CPUC. The CAISO argues that it is appropriate to ensure that the priorities stated in section 34.9 are flexible because exceptional Dispatch determination will be made on the basis of various factors, such as the ability to access information about bids from relevant prior market periods in a timely fashion, the expected duration of the Exceptional Dispatch, the effectiveness of resources, and whether a prospective mitigated resource has reached its supplemental revenue cap or when it is due to reach the cap.<sup>63</sup>

#### c. <u>Commission Determination</u>

37. The Commission finds the CAISO's proposal for selecting resources to be exceptionally dispatched to be reasonable. If the CAISO were required to issue exceptional dispatches on a strictly least-cost bid basis, or to exclusively use resource adequacy resources prior to dispatching non-resource adequacy resources, this could lead to inadvertent tariff violations or the selection of ineffective resources. Because Exceptional Dispatch is an out-of-market mechanism that is used to address real-time contingencies, decisions to dispatch a resource must be made quickly, under circumstances where it may not be possible to comply with a tariff requirement that the least-cost resource be selected, given the bid data needed to ensure compliance.<sup>64</sup> Therefore, we hereby accept the CAISO's proposed amendment to section 34.9 of the MRTU Tariff that clarifies which costs the CAISO will consider when it selects a resource for Exceptional Dispatch. Although we decline to impose a more rigid rule, we expect the CAISO to abide by its stated goal of issuing Exceptional Dispatch instructions on a least cost basis.<sup>65</sup>

<sup>63</sup> CAISO Reply at 25-26.

<sup>64</sup> Further, start-up and minimum load costs would have to be weighed against energy bids in order to find the lowest cost resource.

<sup>65</sup> Further, the CAISO is required to provide detailed information on each instance of Exceptional Dispatch, thereby achieving transparency and allowing market participants to analyze the CAISO's use of Exceptional Dispatch.

### 3. <u>New Market Products</u>

### a. <u>Comments and Protests</u>

38. Regarding contingencies on Path 26, J.P. Morgan argues that the CAISO should rely on existing or new market products to provide the capacity-based reliability services it currently proposes to procure through Exceptional Dispatch. J.P. Morgan notes that the CAISO has posted a paper entitled "30-Minute Ancillary Services" (Issue Paper) on its website, <sup>66</sup> but remains concerned that the CAISO does not appear inclined to create a 30-minute reserve product. Rather than deferring to the stakeholder process, J.P. Morgan urges the Commission to address the issue of appropriate compensation for resources providing capacity-related services, including the capacity necessary to cover a Path 26 contingency, in the instant proceeding.<sup>67</sup>

39. WPTF states that the Exceptional Dispatch discussion has identified a number of services that the CAISO now plans to procure through Exceptional Dispatch that should instead be structured, procured, and compensated as distinctive market products, including a 30-minute reserve product and a competitive product to procure voltage support services. WPTF asserts that although the Commission has directed the CAISO to develop market-based voltage support services, the CAISO has declined to do so. Similarly, WPTF states that through discussions related to the CAISO's miscellaneous tariff provisions, the CAISO has indicated that it has no plans to develop a voltage support service, despite a directive from the Commission. Accordingly, WPTF requests that the Commission direct the CAISO to do the following: (1) continue the stakeholder process to investigate and define missing services such as 30-minute reserves, and reconvene the stakeholder process for voltage support; (2) file appropriate tariff changes with the Commission that set forth market-based mechanisms for procurement and compensation and complete implementation within 12 months after MRTU startup; and (3) establish in this proceeding appropriate compensation for resources that provide capacity-based reliability services such as those needed to address 30-minute contingencies on the CAISO system.<sup>68</sup>

<sup>&</sup>lt;sup>66</sup> J.P. Morgan November Comments at 8. The Issue Paper is posted at http://www.caiso.com/2078/2078be2d3790.html.

<sup>&</sup>lt;sup>67</sup> Id. at 10.

<sup>&</sup>lt;sup>68</sup> WPTF November Comments at 12.

### b. <u>Reply Comments</u>

40. SoCal Edison argues that the Commission should reject WPTF's suggestion to use these proceedings to direct the CAISO to develop new market services and associated appropriate compensation. SoCal Edison points out that the CAISO has initiated discussions to evaluate the need and applicable compensation for a 30-minute reliability product.<sup>69</sup>

41. In contrast, J.P. Morgan continues to urge the Commission not to defer to the CAISO's ongoing 30-minute reserve stakeholder process.<sup>70</sup> J.P. Morgan supports the use of existing, and/or the development of new, market-based products and mechanisms to satisfy the CAISO's known and identified reliability and operating requirements. As a short term solution, J.P. Morgan acknowledges that the CAISO will not be able to better model certain contingencies at the start of MRTU and will need to use Exceptional Dispatch to address these contingencies. On a long-term basis, though, J.P. Morgan believes that reliance on market-based products and services is the best means to ensure the availability of, and investment in, the resources necessary to satisfy the CAISO's operating and reliability requirements.<sup>71</sup> Thus, J.P. Morgan recommends that the Commission direct the CAISO to develop such products in parallel with its efforts to develop more sophisticated modeling and software capabilities.<sup>72</sup>

42. WPTF reiterates that over three years ago the Commission directed the CAISO to submit a proposed structure for the implementation of competitive procurement of

<sup>70</sup> J.P. Morgan Reply at 5.

<sup>71</sup> *Id.* at 10. In light of the CAISO's software constraints and reluctance to use 10-minute operating reserves to address the situation, J.P. Morgan understands that the CAISO may have to rely on its Exceptional Dispatch authority to ensure that sufficient capacity is on-line to respond to the loss of the Pacific DC Intertie. However, J.P. Morgan does not necessarily agree that the loss of the Pacific DC Intertie should be modeled as a "supply/demand contingency" since the loss of the Pacific DC Intertie could shift a potentially significant amount of power to the CAISO's backbone 500-kV transmission network.

<sup>72</sup> *Id.* at 13-14. J.P. Morgan directs the Commission to the joint comments submitted to the CAISO by J.P. Morgan and NRG Energy regarding the development of a 30-Minute Ancillary Service, *available at* http://www.caiso.com/2078/2078be2d3790.html.

<sup>&</sup>lt;sup>69</sup> SoCal Edison Reply at 5.

voltage support.<sup>73</sup> Further, WPTF asserts that the CAISO should not be relying on Exceptional Dispatch to provide voltage support when it has long used annual contracts to do so, and should not be relying on annual reliability must-run contracts as the long-term source of voltage support when the Commission has ordered the CAISO to propose a structure for the implementation of competitive procurement of that service.<sup>74</sup> Additionally, WPTF requests that until such time as a market-based mechanism to procure the services needed to manage the Pacific DC Intertie contingency is in place, the Commission direct the CAISO to do the following: (1) offer ICPM designations to resources that are committed through Exceptional Dispatch for the balance of their unit's capacity not already compensated by other resource adequacy, reliability must-run, or ICPM mechanisms; (2) permit unmitigated energy market revenues earned in connection with Exceptional Dispatch; and (3) eliminate its proposed "double payment" rule that would limit energy market revenues.<sup>75</sup>

43. At this time, the CAISO disagrees that any 30-minute reserve or voltage support products should be developed. The CAISO states that any new market product should be carefully analyzed in the context of an operating MRTU in order to determine its appropriate definition and the appropriate mechanism to procure it. Thus, the CAISO argues that this proceeding is not the appropriate forum in which to create viable new market products. The CAISO also asserts that, in the absence of a defined requirement and a market for the product, neither the Commission nor the CAISO can determine the value of the reliability service.<sup>76</sup> Therefore, the CAISO submits that, while it evaluates

<sup>73</sup> WPTF Reply at 22 (citing *Cal. Indep. Sys. Operator, Inc.*, 112 FERC ¶ 61,350, at P 21 (2005)).

<sup>74</sup> Id.

<sup>75</sup> *Id.* at 20-21.

<sup>76</sup> For example, the CAISO states that typically many units can provide capacity for coverage of contingencies south of Path 26, which may result in the market value of such reserves in a competitive market being very low. The CAISO states that a 30-minute reserve product would be expected to have lower prices than the 10-minute reserve products. Therefore, even at the currently prevailing prices of 10-minute spinning reserves, on a per-megawatt basis it would take many hours of accepted reserve bids to equal the monthly ICPM payment. According to the CAISO, the resulting ICPM payment to a designated unit may at times be higher than if its capacity were procured through a market for a future 30-minute operating reserve product. CAISO Reply at 17 (citing CAISO 2007 Annual Report on Market Performance and Issues P 4.3 (available at http://www.caiso.com/1f9c/1f9c8a8cddd0.html)). The CAISO notes that the average market prices (in \$/MW) for 10-minute spinning reserve was \$10.11 in 2006 and \$5.42 in 2007, while 10-minute non-spinning reserve was \$5.96 in 2006 and \$3.98 in 2007.

the need for and value of potential new market products based on the actual functioning of MRTU, the proposed method for determining partial ICPM designations, on the basis of Exceptional Dispatch megawatt, is an appropriate compensation mechanism to have in place. Finally, the CAISO offers that post-MRTU implementation it will have empirical data concerning whether new products are needed and how they should be defined.<sup>77</sup>

#### c. <u>Commission Determination</u>

44. The Commission finds that, under the circumstances, the use of Exceptional Dispatch for Path 26 and voltage support is just and reasonable upon MRTU start-up. Nevertheless, we agree with WPTF and J.P. Morgan that the CAISO should not permanently rely on an out-of-market mechanism to procure ancillary services that could be more appropriately supplied through market products. We further agree with WPTF and J.P. Morgan that the issues raised in this proceeding indicate that such products may be needed. The CAISO has already initiated a stakeholder process regarding the development of a 30-minute reserve product.<sup>78</sup> We strongly encourage the CAISO to continue to work with the stakeholders to develop a market-based solution for Path 26 dispatch, such as a competitive procurement of existing or new ancillary service products. Accordingly, we direct the CAISO continue its stakeholder process on this issue and, if it has not already filed a proposed solution, to report to the Commission on the status of the stakeholder process within 120 days of the date of this order. In the interim, however, the Commission finds Exceptional Dispatch, as accepted herein, to be a just and reasonable method of procuring these services until such time as the CAISO can implement an alternative mechanism.<sup>79</sup>

45. We further find that voltage support services may be appropriately procured through a competitive market product. The Commission directed the CAISO to submit a proposed structure for the implementation of competitive procurement of voltage support in 2005.<sup>80</sup> Although the CAISO has indicated that the development of a market product for procuring voltage support services is not a priority, we note that a number of parties

<sup>77</sup> *Id.* at 16-18.

<sup>78</sup> *Id.* at 16; *see also* the CAISO's issue paper entitled, "30-Minute Ancillary Services," *available at:* <u>http://www.caiso.com/2078/2078be2d3790.html</u>.

<sup>79</sup> The Commission is only required to accept a reasonable solution and is not required to impose a perfect one. *See e.g. Indep. Energy Producers Ass'n v. FERC*, 121 FERC ¶ 61,276, at P 26 and n.33-34 (2007); *PJM Interconnection, LLC*, 124 FERC ¶ 61,033, at P 17 n.27 (2008).

<sup>80</sup> Cal. Indep. Sys. Operator Corp., 112 FERC ¶ 61,350, at P 21, 22 (2005).

have shown an interest in such a product. Accordingly, we direct the CAISO to file a report within 120 days of the date of this order that details the outcome of the stakeholder process and its plans for a long-term solution for procuring voltage support outside of Exceptional Dispatch. As above, the Commission finds that, given the fact that the CAISO does not have a market for voltage support, Exceptional Dispatch is a just and reasonable mechanism for procuring this product until such time as the CAISO can implement a market for voltage support.

### B. <u>Mitigation</u>

## 1. <u>The CAISO's June Proposal</u>

In its June Proposal, the CAISO proposed to mitigate resources that are issued 46. exceptional dispatches for the following three reasons: (1) to address reliability requirements related to non-competitive transmission constraints; (2) to ramp units up from minimum operating levels to minimum dispatchable levels to protect against contingencies that are not directly incorporated or sufficiently met by the MRTU software; and (3) to address other special unit-specific operating or environmental constraints that are not incorporated into the MRTU model.<sup>81</sup> Specifically, the CAISO proposed to mitigate all resources so that they receive the higher of their default energy bid or the locational marginal price.<sup>82</sup> Under the proposed mitigation, resources with capacity contracts, i.e., resource adequacy resources, reliability must-run resources, and ICPM resources, would earn no additional capacity-related revenues through Exceptional Dispatch. However, non-resource adequacy resources would be allowed to accrue additional supplemental revenues<sup>83</sup> because they have no guaranteed fixed cost recovery for providing capacity and because locational marginal prices will likely be suppressed when Exceptional Dispatch instructions are issued.<sup>84</sup>

<sup>81</sup> June Proposal at 6.

<sup>82</sup> According to the CAISO, mitigating payments for an Exceptional Dispatch to the higher of the resource's default energy bid or the locational marginal price closely mirrors the market result that would occur if the reliability requirement creating the need for the Exceptional Dispatch were incorporated in the MRTU software. *Id.* at 9.

<sup>83</sup> As proposed by the CAISO, supplemental revenues equal the higher of the locational marginal price or the resource's actual bid, minus the resource's default energy bid. Supplemental revenues are the total amount of revenue received by a resource above its default energy bid following an Exceptional Dispatch. *Id.* 

<sup>84</sup> The CAISO provides that the combination of mitigation and Exceptional Dispatch could, at times, suppress locational marginal prices because additional

(continued...)

47. Because the CAISO expects the need for Exceptional Dispatch to be greater at the beginning of MRTU, it proposed two different methods for determining the amount of supplemental revenues that an eligible mitigated resource can receive. Under both methods, the amount of supplemental revenues that a resource can receive in a 30-day period would be capped. Once the cap is reached, the resource would be treated like any other mitigated resource and be paid the higher of the locational marginal price or its default energy bid for the remainder of the 30-day period. The first method would apply from MRTU implementation until the end of the fourth month of MRTU operations. The CAISO proposed that during this initial period, eligible mitigated resource-specific settlement interval locational marginal price, up to the revenue cap.<sup>85</sup> The CAISO states that it proposed the \$24/MWh adder because that is the Commission-approved bid adder under the existing MRTU Tariff for eligible frequently mitigated units.<sup>86</sup>

48. The CAISO proposed that beginning in the fifth month of MRTU, eligible mitigated resources receive supplemental revenues to be settled at the higher of the resource's energy bid price, or the locational marginal price, up to the supplemental revenue cap. The CAISO explained that the energy bid price would be limited by the \$500/MWh bid cap for the first year of MRTU, which would increase thereafter.<sup>87</sup> For

incremental energy delivered by exceptionally dispatched resources will be considered in the real-time market as energy with a price of zero. In general, resources with capacity contracts, such as ICPM capacity, reliability must-run resources, and resource adequacy resources, are guaranteed contributions toward fixed cost recovery under their capacity contracts. The CAISO argues, therefore, that such resources should be less susceptible to the impact on market revenues caused by infrequent exceptional dispatches than resources without capacity contracts. On the other hand, the CAISO provides that suppressed locational marginal prices could affect the recovery of fixed costs by resources without capacity contracts, when such resources are infrequently dispatched or are often subject to mitigation while also being the unit setting the marginal price. *Id.* at 10.

<sup>85</sup> Under this proposal, supplemental revenues are defined as the higher of (1) the locational marginal price minus the default energy bid, or (2) the default energy bid plus a \$24/MWh adder minus the default energy bid price multiplied by the amount of energy provided by the resource under the Exceptional Dispatch. *Id.* at 12.

 $^{86}$  June Proposal at 12. The \$24/MWh adder was approved in the MRTU Order, 116 FERC  $\P$  61,274 at P 1069.

<sup>87</sup> This is the system-wide bid cap approved under MRTU. As approved, the bid cap is set at \$500/MWh for the first 12 months following MRTU implementation. It (continued...)

purposes of this method, the CAISO defined supplemental revenues as the higher of the energy bid price for the resource minus its default energy bid, or the locational marginal price minus the default energy bid price, multiplied by the amount of energy provided by the resource under Exceptional Dispatch. The CAISO explained that this method potentially allows supplemental revenues to accrue in fewer hours than under the \$24/MWh adder.<sup>88</sup>

## 2. <u>The Commission Response in the October 16, 2008 Order</u>

49. In the October 16, 2008 Order, the Commission recognized the potential need for the mitigation of Exceptional Dispatch, but found that the June Proposal, which intended to mitigate Exceptional Dispatch, may be unjust, unreasonable, unduly discriminatory, or otherwise unlawful. Specifically, the Commission found that the proposed hourly compensation provisions may not adequately compensate non-resource adequacy resources for the backstop capacity services they provide under Exceptional Dispatch. However, the Commission expressed concern that absent proper mitigation, resources may have an improper incentive to forgo the Commission's proposed offer of an ICPM designation in hopes of earning revenues in excess of the ICPM payment by submitting high offers into the market and being continually exceptionally dispatched.<sup>89</sup>

## 3. <u>The Need for Mitigation of Exceptional Dispatch</u>

## a. <u>The CAISO's November Proposal</u>

50. The CAISO is concerned that in the absence of especially strong Exceptional Dispatch mitigation measures during the first few months after MRTU start-up, some resources may be able to receive extraordinary payments due to temporary software issues. To address this concern, the CAISO maintains that the Commission should approve its proposal to apply mitigation measures to exceptional dispatches issued in circumstances when resources could potentially exercise local market power.<sup>90</sup> The

will then increase to \$750/MWh, unless the CAISO makes a filing with the Commission showing that its markets are non-competitive and the Commission supports this assessment, and then 12 months later be raised to \$1000/MWh, unless the Commission supports a CAISO analysis that the markets are non-competitive. *Cal. Indep. Sys. Operator Corp.*, 112 FERC ¶ 61,013, at P 104 (2005).

<sup>88</sup> June Proposal at 13; November Proposal at 39.

<sup>89</sup> October 16, 2008 Order, 125 FERC ¶ 61,055 at P 104, 108.

<sup>90</sup> November Proposal at 27.

CAISO asserts that its proposal to offer resources a choice between an ICPM designation or supplemental revenues<sup>91</sup> can be utilized with the \$24/MWh bid adder approach by allowing resources an option, during the first four months of MRTU, to either accept a 30-day ICPM designation or receive supplemental revenues with the \$24/MWh bid adder during the same 30-day period.<sup>92</sup>

51. The CAISO explains that the rationale for its proposed approach is that mitigation should be applied to exceptional dispatches where a significant potential exists for market power to be exercised due to highly localized or unit-specific constraints and other reliability requirements that are not subject to the automated mitigation provisions incorporated into the MRTU software. In addition, the CAISO asserts that the potential for the exercise of locational market power is a concern when the full network model and/or MRTU software is unable to address a constraint and the scheduling coordinator is able to submit high bids knowing that the CAISO requires the resource to operate at a level in excess of the level determined in the CAISO's markets. The CAISO notes that the full network model and MRTU software work well when dealing with flow-based constraints and contingency analyses, but asserts that they were not designed to handle on-line capacity-based constraints, resource specific constraints, environmental constraints, or voltage-related constraints.<sup>93</sup>

52. The CAISO argues that just as it is appropriate to apply mitigation to address the exercise of locational market power by resources that are dispatched through the MRTU software, it is also appropriate to apply mitigation measures to exceptional dispatches of resources that have the ability to exercise locational market power. The CAISO states that it understands that all ISOs and RTOs issue manual dispatch instructions for reliability purposes and apply (or propose to apply) local market power mitigation rules

<sup>92</sup> November Proposal at 39-40. The CAISO's proposal regarding the calculation of supplemental revenues has not changed from the June Proposal.

<sup>93</sup> The CAISO identifies the following instances where the opportunity to exercise market power exists with respect to addressing conditions that are not modeled or are not fully modeled in the full network model: (1) capacity constraints caused by transmission outages of the Pacific DC intertie; (2) forbidden operating regions and other real-time operating constraints, which are resource constraints; (3) San Francisco Bay Area Delta Dispatch (Delta Dispatch) and other environmental constraints; and (4) voltage stability constraints. *Id.* at 30.

<sup>&</sup>lt;sup>91</sup> For a detailed discussion of the CAISO's revised compensation proposal, *see infra* P 114-135.

to those dispatch instructions. Accordingly, the CAISO argues that the Commission should approve its proposal to do the same.<sup>94</sup>

### b. <u>Comments and Protests</u>

53. PG&E, SoCal Edison, and the CPUC generally support the CAISO's proposed mitigation. PG&E asserts that concerns over contribution toward fixed costs are addressed by making an ICPM designation available to the resource immediately upon the first invocation of Exceptional Dispatch. Therefore, PG&E contends that the mitigated energy price results in a just and reasonable energy payment to the exceptionally dispatched resource.<sup>95</sup> On a related note, the CPUC is concerned that the potential exists for the exercise of market power in local areas.<sup>96</sup>

54. SoCal Edison argues that the CAISO's proposed mitigation measures are necessary because the CAISO does not attempt to achieve a competitive market price under Exceptional Dispatch.<sup>97</sup> Further, SoCal Edison supports an exception to the general MRTU mitigation principles to allow non-resource adequacy resources the opportunity to earn supplemental revenues to recover fixed costs. However, SoCal Edison contends that these supplemental revenues must be limited to ensure just and reasonable results to buyers and sellers.<sup>98</sup>

55. In contrast, Calpine, WPTF, and Mirant are opposed to the CAISO's proposed mitigation of Exceptional Dispatch. Specifically, Calpine objects to the CAISO's need to mitigate exceptionally dispatched resources under unspecified circumstances and, thus, contends that the case for mitigation has not been established.<sup>99</sup>

<sup>94</sup> *Id.* at 28.

 $^{95}$  PG&E November Comments at 3 (citing October 16, 2008 Order, 125 FERC  $\P$  61,055 at P 43).

<sup>96</sup> CPUC November Comments 8.

<sup>97</sup> SoCal Edison November Comments at 9.

<sup>98</sup> Id. at 10.

<sup>99</sup> Calpine November Comments at 2-3.

56. Similarly, WPTF repeats its July 18, 2008 protest<sup>100</sup> regarding the CAISO's proposed Exceptional Dispatch mitigation measures and argues that the CAISO has offered no new information to support expanding the circumstances for price mitigation of exceptional dispatches.<sup>101</sup> WPTF acknowledges that it is reasonable to ensure that resources exceptionally dispatched for the purpose of managing local, non-competitive constraints are precluded from abusing market power. However, WPTF asserts that the CAISO has not met its burden of showing the potential for the exercise of market power in all other instances of Exceptional Dispatch. WPTF submits that unless the CAISO demonstrates a supplier's ability to exercise market power, services the CAISO procures through Exceptional Dispatch, other than management of non-competitive local constraints, should not be mitigated.<sup>102</sup> WPTF further asserts that the supplemental payment approach is unjust and unreasonable, such that it should be rejected and replaced with a different set of simplified compensation provisions.<sup>103</sup>

57. Likewise, Mirant argues that the CAISO has not demonstrated that a seller actually has the ability to exercise market power in the vast majority of cases of Exceptional Dispatch. Accordingly, Mirant contends that exceptionally dispatched units should not be mitigated and should be paid the higher of their bid or the prevailing locational marginal price.<sup>104</sup>

<sup>100</sup> In its July 18, 2008 protest, WPTF argued that the June Proposal should be rejected for a number of reasons, including the CAISO's failure to show the potential for the exercise of market power, the unpredictable nature of Exceptional Dispatch, the overbreadth of the proposed mitigation measures, and the concern that approval of proposed mitigation would inhibit timely resolution of the transmission issues that created the need for Exceptional Dispatch in the first place. WPTF also argued that additional mitigation measures for Exceptional Dispatch are unnecessary because the existing MRTU mitigation measures are sufficient and because market manipulation following an Exceptional Dispatch should be easily detectible. WPTF November Comments at 9-10.

<sup>101</sup> *Id.* at 9.

<sup>102</sup> *Id.* at 10.

 $^{103}$  *Id.* at 4. As a result, WPTF submits an alternate proposal described *infra* at P 249.

<sup>104</sup> Mirant November Comments at 8 n.5. Mirant explains that the energy and ancillary service prices that a mitigated Exceptional Dispatch unit receives are not being set by that unit, but rather are subject to market forces already disciplined by the CAISO's price mitigation protocols. Thus, Mirant argues that it would be arbitrary and capricious to impose a pseudo cost-based revenue stream to a unit that is not exercising (continued...)

#### c. <u>Reply Comments</u>

58. In response to the argument that Exceptional Dispatch energy payments should only be mitigated if the CAISO can demonstrate a high likelihood of market power, or its actual exercise, the CAISO argues that the three categories of Exceptional Dispatch listed in the June Proposal cover the situations that it and its Market Monitor have identified as presenting a significant potential for the exercise of market power. The CAISO argues that such potential for market power is attributed to highly localized or unit-specific constraints and other reliability requirements that are not subject to the automated Local Market Power Mitigation provisions incorporated in the MRTU software. The CAISO also notes that in the October 16, 2008 Order, the Commission acknowledged a potential need for mitigation for Exceptional Dispatch.<sup>105</sup> Thus, the CAISO argues that the Commission should disregard the attempts of WPTF and J.P. Morgan to unduly narrow the scope of the Exceptional Dispatch mitigation provisions.

59. The CAISO disagrees with WPTF's statement that it has proposed additional categories of exceptional dispatches to be mitigated. The CAISO explains that WPTF appears to be referring to exceptional dispatches to address the various types of constraints (voltage-related constraints, on-line capacity-based constraints, environmental constraints, and resource constraints) that the CAISO discussed at the technical conference. The CAISO states that, contrary to WPTF's assertion, these constraints do not constitute new categories of exceptional dispatches that the CAISO only now proposes to mitigate. Rather, these constraints are to be mitigated pursuant to the categories of exceptional dispatches listed in the June Proposal.<sup>106</sup>

60. SoCal Edison, Six Cities, the CPUC, and PG&E all support the CAISO's proposed mitigation of exceptional dispatches. SoCal Edison agrees that the mitigation of energy bids is required under certain Exceptional Dispatch situations and asserts its belief that temporal market power situations may occur during which units that are needed could bid up to the energy bid cap and still receive dispatches from the CAISO because other effective resources that could compete with these bids are not available.<sup>107</sup>

market power in regard to the energy and ancillary service prices that it receives for the services that it provides to the market. *Id.* at 9.

<sup>105</sup> CAISO Reply at 23 (citing October 16, 2008 Order, 125 FERC ¶ 61,055 at P 108 n.101).

<sup>106</sup> *Id.* at 22.

<sup>107</sup> SoCal Edison Reply at 5.

61. Similarly, Six Cities submit that, like the mitigation measures in the MRTU markets, Exceptional Dispatch mitigation is intended to ensure that resources do not take advantage of known modeling deficiencies or constraints and demand excessive compensation.<sup>108</sup> Six Cities argue that WPTF's request for modification of the mitigation provisions lacks foundation and should be rejected. Specifically, Six Cities contend that WPTF's insistence on a conclusive showing of market power is inconsistent with the mitigation provisions already in the MRTU Tariff.<sup>109</sup> Moreover, Six Cities question how and when WPTF wants the CAISO to demonstrate the presence of market power.<sup>110</sup>

62. Six Cities accept the CAISO's explanation that Exceptional Dispatch is, in effect, serving as a substitute for the automated process that contains mitigation measures, making the mitigation of Exceptional Dispatch necessary and appropriate. Six Cities also assent to SoCal Edison's observation that the mitigation of exceptional dispatches, which does not require the selection of resources on a least cost basis, is essential to ensure just and reasonable compensation.<sup>111</sup>

63. However, Six Cities express concern that the more flexible mitigation that the CAISO proposes beginning the fifth month after MRTU implementation may not provide sufficient protection against the exercise of market power. Therefore, Six Cities urge the Commission to modify the proposed mitigation to provide that the more stringent measures, currently proposed for the first four months of MRTU, may be extended if experience reveals such a need.<sup>112</sup>

64. The CPUC believes that there will be instances when suppliers may have sufficient knowledge or foresight to predict when the CAISO will use Exceptional Dispatch. The CPUC contends that it is appropriate to mitigate these bids to eliminate a unit's ability to exercise market power. Further, the CPUC disagrees with WPTF's argument that the CAISO should be required to affirmatively demonstrate the existence of market power when it issues an Exceptional Dispatch instruction because it is unlikely that the CAISO will be able to determine the potential for market power abuse until after the Exceptional Dispatch instruction has been issued. The CPUC argues that the

<sup>110</sup> Id.

<sup>112</sup> *Id.* at 12.

<sup>&</sup>lt;sup>108</sup> Six Cities note that energy bids are capped at \$500/MWh for the first 12 months of MRTU. Six Cities Reply at 10 n.5.

<sup>&</sup>lt;sup>109</sup> *Id.* at 10 (citing generally to MRTU Tariff at § 39 *et seq.*).

<sup>&</sup>lt;sup>111</sup> Id. at 11 (citing SoCal Edison November Comments at 9).

CAISO's ex post analysis of the Exceptional Dispatch will determine if the mitigation was necessary and that the CAISO could make any necessary corrections at that time.<sup>113</sup>

65. PG&E argues that if a resource does not, or cannot bid into the market at a price that clears, then payment of the mitigated price is appropriate, while payment of the actual, higher, bid price is not. PG&E posits that if a resource bids into the market and its bid is accepted, Exceptional Dispatch of that resource would not be necessary. PG&E also reasons that if a resource is exceptionally dispatched, it means that either the resource had no bid in the market at all, or that it bid at a price that did not clear in the competitive market. PG&E concludes, therefore, that when a resource is exceptionally dispatched for either reason, "the more reasoned presumption is that the [resource] may have market power, and so should receive a mitigated price for its energy."<sup>114</sup> PG&E further claims that if a resource does not have market power, it can receive an unmitigated price by bidding into the market at a price that clears.<sup>115</sup>

66. PG&E also urges the Commission to reject WPTF's assertion that the burden should be on the CAISO to offer compelling evidence of market power before applying mitigation measures to Exceptional Dispatch. PG&E asserts that WPTF's concerns are made irrelevant by the fact that the CAISO is now proposing to offer the option of an ICPM designation upon issuing an Exceptional Dispatch instruction.<sup>116</sup>

67. In contrast, Calpine, J.P. Morgan, and WPTF continue to oppose the CAISO's proposed mitigation of exceptional dispatches. According to Calpine, the CAISO's reference to its Market Monitor's concerns about economic withholding in the energy markets does not suffice as substantial evidence to support mitigation measures. Calpine explains that MRTU already provides for automatic and ubiquitous mitigation of offers by resources that are dispatched because of transmission-related constraints. Thus, Calpine states that additional mitigation of energy offers is unwarranted.<sup>117</sup>

68. Further, Calpine rejects the CAISO's suggestion that a resource might have a sufficient expectation of an Exceptional Dispatch to engage in economic withholding in the energy markets. Calpine elaborates that the likelihood of Exceptional Dispatch in real-time should be difficult to predict and points out that the CAISO could always resort

- <sup>114</sup> PG&E Reply at 7.
- <sup>115</sup> *Id.* at 8.
- <sup>116</sup> *Id.* at 7.
- <sup>117</sup> Calpine Reply at 4.

<sup>&</sup>lt;sup>113</sup> CPUC Reply at 11.

to an advance "offer of an ICPM designation, accompanied by a must-offer obligation, that would subject the resource to the regular local market power offer mitigation rules applicable to energy offers."<sup>118</sup> Moreover, Calpine asserts that imposing special mitigation rules on energy offers by resources eligible for Exceptional Dispatch would impose obligations that do not accompany eligibility for resource adequacy or ICPM capacity compensation.

69. WPTF urges the Commission to reject mitigation for exceptional dispatches related to managing forbidden operating regions of resources,<sup>119</sup> Pacific DC Intertie contingency management, planned outages, forced outages, general environmental constraints, and voltage support. WPTF argues that the November Proposal presumes the ability to exercise market power in every case, and for every megawatt of resource capability, and applies ex-ante mitigation despite the fact that the CAISO fails to offer substantive evidence of any historical exercise of market power or of a high likelihood that providers will be able to exercise market power for the services that the CAISO proposes to mitigate under Exceptional Dispatch.<sup>120</sup> Further, WPTF objects to the absence of a test to determine whether there is a high level of concentration among suppliers that can address each specific operating constraint during specific operating conditions, and the lack of a requirement to test the impact of every Exceptional Dispatch on each specific uncompetitive constraint in the CAISO's proposal. For these reasons, WPTF asserts that the Commission should reject the November Proposal to mitigate any services procured through Exceptional Dispatch other than local, non-competitive congestion constraints that are not reflected in the full network model.<sup>121</sup>

70. J.P. Morgan argues that the CAISO has not demonstrated the need to mitigate energy bids of resources committed under Exceptional Dispatch above the bid caps already in place.<sup>122</sup>

### d. <u>Commission Determination</u>

71. We find that the CAISO has not satisfied its burden of justifying its proposed market power mitigation measures in the majority of cases of Exceptional Dispatch. In essence, the purpose of market power mitigation is to guard against the potential exercise

<sup>118</sup> Id.

<sup>119</sup> Forbidden operating region limitations are discussed *infra* at n.173.

<sup>120</sup> WPTF Reply at 15.

<sup>121</sup> *Id.* at 16.

<sup>122</sup> J.P. Morgan November Comments at 7.

of market power.<sup>123</sup> The Commission limits mitigation to circumstances in which a "seller has been found to possess ... market power."<sup>124</sup> We have previously held that "[i]t is the possession of market power (and, therefore, the potential to exercise it) ... that triggers the need for mitigation."<sup>125</sup> Once it is shown that market power exists, adequate mitigation of the potential to exercise market power becomes essential.<sup>126</sup>

72. In the course of evaluating proposed mitigation measures, we have historically attempted to balance the need for the Commission to be able to identify the potential to exercise market power and impose appropriate mitigation measures with the need to "ensure that the analysis we adopt and the mitigation measures we design do not mistakenly attribute market power to those who do not have it, and thereby distort markets."<sup>127</sup> Moreover, the Commission only accepts mitigation measures that address well-defined structural problems in the market,<sup>128</sup> and has consistently rejected mitigation

<sup>124</sup> Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities, Order No. 697, 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, order on reh'g and clarification, 124 FERC ¶ 61,055 (2008).

<sup>125</sup> MRTU Rehearing Order, 119 FERC ¶ 61,076 at P 490.

<sup>126</sup> Id.

<sup>127</sup> AEP Power Marketing, Inc., et al, 107 FERC ¶ 61,018, at P 5 (2004).

<sup>128</sup> See New England Power Pool, 101 FERC ¶ 61,344 (2002) (rejecting ISO-NE's proposal to permit mitigation in unconstrained areas where the ISO failed to identify alleged pivotal suppliers or the number of hours the supplier was pivotal or to explain how the proposed mitigation would target this problem); *New York Sys. Operator, Inc.*, 106 FERC ¶ 61,111, at P 28, 30 (2004) (denying the NYISO's proposal to automate mitigation procedures for generators in non-constrained areas because the NYISO failed to identify a well-defined structural problem in the market).

<sup>&</sup>lt;sup>123</sup> The Commission defines "market power" as a seller's ability to "significantly influence price in the market by withholding service and excluding competitors for a significant period of time." *Citizens Power & Light Corp.*, 48 FERC ¶ 61,210, at 61,777 (1989); *Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,076, at P 506 n.511 (2007). The Commission has also explained that "market power involves the ability to influence market prices." MRTU Order, 116 FERC ¶ 61,274 at P 1052; MRTU Rehearing Order, 119 FERC ¶ 61,076 at P 506.

proposals that are not adequately supported by a showing of the potential to exercise market power.<sup>129</sup>

73. We recognize that the mitigation of resources that receive Exceptional Dispatch instructions differs from other mitigation measures that the Commission has approved<sup>130</sup> because Exceptional Dispatch is an out-of-market mechanism. Because the dispatch and settlement occur outside the market, the price of exceptionally dispatched energy does not set the market clearing price.<sup>131</sup> We also acknowledge that if a resource knows with a high degree of certainty that it is the only (or one of the few) resource that can address a contingency in real-time, it may have the opportunity to influence the price in the "market" for involuntary backstop capacity by bidding at the cap. This is possible, regardless of the unit's marginal costs, and even though this bidding strategy would likely price the resource out of the regular market.<sup>132</sup> In the instant proceeding, however, we find that the CAISO has not made an adequate showing of the potential to exercise market power in all of the circumstances for which it proposes to mitigate Exceptional Dispatch. Therefore, we accept in part and reject in part the CAISO's proposed mitigation measures.

74. The Commission accepts the CAISO's proposal to mitigate Exceptional Dispatch in the following two situations. First, for the purpose of addressing reliability requirements related to non-competitive constraints. Second, for exceptional dispatches

<sup>129</sup> See, e.g., PJM Interconnection, LLC, 106 FERC ¶ 61,277, at P 27 (2004).

<sup>130</sup> See Cal. Indep. Sys. Operator Corp., 123 FERC ¶ 61,288, at P 4-7, 24 (2008) (The Commission conditionally approved the CAISO's 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 markets, based in part on the CAISO's showing that certain bidding strategies could be exercised to drive up locational marginal prices through economic withholding. Significantly, none of the parties to that proceeding disputed the CAISO's finding that bidding strategies could be employed to exercise varying degrees of market power. In contrast, parties in the instant proceeding have challenged the CAISO's claims regarding the potential to exercise market power.)

<sup>131</sup> See, e.g., MRTU Tariff, § 11.5.6.1. Bids taken for Exceptional Dispatch do not set locational marginal prices and energy from exceptional dispatches does not set any dispatch interval locational marginal price.

<sup>132</sup> We again emphasize that an exceptionally dispatched resource cannot set the market-clearing price.

needed to address the Delta Dispatch.<sup>133</sup> With respect to the mitigation of exceptional dispatches related to non-competitive constraints, we find that the CAISO has met its burden of demonstrating the potential to exercise market power. The previously-approved market power mitigation provisions of the MRTU Tariff require the CAISO to conduct a competitive path assessment to determine which transmission paths are competitive and which are non-competitive.<sup>134</sup> The competitive path assessment is an objective and well-defined methodology that identifies transmission paths, which, if constrained, could enable suppliers to exercise market power. By definition, a supplier exceptionally dispatched to address a contingency on a non-competitive transmission path would be able to exercise market power, due to the pre-determined lack of competition along that path. The parties generally agree that mitigation of exceptional dispatches to relieve constraints on non-competitive paths is appropriate. Accordingly, we find this use of mitigation to be just and reasonable.

75. The Commission also finds that the CAISO has met its burden of showing the potential for the exercise of market power by resources exceptionally dispatched to address the Delta Dispatch. During several weeks of the year certain resources are limited by environmental restrictions in the San Francisco Bay. As a result of the restrictions, the CAISO must manually dispatch combinations of resources in a particular order during the same period of time every year.<sup>135</sup> Specifically, as has been shown in other proceedings,<sup>136</sup> the operator of the Pittsburg 7 unit knows with a high degree of certainty that it will be dispatched regularly during this period, creating the potential for it to exercise market power. Further, we find that Mirant has not provided sufficient evidence to support its claim that its units that are subject to the Delta Dispatch constraint will fail to recover adequate compensation towards their fixed costs under the CAISO's proposed mitigation. For these reasons, we accept the CAISO's proposal to mitigate resources that are exceptionally dispatched to address the Delta Dispatch.

<sup>134</sup> MRTU Tariff section 39.7. We have directed the CAISO to refine its competitive assessment study procedures to make seasonal designations and to make a compliance filing showing the necessary tariff modifications within 12 months of MRTU implementation. MRTU Order, 116 FERC  $\P$  61,274 at P 1031.

<sup>135</sup> November Proposal at 35.

<sup>136</sup> See CAISO November 15, 2007 Comments in Docket No. EL05-146-004 at 6-7.

<sup>&</sup>lt;sup>133</sup> Delta Dispatch is an environmental restriction that affects the operation of specific generators in the Sacramento Delta area during a limited period in the spring and summer, which limits the usage of resources and requires different combinations of resources to be used in certain circumstances.

76. We find that the CAISO has not shown a need to mitigate resources that are exceptionally dispatched to ramp units from minimum operating levels to minimum dispatchable levels in order to protect against reliability contingencies that are not directly incorporated or sufficiently met by the MRTU software, and to address other unit-specific operating or environmental constraints not incorporated in the MRTU model.<sup>137</sup> The Commission understands these categories of mitigation to include, among other things, Exceptional Dispatch instructions related to on-line capacity contingencies (such as those related to Path 26), voltage support services, maintenance outages, environmental constraints and transiting forbidden operating regions.<sup>138</sup> In each of these cases, with the exception of the Delta Dispatch, we find that the CAISO has failed to meet its burden of showing the potential to exercise market power, as discussed in greater detail below. In fact, the CAISO does not even attempt to show the potential for the exercise of market power for the unidentified "other" unit-specific operating constraints or environmental constraints, other than the Delta Dispatch, that may justify its proposed mitigation measures. For the reasons set forth above, we cannot accept the CAISO's proposal to apply broad mitigation where there has been no showing of the potential to exercise market power.

77. Just as we are not persuaded by the CAISO's broad assertion of market power in all instances of Exceptional Dispatch, we do not accept the CAISO's comparison of its proposed mitigation measures with those of other ISOs and RTOs.<sup>139</sup> The CAISO correctly notes that other system operators subject manually dispatched resources to essentially the same local market power mitigation as dispatches made through their respective market software. However, in all the examples mentioned by the CAISO, resources receiving manual dispatches are subject to objective market power tests before mitigation is applied. In PJM, for example, suppliers dispatched out of order to maintain reliability are subject to a "three pivotal suppliers test" to determine if the supplier has market power. If the resource passes the pivotal supplier test, the bid is not mitigated.<sup>140</sup>

<sup>137</sup> MRTU Tariff, proposed section 39.10.

<sup>138</sup> CAISO Reply at 22.

<sup>139</sup> The CAISO notes that "it is the CAISO's understanding that all ISOs and RTOs issue manual dispatch instructions for reliability purposes and apply (or propose to apply) local market power mitigation rules to those dispatch instructions." The CAISO argues, therefore, that the Commission should approve the CAISO's proposal to do the same. November Proposal at 28.

<sup>140</sup> PJM Operating Agreement, Schedule 1, § 6.4.1(e),(f). The NYISO and ISO-NE employ comparable tests for market power before applying mitigation to bids submitted by suppliers that are dispatched out-of-market. *See* NYISO Market Services (continued...) In contrast, in the instant proceeding, the CAISO proposes no market power screens comparable to those employed by other RTOs or ISOs. Accordingly, with the exception of non-competitive constraints and the Delta Dispatch, the Commission rejects the CAISO's proposed mitigation measures as unjust and unreasonable.

78. We likewise disagree with the CAISO's argument that because it is appropriate to apply local market power mitigation measures to resources that are dispatched through the MRTU software, it is also appropriate to apply its proposed Exceptional Dispatch mitigation measures. The CAISO's day-ahead market mitigation mechanism and MRTU's automated local market power mitigation provisions employ automatic and objective tests for market power. To screen for market power in the day-ahead market, the CAISO runs its market twice. In the first run, only competitive constraints are enforced, followed by a second run in which all transmission constraints are enforced.<sup>141</sup> To determine if mitigation is appropriate for a particular resource, the dispatch levels of that resource are compared between the two runs. Mitigation applies only to a resource whose dispatch level increases from the first to the second run, indicating that the resource is being dispatched out-of-merit due to transmission congestion. The CAISO mitigates the bids of those resources by substituting the resource's default energy bid for its market bid.<sup>142</sup> Similar automatic and objective mitigation occurs in real-time based on competitive path assessments; only the units dispatched for the purpose of relieving a constraint on a non-competitive path are mitigated.<sup>143</sup> In contrast, the CAISO now proposes to mitigate almost all exceptional dispatches without any showing of which units have the potential to exercise market power. As discussed above, the CAISO's vague justifications for its broad mitigation measures do not satisfy the CAISO's burden of demonstrating market power.

79. We reject the CPUC's assertion that the need for mitigation can, and should, be evaluated only after the fact. Rather, the Commission requires a forward-looking approach to market power analysis. Notably, the Commission's market power analysis considers historical data to determine whether a seller has the ability to exercise market

Tariff, Attachment H, §§ 3.1.2(b)(2), 3.2.1; ISO-NE Transmission, Markets, and Services Tariff, Market Rule 1, Appendix A, § III.A.5.3.

<sup>141</sup> MRTU Tariff, § 31.2.1.

<sup>142</sup> Id. § 31.2.2.2; see also MRTU Order, 116 FERC ¶ 61,274 at P 1007.

 $^{143}$  *Id.* § 39.7. The determination of which paths are competitive and non-competitive is done periodically.

power.<sup>144</sup> To the extent that the potential to exercise market power is shown, an applicant may "propose its own mitigation specifically tailored to the market power findings on a case-by-case basis."<sup>145</sup> Furthermore, the Commission has explicitly rejected the argument that an applicant must show the actual exercise of market power before we will approve mitigation.<sup>146</sup> Contrary to the CPUC's assertions, we find that the need for market power mitigation can, and must, be assessed prior to the imposition of mitigation measures.

80. We also reject PG&E's contention that market power can be presumed simply because a resource receives an Exceptional Dispatch instruction. With the elimination of the must-offer obligation, a resource is not required to bid in the CAISO's markets unless it has a contractual obligation to do so or has accepted an ICPM designation. Therefore, we find that it is improper to conclude, as PG&E suggests, that a resource that is not obligated to bid is engaged in economic or physical withholding in an attempt to exercise market power merely because it exercises its option not to bid. In addition, the fact that a bid does not clear in the competitive market does not necessarily imply, as PG&E reasons, the potential to exercise market power. The submission of a bid that ends up being higher than the bid submitted by the marginal unit during a specific dispatch interval does not necessarily imply economic or physical withholding any more than the lack of a bid does. While it is true that a pivotal supplier may be able to extract excessive energy revenues during peak periods, neither PG&E nor the CAISO has shown that all exceptionally dispatched resources are pivotal suppliers.

81. Without some additional showing by the CAISO, we can only conclude that the exceptionally dispatched resource is pivotal in the sense that the CAISO cannot meet demand without some contribution of supply or capacity from the resource that is ultimately exceptionally dispatched. However, the CAISO has not explained why, in the vast majority of instances of Exceptional Dispatch, it has such a limited selection of suppliers that a particular resource will become pivotal. In fact, in its Answer, the CAISO has acknowledged the possibility of competition among resources to provide

<sup>&</sup>lt;sup>144</sup> Westar Energy, Inc., 123 FERC ¶ 61,123, at P 22 (2008); see, e.g., Order No. 697, FERC Stats. & Regs. ¶ 31,252 at P 36, 70 (explaining that the horizontal market power screens examine the seller's ability to exercise market power).

<sup>&</sup>lt;sup>145</sup> AEP Power Marketing, Inc., 107 FERC ¶ 61,018, at P 31 (2004).

<sup>&</sup>lt;sup>146</sup> MRTU Rehearing Order, 119 FERC  $\P$  61,076 at P 490 (emphasizing that it is the potential for the exercise of market power, and not the actual exercise of market power, that triggers the need for mitigation).

Exceptional Dispatch capacity.<sup>147</sup> Therefore, unless the CAISO can show a lack of alternatives for procuring the necessary backstop capacity or incremental energy in specific instances of Exceptional Dispatch, we do not agree with PG&E that the receipt of an Exceptional Dispatch instruction, by itself, triggers the presumption of market power.

82. We do note, however, that the automated local market power mitigation measures in the MRTU software will not apply to exceptional dispatches, and thus will be insufficient to prevent the exercise of market power in cases where market power is shown to exist. As noted previously, exceptional dispatches occur outside of the MRTU software. As a result, resources that receive exceptional dispatch instructions are not subject to the automated process that the CAISO uses to mitigate the potential exercise of market power in its integrated forward and real-time markets. Therefore, separate mitigation measures for Exceptional Dispatch may be warranted, but only in those cases where the CAISO is actually able to show the potential for the exercise of market power.

83. Finally, we do not agree with J.P. Morgan and WPTF that the \$500/MWh bid cap<sup>148</sup> necessarily provides sufficient mitigation for exceptional dispatches where the potential for market power has been shown. The CAISO has acknowledged that due to modeling limitations and inexperience with the MRTU software, it expects Exceptional Dispatch to be used more frequently than originally intended.<sup>149</sup> Due to this increased frequency, resources with market power could significantly impact the cost of electricity to customers by consistently bidding up to the cap. Given the CAISO's expectation that Exceptional Dispatch will be used much more frequently during the initial stages of MRTU due to uncertainty concerning the limitations in the full network model and MRTU software, we find that bid caps alone may not provide adequate protection for consumers in the early months of MRTU. We expect that as the CAISO gains operational experience and implements enhancements to the MRTU software and full network model, the need for Exceptional Dispatch will decrease, thereby eliminating the

<sup>&</sup>lt;sup>147</sup> "The original concept of [b]id-based [s]upplemental [r]evenues allowed for the possibility that there could be some competition for providing such Exceptional Dispatch capacity and that such competition could be reflected in the [b]ids." CAISO Answer at 10.

<sup>&</sup>lt;sup>148</sup> See P 48 n.87 supra for a detailed explanation of the bid cap.

<sup>&</sup>lt;sup>149</sup> See June Proposal at 6, 11, 19, 20-21; see also November Proposal at 20.

need for mitigation measures beyond the automated mitigation process already included in the MRTU software.<sup>150</sup>

84. Although the CAISO has not satisfied its burden of showing the potential to exercise market power for the majority of its proposed uses of Exceptional Dispatch, the Commission recognizes the CAISO's need to rely on Exceptional Dispatch to ensure reliable grid operations, particularly during the start-up days of MRTU. In addition, we acknowledge that the limitations in the full network model and MRTU software may not become fully apparent until MRTU goes live. We find that this uncertainty demonstrates the importance of implementing interim measures to control Exceptional Dispatch revenues to protect customers from potentially unjust and unreasonable rates during the early stages of MRTU. Therefore, to help facilitate a smooth transition into MRTU, the Commission institutes, pursuant to its section 206 authority, a four-month transitional start-up period in which Exceptional Dispatch instructions, for all purposes identified by the CAISO in its proposal, will be subject to a revenue cap, as explained in greater detail below.<sup>151</sup>

85. The Commission finds that a temporary cap on Exceptional Dispatch revenues is just and reasonable. First, we recognize that in launching a new market, the CAISO cannot be expected to resolve all software issues in advance through simulations and testing. As the CAISO explains, during the first few months of market operations under MRTU, "operators will be gaining experience with the software, and any software design flaws that were not apparent during the months of testing prior to MRTU start-up will become manifest."<sup>152</sup> Until the CAISO gains operational experience that will enable it to

<sup>151</sup> The Commission has previously directed system operators to implement interim measures to help facilitate the smooth transition to a new market structure. *Cf. Midwest Indep. Transmission Sys. Operator, Inc.*, 108 FERC ¶ 61,163 (2004) (ordering the Midwest ISO to implement additional safeguards and confidence-building protections at startup and for a transition period); *New York Indep. Sys. Operator, Inc.*, NYISO's non-spinning reserve market); *New York Indep. Sys. Operator, Inc.*, 92 FERC ¶ 61,073 (2000) (imposing a temporary bid cap on NYISO's energy markets); *Blumenthal, et al v. ISO New England Inc.*, 117 FERC ¶ 61,038 (2006) (instituting revised bidding rules as an interim measure to give low-capacity factor generating units operating in designated congestion areas the opportunity to recover their costs through the market).

<sup>152</sup> November Proposal at 37.

<sup>&</sup>lt;sup>150</sup> The transitional cap on Exceptional Dispatch revenues will terminate 4 months after MRTU implementation. All Exceptional Dispatch mitigation is scheduled to expire 24 months after MRTU implementation.

determine the full extent of the software and full network model limitations, we find that a temporary revenue cap is a just and reasonable measure to protect customers during the transition to the new market. Second, the four-month transition period will allow the CAISO to gather evidence to demonstrate the potential to exercise market power for specific instances of Exceptional Dispatch, if it exists, or to develop a market power test to assess which exceptionally dispatched resources possess market power. However, to ensure that the cap on Exceptional Dispatch does not become a permanent "band-aid" fix for software and modeling limitations, we find it necessary to limit the term of the cap to the four-month period immediately following MRTU implementation. We note that, as of the issuance of this order, the day-ahead market is scheduled to begin on March 31, 2009, in which case the four-month transition period will terminate on July 31, 2009, during the summer season. However, we note that the CAISO has indicated that it expects the need for Exceptional Dispatch to be "greater at the beginning of MRTU than during the remainder" of the initial 24 months of market operations, "especially during the first few months of implementation."<sup>153</sup> Accordingly, we find that the four-month transitional period is appropriate.

86. During the four-month transition period, the CAISO will apply a revenue cap on Exceptional Dispatch instructions that is equivalent to the "relaxed mitigation" originally proposed by the CAISO for months five through 24 of MRTU operations. Specifically, under the revenue cap, a resource with a capacity contract that is exceptionally dispatched for incremental energy will receive the higher of its default energy bid or the locational marginal price. A resource without a capacity contract that is exceptionally dispatched for energy, will receive the higher of its energy bid, its default energy bid, or the locational marginal price. Resources without capacity contracts will be allowed to accrue supplemental revenues (as defined by the CAISO) up to the ICPM payment level; after it reaches the ICPM level, the resource will earn the higher of its default energy bid or the locational marginal price for the remainder of 30-day period. Following the expiration of the four-month transitional period, unmitigated resources will elect, prior to the start of each calendar month, whether they want an ICPM designation or to be paid pursuant to the tariff, i.e., the higher of their bid, locational marginal price, or default energy bid, if they receive an Exceptional Dispatch instruction. The ICPM option will be the default option for resources that do not make an election.

87. For exceptional dispatches related to non-competitive constraints and the Delta Dispatch, for which we have approved ongoing mitigation measures, we accept the CAISO's proposal to mitigate all resources so that they receive the higher of their default energy bid or the locational marginal price. We also accept the CAISO's proposal to distinguish between resources with and without capacity contracts and to provide non-

<sup>153</sup> *Id*.

resource adequacy resources with the opportunity to earn supplemental revenues for exceptional dispatches in order to facilitate fixed cost recovery. However, we find that the CAISO's proposal to limit supplemental revenues during the first four months of MRTU to the higher of the default energy bid plus a \$24/MWh adder or the locational marginal price is not just and reasonable, and hereby reject it.

88. The CAISO has attempted to justify its proposal to use the \$24/MWh as a form of more stringent mitigation during the first four months of MRTU by pointing out that the Commission approved a \$24/MWh adder as default energy bid option for frequently mitigated units in the MRTU Order.<sup>154</sup> We approved the adder in the MRTU Tariff as a way to ensure that units that meet certain eligibility criteria have the opportunity to recover some contribution toward fixed costs, despite being frequently mitigated by MRTU's local market power mitigation measures.<sup>155</sup> However, there is a key distinction between frequently mitigated units and exceptionally dispatched units. Under the frequently mitigated unit option, a resource may present actual cost data and negotiate a higher bid adder if necessary. In contrast, the Exceptional Dispatch mitigation proposal contains no cost-based adjustment mechanism. Therefore, we find that the proposed \$24/MWh bid adder may not be just and reasonable in the context of Exceptional Dispatch and hereby reject it. Instead, we direct the CAISO to allow eligible resources to accrue supplemental revenues based on the "relaxed" mitigation proposed for months five through 24 of MRTU immediately upon MRTU implementation. Accordingly, eligible resources should have the option of earning supplemental revenues based on the higher of their energy bids or locational marginal prices throughout the duration of Exceptional Dispatch.<sup>156</sup>

89. The CAISO is directed to submit, within 30 days of the date of this order, a compliance filing implementing the modifications to its Exceptional Dispatch mitigation provisions discussed above. Specifically, the CAISO is directed to file tariff language implementing the four-month revenue cap on all relevant exceptional dispatches, to expire automatically at the end of the four-month transition period. The CAISO is also directed to file tariff language that narrows the scope of its proposed mitigation measures to include only Exceptional Dispatch instructions that address reliability constraints related to non-competitive transmission constraints and the Delta Dispatch for the 24-month period following MRTU implementation. In addition, the CAISO is directed to remove all references to its proposed four-month "stringent" mitigation period and the associated \$24/MWh adder.

<sup>&</sup>lt;sup>154</sup> *Id.* at 39; MRTU Order 116 FERC ¶ 61,274 at P 1069.

<sup>&</sup>lt;sup>155</sup> See MRTU Order, 116 FERC ¶61,274 at P 1062, 1069.

<sup>&</sup>lt;sup>156</sup> For a more detailed discussion of supplemental revenues, *see infra* P 220-228.

# 4. <u>The Application of Mitigation for Specific Uses of Exceptional</u> <u>Dispatch</u>

# a. <u>Delta Dispatch</u>

# i. <u>The CAISO's November Proposal</u>

90. The CAISO states that the Delta Dispatch constraint is not modeled in the full network model due to its temporary nature, complexity, and the fact that it involves constraints that cannot be modeled, such as water temperature. The CAISO explains that under the Delta Dispatch operating procedures, it must ramp up output from one unit prior to ramping up output from other units. Since this constraint is not included in either the day-ahead or the real-time dispatch software, the CAISO claims that Exceptional Dispatch of the first unit may be necessary to ensure that capacity from the other units is actually available in the real-time market. According to the CAISO, this can lead to the opportunity for units that are called on during periods when resources are constrained by this environmental restriction to exercise market power. The CAISO claims that such an opportunity exists because of the predictable nature of this phenomenon.<sup>157</sup>

# ii. <u>Comments and Protests</u>

91. WPTF acknowledges that the CAISO provides specific justifications that it may be appropriate to mitigate energy payments to resources dispatched for the Delta Dispatch. However, WPTF argues that the CAISO provides no explanation and no analysis to justify mitigation of exceptional dispatches for environmental constraints in general. Thus, WPTF states that while the Commission must determine whether the CAISO has sufficiently demonstrated the need to mitigate exceptional dispatches for the Delta Dispatch, it should direct the CAISO not to mitigate exceptional dispatches for other environmental conditions.<sup>158</sup>

92. Mirant, the owner of the units primarily affected by the Delta Dispatch, notes that the Delta Dispatch affects its units for approximately two and a half months, during which time the CAISO may need to use Exceptional Dispatch to operate the vast majority of the Mirant units for reliability purposes.<sup>159</sup> Mirant argues that any energy or ancillary services prices that its units receive when exceptionally dispatched are already subject to market forces that are disciplined by the CAISO's automated mitigation measures.

<sup>&</sup>lt;sup>157</sup> November Proposal at 35.

<sup>&</sup>lt;sup>158</sup> WPTF Reply at 25.

<sup>&</sup>lt;sup>159</sup> Mirant November Comments at 5-6.

Accordingly, Mirant contends that it would be "arbitrary and capricious to impose a pseudo, cost-based revenue stream to a unit that is not exercising market power" with respect to the energy and ancillary service revenues it receives.<sup>160</sup>

### iii. <u>Commission Determination</u>

93. As previously discussed, the Commission accepts the CAISO's proposal to mitigate resources that are exceptionally dispatched to address the Delta Dispatch.

# b. <u>Anticipated and Unplanned Outages</u>

## i. <u>The CAISO's November Proposal</u>

94. With respect to modeling limitations related to outages, the CAISO states that it will ideally be able to incorporate a transmission or generation outage or de-rate into the full network model within one to 24 hours. According to the CAISO, a rapid incorporation of the outage into the model would allow for a return to a reliance on market mechanisms to establish schedules before a significant opportunity arises to adjust bidding practices. While this is the ideal, the CAISO states that it will not always be possible to update the full network model quickly, particularly during the first two years of MRTU. The CAISO provides that when these types of outages create a need for additional capacity, particularly in transmission-constrained areas of the grid, a market participant will know, after one Exceptional Dispatch, that its resource is needed and that the MRTU software is unable to dispatch the resource automatically. The CAISO states that under these circumstances, the market participant could exercise local market power by submitting extremely high energy bids and being paid as-bid. Therefore, the CAISO argues that it is appropriate to subject exceptionally dispatched resources to mitigation in the same manner as resources that are selected through the automatic dispatch software.<sup>161</sup>

## ii. <u>Comments and Protests</u>

95. WPTF argues that the CAISO fails to justify the need to mitigate exceptional dispatches that involve transmission derates or transmission outages of short duration. WPTF asserts that by definition, short duration events do not provide an opportunity to capitalize on the knowledge that a provider will be needed for an extended period of time.<sup>162</sup>

<sup>160</sup> *Id.* at 9.

<sup>161</sup> November Proposal at 29.

<sup>162</sup> WPTF Reply at 25.

#### iii. <u>Commission Determination</u>

96. The Commission finds that the CAISO's proposal to mitigate Exceptional Dispatch in connection with all outages is overly broad, and that the CAISO has not met its burden of showing that all resources exceptionally dispatched to address transmission outages have the potential to exercise market power. We agree with WPTF that unanticipated outages of short duration generally do not provide the opportunity to exercise market power. Because the CAISO's proposal to mitigate exceptional dispatches is for all outages and is overly broad, it could result in unreasonably mitigating resources that lack market power. Accordingly, we reject it.<sup>163</sup>

### c. <u>Capacity-Based Constraints</u>

#### i. <u>The CAISO's November Proposal</u>

97. The CAISO asserts that capacity-based constraints, such as contingencies that occur on the Pacific DC Intertie, create the potential for exceptionally dispatched resources to exercise market power. To make the required showing of market power, the CAISO first observes that reliability standards implemented by the North American Electric Reliability Corporation (NERC) require the CAISO, in the event of such an outage, to take actions to restore flows to regular ratings within 30 minutes.<sup>164</sup> The CAISO explains that under MRTU, it expects that most capacity needed to meet capacity requirements related to Path 26 and the Pacific DC Intertie will be committed on a dayahead basis through a combination of the following: (1) capacity from units that are selfscheduled in the day-ahead market; (2) capacity from units that are scheduled through the day-ahead market (and are therefore eligible for bid cost recovery guarantees); and (3) additional capacity that is committed at minimum operating levels through the residual unit commitment process. However, since the day-ahead and residual unit commitment process do not directly incorporate analysis of 30-minute contingency requirements, it is possible that the CAISO may need to use Exceptional Dispatch to commit additional capacity in order to address a 30-minute contingency. The CAISO states that in making this type of manual commitment, its operators will continue the current practice of

<sup>164</sup> The CAISO explains that it can currently utilize the must-offer waiver denial process (on a day-ahead basis), or issue out-of sequence dispatches in real-time, if it needs to manually procure additional capacity to address the capacity-based constraints related to Path 26 and the Pacific DC Intertie. November Proposal at 30-31.

<sup>&</sup>lt;sup>163</sup> As we stated above, if the CAISO uncovers evidence of the potential to exercise market power during the four-month transition period or thereafter, it may file such evidence and seek to expand its mitigation proposal based on such supporting evidence.

selecting units based on a combination of reliability considerations and, to the extent practicable, projected unit commitment costs based on the start-up costs and minimum load operating costs of each unit.

98. The CAISO claims that during the day-ahead commitment process, the potential for market power in providing generation to meet major zonal contingencies, such as the loss of the Pacific DC Intertie, is limited by a variety of factors. First, the CAISO explains that because the process is performed in the day-ahead, the amount of available supply includes all available capacity. Second, the CAISO provides that the potential for the exercise of market power is mitigated in the day-ahead market by the fact that all units are subject to bid caps on start-up costs, minimum load costs, and residual unit commitment capacity. Therefore, the CAISO asserts that although suppliers may be in a position to exercise market power, they must weigh their potential gains, in light of these limitations, against the potential profits of selling increased output in the day-ahead energy market.<sup>165</sup>

99. The CAISO states, however, that once this day-ahead commitment process is complete, the potential to exercise market power dramatically increases for units needed to provide energy beyond that scheduled day-ahead because: (1) the day-ahead process is designed to ensure the availability of an amount of capacity and energy that meets, but does not exceed, system energy requirements; (2) units are selected through the residual unit commitment process based only on start-up, minimum load, and residual unit commitment capacity bid prices (excluding energy bid prices for any unloaded capacity of units committed through self-schedules, the day-ahead energy market, or the residual unit commitment process); and (3) units that are self-scheduled or committed in the dayahead process can modify their bid prices for energy during the time period between the closing of the day-ahead market and two hours prior to the actual operating hour. Therefore, the CAISO states that the real-time energy bid prices of some unscheduled capacity could be extremely high for units with a high expectation of being exceptionally dispatched above their minimum load for locational reliability needs or unit-specific operating constraints.<sup>166</sup>

100. The CAISO describes this situation as a form of "temporal market power" that is created by an increasingly limited supply available in real-time, due to the fact that not all resources effective in addressing the contingency are available in real-time (i.e., if some of the long-start units were not committed in the day-ahead process, they will not be available to compete in real-time). The CAISO explains that under these conditions, units that are needed to operate at minimum dispatchable operating levels could bid up to

<sup>165</sup> *Id.* at 32.

<sup>166</sup> *Id.* at 32-33.

the \$500 energy bid cap, regardless of their costs, and still receive dispatches because other effective resources that could contest these bids were not committed day-ahead and, thus, are not available to compete in real-time. Although the CAISO illustrates this potential use of market power for outages on the Pacific DC Intertie, it notes that its concerns also apply to capacity constraints generally.<sup>167</sup>

## ii. <u>Comments and Protests</u>

101. According to J.P. Morgan, the commitment of a resource for capacity-related purposes in no way signals that a resource will be dispatched for energy. In fact, J.P. Morgan points out that the majority of the time the contingency will not occur and the resource will not be needed for energy. For these reasons, J.P. Morgan does not agree with the CAISO that the energy bids of resources committed to satisfy certain capacity-based constraints, such as the loss of the Pacific DC Intertie, need to be mitigated beyond the CAISO's bid caps.<sup>168</sup>

102. Similarly, WPTF argues that not only has the CAISO failed to justify the mitigation of Exceptional Dispatch for the purpose of addressing capacity constraints such as loss of the Pacific DC Intertie, but also that such contingencies are more appropriately addressed through a competitively-procured market product.<sup>169</sup>

# iii. <u>Commission Determination</u>

103. The Commission finds that the CAISO has failed to show the potential for the exercise of market power in the event of real-time Exceptional Dispatch instructions to meet 30-minute contingencies related to capacity constraints, such as Path 26 and the Pacific DC Intertie. Path 26, for example, is currently assessed as a competitive constraint,<sup>170</sup> indicating that there should be adequate supply alternatives to limit any

<sup>168</sup> J.P. Morgan Reply at 8.

<sup>169</sup> See WPTF Reply at 19-20.

<sup>170</sup> See MRTU Order, 116 FERC ¶ 61,274 at P 1030. The CAISO indicates that the initial assessment will assume all interfaces to neighboring control areas and all interzonal interfaces for zones that existed prior to the effective date of MRTU to be competitive. Because Path 26 is the transmission interface between the current SP 26 and ZP 26 congestion zones, the CAISO currently assumes that it is a competitive path.

<sup>&</sup>lt;sup>167</sup> The CAISO notes that the Pacific DC Intertie is not the only capacity-based constraint. Rather, the CAISO maintains operating procedures that identify resources needed to be on-line in specific geographical areas such as South of Lugo, San Diego, and Southern California Import Transmission. *Id.* at 33 n.25.

particular resource's ability to exercise market power. We are not persuaded by the CAISO's "temporal market power" argument, which appears to be based primarily on the fact that not all resources that can effectively address the contingency are available in real-time. We agree with J.P. Morgan that "a critical ingredient in the ability to exercise market power is knowledge that a resource will need to be dispatched for energy."<sup>171</sup> The CAISO has not explained why the selection of appropriate resources to address these contingencies will be restricted so as to allow specific suppliers to anticipate that they will be needed by the CAISO for energy in real-time, thereby enabling them to artificially inflate their bids. Accordingly, we reject the CAISO's proposal to mitigate exceptional dispatches for the purpose of addressing on-line capacity constraints.<sup>172</sup>

### d. <u>Forbidden Operating Regions</u>

### i. <u>The CAISO's November Proposal</u>

104. The CAISO states that the inability of its real-time market software to recognize forbidden operating regions<sup>173</sup> and other unit-related real-time operating constraints (such as minimum operating times after being dispatched below a certain forbidden operating region) may also give rise to opportunities to exercise market power when a unit knows that it is needed. As an example, the CAISO presents a scenario in which its day-ahead market and residual unit commitment process commit just enough capacity to meet all reliability requirements of the CAISO system. Thus, the CAISO explains that virtually all on-line capacity is needed to meet reliability requirements. The CAISO provides that under this scenario, temporarily dispatching a unit below its forbidden operating region (due to market prices and bids) could cause the unit's unloaded capacity to be unavailable when it would be needed for reliability. Under these circumstances, the CAISO notes that Exceptional Dispatch may be used to keep the unit operating above its forbidden

<sup>171</sup> J.P. Morgan Reply at 8.

<sup>172</sup> As noted above, the Commission has determined that capacity-based constraints may be more appropriately addressed through a competitive market product and has directed the CAISO to continue the stakeholder processes regarding the development of such products. *See supra* P 44-45.

<sup>173</sup> Forbidden operating regions are the operating ranges through which a resource can transit but within which it cannot stably operate. Forbidden operating regions are the result of a resource's physical limitations. Resources with forbidden operating regions must be dispatched according to specific protocols for stability. For example, if the resource is required to pass through a forbidden operating region in the upward direction, the resource may then have to stay above the forbidden operating region for the specified amount of time.

operating region. Thus, the CAISO submits that without bid mitigation, a unit that knows it is needed for reliability purposes could bid up to the \$500 energy bid cap, recognizing that the CAISO would need to utilize Exceptional Dispatch in order to manage its unit-specific operating characteristics. The CAISO claims that this is plausible because resources "will, of course, be aware of the operating characteristics of their own units and what actions CAISO operators need to take in order to manage those characteristics."<sup>174</sup>

## ii. <u>Comments and Protests</u>

105. J.P. Morgan argues that the CAISO has not made a definitive showing that resources with forbidden operating regions that are exceptionally dispatched to manage those constraints will know when they are needed for reliability purposes. Therefore, J.P. Morgan asserts that the energy market bids of resources with forbidden operating regions need not be mitigated beyond the existing bid caps. Further, J.P. Morgan states that the CAISO knows which resources have forbidden operating regions, such that the CAISO may monitor any anomalous or manipulative bidding behavior with respect to these resources. In the event of questionable bidding behavior, J.P. Morgan points out that the CAISO can investigate and, if necessary, take appropriate action. Thus, J.P. Morgan asserts that it is highly unlikely that the resource owners would attempt to exercise market power.<sup>175</sup>

106. WPTF also specifically objects to the CAISO's attempt to justify mitigation of exceptional dispatches to manage unit-specific operating constraints for reliability purposes. WPTF points out that the extent to which a unit has the potential to exercise market power depends on a unit's ability to know whether it was needed for reliability, and the concentration of that service with respect to other suppliers, not on how its operating characteristics are managed.<sup>176</sup> According to WPTF, if the unit cannot predict that it is needed for reliability purposes, then the need to mitigate exceptional dispatches issued to manage operating constraints dissipates because a unit bidding into the market does not know where it will be dispatched. WPTF also states that market monitoring should detect any bidding behavior intended to manipulate the market.

## iii. <u>Commission Determination</u>

107. Regarding mitigation related to unit-specific operating characteristics, such as forbidden operating regions, the CAISO has not provided any explanation as to how a

<sup>175</sup> J.P. Morgan Reply at 9-10.

<sup>176</sup> WPTF Reply at 16-17.

<sup>&</sup>lt;sup>174</sup> November Proposal at 35.

resource could possibly determine ahead of time that the CAISO would need to manually hold it above its forbidden operating region for capacity-related reasons. The CAISO has further failed to explain why, in such a situation, it lacks adequate alternatives for procuring the needed additional capacity elsewhere, thereby limiting a particular unit's ability to exercise market power. Consistent with Commission policy to limit mitigation to the market in which a seller has been found to possess market power,<sup>177</sup> we reject the CAISO's proposal to apply broad mitigation to all resources exceptionally dispatched due to specific operating constraints without some showing by the CAISO that these resources can anticipate the need for the Exceptional Dispatch, thereby creating the potential to exercise market power.

### e. <u>Voltage Support</u>

### i. The CAISO's November Proposal

The CAISO provides that the MRTU software does not model voltage support 108. conditions, thereby creating the need to rely on Exceptional Dispatch to commit resources or adjust the amount of voltage support on the grid in real-time. The CAISO states that it has historically relied on units under reliability must-run contracts to address voltage stability issues. Specifically, the CAISO explains that reliability must-run contracts have served as a form of local market power mitigation by limiting the payment that units received for services such as voltage support, including energy needed for voltage support, through compensation mechanisms set forth in the contracts. However, according to the CAISO, the number of units under reliability must-run contracts has decreased significantly over the past several years, as most of the units that were formerly under reliability must-run contracts are now resource adequacy units. The CAISO explains that the resource adequacy mechanism does not limit the compensation that units can receive for energy needed for voltage support. Therefore, the CAISO is concerned that units needed to resolve voltage stability issues can submit very high bids, knowing that the CAISO will have to call on them through Exceptional Dispatch. Accordingly, the CAISO claims that mitigation is appropriate.<sup>178</sup>

### ii. <u>Reply Comments</u>

109. WPTF rejects the CAISO's justification for the mitigation of exceptional dispatches for voltage support. The CAISO, according to WPTF, believes that mitigation is appropriate in this situation because while reliability must-run contracts, which were previously the primary source of voltage support services, provided mitigation of market

<sup>&</sup>lt;sup>177</sup> See supra P 71-72.

<sup>&</sup>lt;sup>178</sup> November Proposal at 36-37.

power, resource adequacy contracts may not. WPTF is bewildered by the fact that a unit that the CAISO knows is needed for voltage support could be released from its reliability must-run contract and instead given a resource adequacy contract that does not place limits on the revenue a resource can earn by providing this service.<sup>179</sup> WPTF expresses concern that releasing a unit from an annual contract that is intended to cover its fixed costs and instead allowing that unit to become a resource adequacy resource with a contract that may be in effect less than a year, "opens the door to two perverse outcomes."<sup>180</sup> First, WPTF suggests that such a strategy encourages the CAISO to seek broad mitigation of Exceptional Dispatch rather than appropriately specifying the reliability requirements applicable to resource adequacy resources. Second, WPTF claims that moving units from a full year reliability must-run contract to a resource adequacy contract does not promote the recovery of fixed costs for units that the CAISO knows are needed to provide voltage support. Further, WPTF provides that the CAISO has not demonstrated that the need for voltage support is predictable or that exceptional dispatches for voltage support have characteristics that make it likely that providers could extract above-market profits when dispatched.<sup>181</sup>

### iii. <u>Commission Determination</u>

110. We find that the CAISO has failed to show the potential for exercise of market power by resources that are exceptionally dispatched to provide voltage support services. We do not agree with the CAISO that the mere fact that many of the resources that may be called upon to provide voltage support are now performing under resource adequacy contracts, rather than reliability-must run contracts,<sup>182</sup> justifies the broad mitigation measures that have been proposed. The CAISO has provided no demonstration that any resource, or small group of resources, has any way of predicting that it will be called upon at some particular time to provide this service. Accordingly we reject the CAISO's proposal to mitigate exceptional dispatches for the purpose of providing voltage support

<sup>179</sup> WPTF Reply at 21.

<sup>180</sup> Id.

<sup>181</sup> *Id.* at 26.

<sup>182</sup> As the CAISO points out, reliability-must run contracts have served as a form of market power mitigation by limiting the payment that units received for providing services such as voltage support through compensation mechanisms set forth in the contracts. Resource adequacy contracts contain no such limitations. November Proposal at 36.

services, and direct the CAISO to report on the outcome of its stakeholder process regarding a competitive voltage support product, as discussed above.<sup>183</sup>

# C. <u>Compensation for Non-Resource Adequacy Resources</u>

# 1. <u>The CAISO's June Proposal</u>

111. The CAISO proposed that non-resource adequacy resources that receive Exceptional Dispatch instructions be paid the higher of the locational marginal price or their bid. However, non-resource adequacy resources that have not bid into the CAISO's markets would not be eligible to receive supplemental revenues and would be limited to recovering the higher of their default energy bid or locational marginal price. While the CAISO proposed to allow non-resource adequacy resources to accrue supplemental revenues as a contribution toward their fixed costs, the CAISO proposed to mitigate non-resource adequacy resources by capping the amount of supplemental revenues that may accrue at the same level as the capacity payment associated with a 30-day ICPM designation.<sup>184</sup>

112. Where the energy bid for a mitigated resource is lower than its default energy bid, and the resource-specific locational marginal price is lower than both the energy bid and the default energy bid for the resource, the CAISO proposed to settle the Exceptional Dispatch at the resource's energy bid. According to the CAISO, this is consistent with the settlement rule for market power mitigation in the MRTU Tariff.<sup>185</sup>

# 2. <u>The Commission Response in the October 16, 2008 Order</u>

113. The Commission found that the June Proposal may not be just and reasonable because certain resources may not receive adequate compensation for the capacity services they provide. To address its concerns, the Commission proposed a remedy that would: (1) provide non-resource adequacy resources with the offer of ICPM designation upon receiving their first Exceptional Dispatch instruction; and (2) cap the amount a non-resource adequacy resource may receive in a 30-day period under the ICPM, Exceptional Dispatch, or both mechanisms together at the ICPM price.<sup>186</sup> The Commission also

<sup>185</sup> *Id.* at 9.

<sup>&</sup>lt;sup>183</sup> See supra P 44-45 for a detailed discussion of the Commission's determinations regarding the development of new market products.

<sup>&</sup>lt;sup>184</sup> June Proposal at 15-17.

<sup>&</sup>lt;sup>186</sup> October 16, 2008 Order, 125 FERC ¶ 61,055 at P 107.

proposed to limit the possibility of a resource receiving a double recovery by capping the total recovery for non-resource adequacy resources at the ICPM monthly rate.<sup>187</sup>

# 3. <u>CAISO's November Proposal</u>

114. In its November Proposal, the CAISO proposes to revise its Exceptional Dispatch pricing proposal based on the input it received from the October 16, 2008 Order and the technical conference.

### a. <u>Election</u>

115. First, the CAISO notes that eligible resources would have two options to receive compensation when they are exceptionally dispatched:

(a) an ICPM designation for 30 days, either for a partial or full unit depending on the amount of capacity subject to Exceptional Dispatch within the 30-day period, pursuant to the compensation rules discussed below which would obligate the resource in the same manner as a designation triggered under the tariff rules for the ICPM; <sup>188</sup> or

(b) a bid-based supplemental revenue payment, calculated according to the pricing rules contained in the CAISO's filed pricing proposal (including the supplemental revenue cap).<sup>189</sup>

116. The CAISO explains that eligible resources (i.e., non-resource adequacy and partial resource adequacy units) would be required to indicate by the first day of each calendar month which compensation method they prefer if exceptionally dispatched.<sup>190</sup> The CAISO states that pre-selection is necessary because many exceptional dispatches will occur in real-time, which does not provide enough time for simultaneous acceptance

<sup>187</sup> Id.

<sup>188</sup> November Proposal at 6 (citing MRTU Tariff Section 43, et seq).

<sup>189</sup> Id.

<sup>190</sup> In its Reply, the CAISO appears to have modified this proposal to require a resource to indicate seven days before the first calendar day of the month which compensation method it prefers for that month. Whichever deadline the CAISO selects, we direct the CAISO to include it in the Order No. 614-compliant tariff filing it is required to submit prior to MRTU start-up. CAISO Reply at 3.

of an ICPM designation. The CAISO specifies that if no election is made, the resource will be treated as having selected the ICPM designation option.<sup>191</sup>

117. The CAISO explains that once that election has been made, the following rules should apply:

(a) If a resource elects an ICPM designation for a particular month, once an Exceptional Dispatch triggers the ICPM designation, the resource would not be eligible to choose the supplemental revenue option for any subsequent exceptional dispatches during the 30-day period;<sup>192</sup> and

(b) If a resource elects supplemental revenues for a particular month, once an Exceptional Dispatch occurs, the resource will not be eligible to choose the ICPM option for any additional exceptional dispatches during the subsequent 30 days.<sup>193</sup>

118. The CAISO notes that a resource can still accept an ICPM designation if the CAISO offers such a designation, for reasons other than Exceptional Dispatch, during the 30-day period. The CAISO states that under these circumstances, the double payment rule (discussed infra) would apply and any supplemental revenues earned by the resource during the 30-day period would be subtracted from the applicable ICPM payment to ensure that during the 30-day period the resource does not earn more than it otherwise would from an ICPM designation.<sup>194</sup>

<sup>191</sup> November Proposal at 6-7.

<sup>192</sup> The resource would have the ICPM designation for the entirety of the 30-day period, even if that period extends into the next calendar month.

<sup>193</sup> November Proposed at 7. As an example, the CAISO explains that if an Exceptional Dispatch occurs on June 15, and the resource selected the supplemental revenue approach for June, the supplemental revenue approach would apply for the period June 15-July 15. The CAISO states that the resource would not, for example, be able to select the supplemental revenue approach for the period June 15-30 and an ICPM designation for the period July 1-15; however, under the above example, if a second Exceptional Dispatch occurs on July 20, and the resource selected the ICPM option for the month of July, the resource would receive an ICPM designation effective July 20 and remaining in effect for the next 30-day period.

<sup>194</sup> *Id.* at 8.

#### b. <u>Eligibility</u>

119. The CAISO explains that four types of exceptional dispatches would trigger a unit's eligibility for an ICPM designation or supplemental revenues. First, the CAISO provides that any commitment of a non-resource adequacy unit would result in the unit being eligible for an ICPM designation. The CAISO explains that the ICPM designation would be for the commitment amount; generally the unit's minimum operating level. However, a resource that has elected supplemental revenues would not accrue any such revenues for a commitment to its minimum operating level because supplemental revenues require a dispatch for incremental energy. Also, the CAISO notes that any resource committed through Exceptional Dispatch would recover its start-up and minimum load costs.<sup>195</sup>

120. The CAISO states that the second type of Exceptional Dispatch eligible for an ICPM designation is any Exceptional Dispatch for incremental energy (i.e., a dispatch of energy above minimum operating level) that moves a non-resource adequacy resource (with no partial capacity contracts or designations) beyond its self-schedule amount, or market-based commitment/dispatch level. In this case, a resource is eligible for either an ICPM designation or supplemental revenues for the incremental amount that is exceptionally dispatched, minus any self-schedule or market-based commitment or dispatch level. To account for the possibility of incremental dispatches for a quantity less than a unit's minimum operating level, the CAISO explains that the ICPM designation will be for the higher of the unit's minimum operating level or the quantity that is exceptionally dispatched.<sup>196</sup>

<sup>195</sup> Under MRTU, resources can receive up to 200 percent of their actual start-up and minimum load costs if located in a local capacity requirement area or 400 percent if the resource is not located in a local capacity requirement area. *Id.* at 9 (citing MRTU Tariff, sections 30.4 and 39.6.1.6).

<sup>196</sup> *Id.* The CAISO proffers the following example of this second type of Exceptional Dispatch: assume a non-resource adequacy unit with a minimum operating level of 50 MW that has a self-schedule for 50 MW and a market bid for 25 MW; further assume that the CAISO directs the unit to move to 100 MW through an Exceptional Dispatch. The CAISO explains that the unit would be eligible to receive an ICPM designation for 25 MW; however, because the CAISO cannot access a unit's capacity below its minimum operating level, the CAISO proposes to adopt a rule for these types of circumstances whereby the quantity eligible for an ICPM designation will be the higher of a unit's minimum operating level or the Exceptional Dispatch quantity. In the CAISO's example, the result would be an ICPM designation for 50 MW to minimum operating level (and would establish an obligation to bid the resource's minimum operating level into the day-ahead market).

121. The CAISO provides that the third type of Exceptional Dispatch eligible for an ICPM designation is any Exceptional Dispatch for incremental energy (i.e., a dispatch of energy above minimum operating level) that moves a partial resource adequacy or partial ICPM resource to a point that is beyond its self-schedule amount or market-based commitment or dispatch level, and beyond its resource adequacy or ICPM capacity amount. In this case, a resource is eligible for an ICPM designation to the extent the exceptionally dispatched incremental quantity exceeds the resource adequacy/ICPM capacity amount minus the self-schedule or market-based commitment/dispatch level. If, however, a unit were to elect to receive supplemental revenues under this scenario, the CAISO explains that it would be paid according to the submitted bid. The CAISO would not distinguish between partial and non-resource adequacy capacity, consistent with the CAISO's original pricing proposal.<sup>197</sup>

122. The CAISO states that the fourth type of Exceptional Dispatch that would be eligible for an ICPM designation includes resources that have been subject to an Exceptional Dispatch ICPM designation during a 30-day period in which their resource adequacy contracts, or otherwise obtained ICPM designations, decrease in quantity. The CAISO states that these units may have their ICPM designation quantity changed accordingly for the remainder of the 30-day period. For example, the CAISO notes that if a partial resource adequacy resource becomes a non-resource adequacy resource in day 15 of a 30-day period, the ICPM designation would have to be adjusted to reflect the minimum amount of megawatts associated with the minimum operating level for that resource.<sup>198</sup>

123. The CAISO states that other types of Exceptional Dispatch would not be eligible for ICPM designations or supplemental revenue payments. Specifically, the CAISO

<sup>198</sup> Id. at 11.

<sup>&</sup>lt;sup>197</sup> *Id.* at 10. The CAISO submits the following example of this third type of Exceptional Dispatch: assume a partial resource adequacy unit with resource adequacy capacity of 60 MW, a minimum operating level of 50 MW, and a self-schedule for 55 MW and an accepted market bid for 25 MW, and further assume that the CAISO directs the unit to move to 100 MW. Under this example, the CAISO explains that the unit would be eligible to receive an ICPM designation for 20 MW of capacity. Because the unit is already a resource adequacy unit, the CAISO argues that there is no need for the ICPM quantity to be the greater of the minimum operating level or the Exceptional Dispatch quantity. The CAISO claims that there should not be any double capacity payments for capacity that is already designated as ICPM or under a resource adequacy contract. Further, the CAISO asserts that the minimum operating level amount of capacity is already under a resource adequacy contract and it should not also be eligible for an ICPM designation.

claims that exceptional dispatches for decommitment or decremental energy should not receive additional compensation in the form of ICPM designations or supplemental revenues.<sup>199</sup>

124. The CAISO provides that some exceptional dispatches that are not eligible for either an ICPM designation or supplemental revenues should be subject to mitigation. To justify its position, the CAISO argues that when a resource has to be moved for reasons unrelated to the CAISO's needs, the CAISO should not be obligated to pay for the capacity.<sup>200</sup> According to the CAISO, mitigation for forbidden operating regions is warranted because the resource owner would be able to submit high bids after the initial Exceptional Dispatch, knowing that the resource is being held at a certain level. Further, the CAISO asserts that neither an ICPM designation nor supplemental revenues are appropriate in this circumstance.<sup>201</sup>

### c. <u>Settlement</u>

125. The CAISO explains that if a resource with an existing ICPM designation at its minimum operating level (or a partial resource adequacy contract at its minimum operating level) is subsequently exceptionally dispatched above its minimum operating level, whether on the same day or on a subsequent day during the 30-day period, the CAISO will calculate the megawatt corresponding to that Exceptional Dispatch and provide an incremental ICPM designation for the new amount. The CAISO states that if the unit is exceptionally dispatched multiple times during the 30-day period, the monthly payment will be based on the largest incremental ICPM designation for which the

<sup>201</sup> *Id.* The CAISO states that other instances may exist where the exception should apply for similar reasons; however, due to time constraints the CAISO was unable to conduct a complete analysis of this issue.

<sup>&</sup>lt;sup>199</sup> *Id.* at 12. The CAISO notes that there was general agreement at the technical conference that these types of exceptional dispatches do not warrant additional payments to resources; moreover, the CAISO has not proposed to mitigate suppliers in these circumstances.

<sup>&</sup>lt;sup>200</sup> The CAISO will use Exceptional Dispatch in real-time to move a unit through its forbidden operating region and to hold a unit either below or above its forbidden operating region. This is because the forbidden operating region functionality will be in place in the day-ahead market and reflected in the day-ahead schedule, but not in place in the real-time market, meaning that operators will issue exceptional dispatches when the real-time market software is trying to move the unit to a point within the resource's forbidden operating region. *Id.* at 13.

resource was exceptionally dispatched during each respective calendar month for which the exceptional dispatch occurred.<sup>202</sup>

### d. <u>Other Rules</u>

126. The CAISO asserts that a minimum designation rule is needed for exceptional dispatches for incremental energy which move non-resource adequacy resources beyond their market-based or self-scheduled commitment or dispatch level. The CAISO explains that there is a possibility that the incremental energy Exceptional Dispatch amount may not be greater than the resource's minimum operating level, and would therefore provide no operational value to the CAISO. The CAISO proposes that under these circumstances the unit would be eligible for a designation to its minimum operating level.<sup>203</sup>

127. The CAISO states that a rule is also needed for units with resource adequacy capacity less than their minimum operating level. The CAISO asserts that any resource adequacy unit that has entered into a contract to provide resource adequacy capacity less than its minimum operating level has an obligation to make that resource adequacy capacity available to the CAISO and, therefore, must offer its minimum operating level of capacity to the CAISO. The CAISO does not believe that such a unit should be

<sup>&</sup>lt;sup>202</sup> *Id.* at 14. The CAISO provides the following example to illustrate the payment rule described above: a resource is committed on Day 1 and dispatched to its minimum operating level of 50 MW, making the resource eligible for an ICPM designation to its minimum operating level. On Day 2, that same resource is exceptionally dispatched again and given an Exceptional Dispatch instruction to increase its output by 100 MW. The CAISO explains that the unit will now be eligible for an ICPM designation of 150 MW. Then, if on Day 3 the unit is exceptionally dispatched to an output level of 175 MW. Then, if on Day 3 the unit is excepted market bids "sandwiched" between resource adequacy/ICPM commitments and/or exceptional dispatches, those accepted bid quantities or self-schedules would not count toward an ICPM designation. In this example, if Days 1 and 2 are in one calendar month and Day 3 in the next month, the payment in month 1 will be based on 150 MW while the payment in month 2 will be based on the 175 MW. In addition, the CAISO explains that the payments will be prorated.

<sup>&</sup>lt;sup>203</sup> For example, a non-resource adequacy resource has a minimum operating level of 50 MW. The CAISO explains that if it is self-scheduled for 270 MW and the CAISO issues it an Exceptional Dispatch instruction to increase its output by 30 MW, the CAISO will offer it an ICPM designation to its minimum operating level since the incremental dispatch of 30 MW is lower than its minimum operating level. *Id.* at 15.

eligible for an ICPM designation for the difference between its minimum operating level and its contracted resource adequacy capacity less than its minimum operating level.<sup>204</sup>

128. Finally, the CAISO states that a rule is needed to prevent any double payment to resources during the 30-day period so that, consistent with the October 16, 2008 Order, a resource committed through Exceptional Dispatch will not be permitted to earn, through the sum of ICPM capacity payments and supplemental revenues, payments greater than the applicable monthly ICPM payment. The CAISO explains that a resource that elects and receives supplemental revenues upon the first Exceptional Dispatch, and is then offered an ICPM designation due to a Significant Event on a subsequent day in the 30-day period, cannot earn more than the applicable monthly ICPM payment for the 30-day period triggered by the Exceptional Dispatch. Under these circumstances, the CAISO states that any applicable supplemental revenues would be subtracted from the ICPM payment.<sup>205</sup>

### e. Justification

The CAISO states that its November Proposal gives exceptionally dispatched units 129. the option of earning a monthly ICPM payment, thereby satisfying the Commission's objective that non-resource adequacy resources providing reliability services be paid in a similar manner, and subject to similar obligations, as resource adequacy resources.<sup>206</sup> In addition, the CAISO argues that its November Proposal respects the voluntary nature of the ICPM, while allowing resources that are exceptionally dispatched to choose to either earn supplemental revenues during the 30-day period following an Exceptional Dispatch, or opt for a 30-day ICPM designation.<sup>207</sup> The CAISO also posits that the November Proposal recognizes the intertwined nature of Exceptional Dispatch, ICPM, and the need to encourage participation in the resource adequacy program. In particular, the CAISO asserts that the November Proposal allows for partial-unit ICPM designations in instances where the CAISO does not need the entire capacity of a unit for reliability. The CAISO explains that requiring full-unit ICPM designations upon issuance of an Exceptional Dispatch instruction, even in cases when the CAISO does not need or use the entire capacity of the unit, would result in resources that are exceptionally dispatched being

<sup>204</sup> Id.
<sup>205</sup> Id. at 16.
<sup>206</sup> Id.
<sup>207</sup> Id. at 17.

treated more favorably than they otherwise would be under resource adequacy or the ICPM.  $^{208}$ 

130. The CAISO submits that its revised pricing proposal is just and reasonable because it will make a monthly ICPM payment based on the highest quantity for which a unit was exceptionally dispatched during the first calendar month within the 30-day period. Moreover, the CAISO provides that the monthly ICPM payment in the second calendar month of a single 30-day period will be based on the highest quantity for which a unit was exceptionally dispatched during the 30-day period, even when the highest quantity occurred during the first month.<sup>209</sup>

131. The CAISO claims that the November Proposal eliminates the possibility of double payment that existed under the June Proposal. To accomplish this objective, the CAISO proposes to cap the amount a non-resource adequacy resource may receive in a 30-day period under the ICPM and Exceptional Dispatch combined to the higher of \$41/kW-year, or a unit's (higher) cost-justified, ICPM capacity payment, whichever is applicable.<sup>210</sup>

132. Finally, the CAISO claims that the revised proposal addresses any concerns about partial resource adequacy units being eligible for capacity payments for their non-resource adequacy capacity by allowing partial resource adequacy (or partial ICPM) units to receive ICPM designations for capacity in excess of their resource adequacy capacity (or ICPM capacity).<sup>211</sup>

# f. <u>Withholding Concerns</u>

133. The CAISO states that its Market Monitor has raised concerns about any proposal that could create incentives to withhold bids. According to the CAISO, the Market Monitor is concerned that the November Proposal, if accepted, will create an incentive for resources to withhold capacity in anticipation of an Exceptional Dispatch, or to force

<sup>209</sup> *Id.* at 18.

<sup>210</sup> Id.

<sup>211</sup> *Id.* at 18-19. The partial unit ICPM designation would apply only to the extent the CAISO exceptionally dispatches capacity above the resource adequacy (or ICPM) amount, and such capacity was not self-scheduled or bid-in by the resource.

<sup>&</sup>lt;sup>208</sup> The CAISO claims that this is consistent with both the ICPM and resource adequacy programs, which allow for the procurement of partial units if the full output of the unit is not needed for the CAISO to meet reliability needs or for a load serving entity to satisfy its resource adequacy obligations. *Id.* at 17.

the CAISO to issue an Exceptional Dispatch that will provide the resource with the option of either an ICPM designation or supplemental revenues.<sup>212</sup>

134. According to the CAISO, the Market Monitor asserts that it is more appropriate to require units to submit a bid to be eligible for an ICPM designation or supplemental revenues. The CAISO explains this is because such a requirement would encourage a resource to continue to participate in the markets while ensuring that if the resource chooses otherwise, it will still be compensated at the higher of the default energy bid price or the resource-specific settlement interval locational marginal price.<sup>213</sup>

135. The CAISO recognizes that the Commission may be unwilling to adopt a strict requirement that a resource submit a bid into the applicable market in order to be eligible to receive an ICPM designation or supplemental revenues. As an alternative, and a compromise between the November Proposal and the Market Monitor's preferred approach, the CAISO explains that it could offer an ICPM designation (or supplemental revenues) in the event the CAISO uses Exceptional Dispatch to commit a resource, regardless of whether the resource has submitted a bid, but make any incremental designations contingent upon the resource submitting bids into the CAISO's markets.<sup>214</sup>

## 4. <u>Comparable Treatment for Similar Services</u>

# a. <u>Comments and Protests</u>

136. Suppliers, including Calpine, Mirant, and WPTF, generally support the Commission's proposed remedy to provide compensation to eligible exceptionally dispatched units via the resource's choice of either a 30-day ICPM designation or an equivalent supplemental payment scheme. WPTF argues that an option for an ICPM designation is appropriate because the CAISO is procuring a compensable capacity service through some forms of Exceptional Dispatch and because the CAISO has acknowledged that it needs this backstop procurement authority for reliability purposes.<sup>215</sup> J.P. Morgan states that providers of reliability and capacity services to the CAISO should be compensated on a basis comparable to that provided to resource adequacy and ICPM capacity.<sup>216</sup>

<sup>213</sup> Id.

<sup>214</sup> *Id.* at 20.

<sup>215</sup> See WPTF November Comments at 4-5.

<sup>216</sup> See J.P. Morgan November Comments at 7.

<sup>&</sup>lt;sup>212</sup> *Id.* at 19.

137. Mirant explains that a unit that is not covered by a contractual arrangement has no source of revenue except for what it can earn in the day-ahead or real-time markets. Thus, Mirant provides that if a unit is not a resource adequacy, ICPM, or reliability must-run resource, it is likely that unit will only be economically dispatched during a limited number of hours, over which it needs to earn its annual revenue requirement. Accordingly, Mirant argues that units committed through Exceptional Dispatch warrant, at a minimum, a monthly capacity payment that is equivalent to the ICPM payment in order to supplement any revenues they earn during the year in the energy markets.<sup>217</sup>

138. SoCal Edison, Six Cities, and PG&E support the Commission's proposal to provide some form of fixed cost recovery under limited circumstances. SoCal Edison recommends limiting ICPM offers to exceptional dispatches to commit non-resource adequacy resources, but not for exceptional dispatches for incremental energy.<sup>218</sup> PG&E's support is conditioned on energy payments being limited to the higher of the resource's default energy bid or the applicable locational marginal price. However, if the resource is eligible to receive ICPM compensation immediately upon receiving an Exceptional Dispatch, PG&E asserts that supplemental revenues are not appropriate.<sup>219</sup>

139. Six Cities emphasize that the offer of ICPM designations should be limited to situations in which the Exceptional Dispatch is for a capacity need.<sup>220</sup> Further, Six Cities assert that any capacity payments should be limited to a resource's going forward costs because the Commission has consistently ruled that there is no basis upon which to compensate resources that provide backstop capacity based on the cost of new entry or other benchmarks intended to incentivize new construction. Further, Six Cities argue that if a resource considers compensation under the ICPM to be inadequate, it can cost justify a higher payment, enter into a resource adequacy contract, or seek designation as a reliability must-run resource.<sup>221</sup>

## b. <u>Reply Comments</u>

140. WPTF states that capacity compensation is needed because energy prices are capped. WPTF explains that an inefficient resource may be needed only a few hours each year; but if it is needed it still must be able to recover its fixed costs. Thus, WPTF

<sup>220</sup> Six Cities November Comments at 5.

<sup>221</sup> *Id.* at 7.

<sup>&</sup>lt;sup>217</sup> Mirant November Comments at 5

<sup>&</sup>lt;sup>218</sup> SoCal Edison November Comments at 5.

<sup>&</sup>lt;sup>219</sup> PG&E November Comments at 1.

submits that if the fixed costs needed to keep that unit in operation must be recovered in a few hours in the energy or ancillary services markets, then the prices in those markets must be allowed to rise to high levels. WPTF asserts that if those energy and ancillary service price levels are capped it is necessary to define an additional product that provides compensation for the fixed costs that uncapped energy and ancillary services would have provided. Therefore, WPTF distinguishes capacity services from energy and asserts that paying for capacity service as if it were energy is problematic, especially in markets in which energy prices are capped. Further, WPTF states that the costs incurred to provide capacity service are incurred whether the unit operates or not, making reliance on energy dispatches to recover these costs inappropriate. For all of these reasons, WPTF argues that non-resource adequacy units providing capacity service via Exceptional Dispatch should be offered an ICPM designation.<sup>222</sup>

141. Calpine continues to support the remedies proposed in the October 16, 2008 Order. According to Calpine, resources subject to Exceptional Dispatch are providing the CAISO with a reliability service, the same as resource adequacy and ICPM resources. For providing this comparable capacity service, Calpine asserts that resources subject to Exceptional Dispatch should receive comparable capacity compensation. Further, Calpine submits that effectuating this comparability principle is the only resolution of the present proceeding that would yield just and reasonable results for non-resource adequacy resources subject to Exceptional Dispatch.<sup>223</sup>

142. Similarly, J.P. Morgan reiterates its earlier comments that resources committed under Exceptional Dispatch should be compensated on a basis comparable to resource adequacy and ICPM resources. J.P. Morgan does not believe that the November Proposal affords such comparable treatment.<sup>224</sup>

143. In contrast, PG&E supports the November Proposal insofar as it provides ICPM designations to non-resource adequacy resources that provide capacity services. SoCal Edison supports the November Proposal provided the Commission approves it along with three qualifying conditions.<sup>225</sup>

<sup>222</sup> WPTF Reply at 7.

<sup>223</sup> Calpine Reply at 2.

<sup>224</sup> J.P. Morgan Reply at 6.

<sup>225</sup> SoCal Edison asserts that ICPM offers must be: limited to exceptional dispatches to commit non-resource adequacy capacity; fixed in duration; and compensated on the basis of the highest level of megawatt commitment during any given 30-day interval. SoCal Edison maintains that if an ICPM resource receives a

(continued...)

144. NCPA supports the November Proposal and reiterates that compensation under Exceptional Dispatch should be tied to the services provided. NCPA supports the CAISO's position that units that are exceptionally dispatched for reasons unrelated to reliability needs do not provide the same reliability benefits to the system as resource adequacy or ICPM resources, such that they should not be compensated on par with resources that provide reliability services.<sup>226</sup>

### c. <u>Commission Determination</u>

145. The Commission accepts the CAISO's compensation proposal because it provides non-resource adequacy resources with an opportunity to recover the fixed costs associated with any capacity-type services procured by the CAISO through Exceptional Dispatch. During the first 24 months of MRTU, non-resource adequacy resources will have a month-to-month choice between accepting an ICPM designation and earning hourly, bid-based compensation pursuant to the existing Exceptional Dispatch compensation provisions in the MRTU Tariff. Non-resource adequacy resources that choose the hourly, bid-based option and are subject to Exceptional Dispatch mitigation will earn supplemental revenues up to the level of the ICPM payment. We find that both compensation methods yield a just and reasonable result because both methods compensate non-resource adequacy resources in manner comparable to the compensation of resource adequacy resources for providing similar reliability services. The Commission notes that both the ICPM designation offer and supplemental revenues proposal will be available for all Exceptional Dispatch instructions for capacity services<sup>227</sup> for the first four months of MRTU operation. Following the four-month transition period, the ICPM designation offer will continue to be available for all Exceptional Dispatch instructions for capacity; the supplemental revenue proposal will only be available for exceptional dispatches in circumstances where the CAISO has shown there is the potential to exercise market power, i.e., involving non-competitive constraints or the Delta Dispatch.<sup>228</sup> All other non-resource adequacy resources that are exceptionally dispatched will have the option of choosing between accepting an ICPM designation offer and collecting unmitigated Exceptional Dispatch revenues.

commitment increase that impacts two settlement intervals, adjustments can be made to subsequent settlement periods. SoCal Edision Reply at 2-3. The Commission addresses SoCal Edison's alternative proposal below. *See infra* P 254.

<sup>226</sup> NCPA December Reply Comments at 3.

<sup>227</sup> Capacity services are discussed *infra* at P 161-166.

<sup>228</sup> After the four-month transition period, supplemental revenues will only be available when mitigation applies.

146. As originally accepted, the Exceptional Dispatch provisions of the MRTU Tariff may unduly discriminate against non-resource adequacy resources by failing to provide those resources with a capacity payment on par with the compensation resource adequacy and reliability must-run resources receive for providing essentially the same service.<sup>229</sup> In evaluating the CAISO's backstop capacity methods, designed to augment the MRTU Tariff, the Commission has aimed to ensure equitable compensation for all resources providing similar capacity services.<sup>230</sup> The Commission has found that resources that provide the CAISO with reliability services must be compensated in a manner similar to resources that are designated under the resource adequacy program.<sup>231</sup> The Commission reasoned that comparable compensation is necessary to ensure that non-resource adequacy resources have a sufficient opportunity to recover their fixed costs.<sup>232</sup>

147. In sum, we find that by offering an ICPM designation to uncontracted resources that are exceptionally dispatched and providing capacity-type services, the CAISO ensures equitable treatment of all resources providing capacity services in its markets. Thus, the Commission finds the November Proposal provision offering an ICPM designation to otherwise uncontracted resources providing capacity-type services is just and reasonable. With respect to the market monitor's concern about physical withholding, we note that the market monitor has raised theoretical concerns regarding physical withholding, but has not provided evidence that such withholding will occur. If the market monitor observes any evidence of improper physical withholding during MRTU operation, we expect the market monitor to report to the Commission such evidence as expediently as practicable. The CAISO is directed to submit, within 30 days of the date of this order, a compliance filing implementing its revised Exceptional Dispatch compensation proposal, as discussed in this order.

<sup>229</sup> See MRTU Order, 116 FERC ¶ 61,274.

<sup>230</sup> See, e.g., Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp.,
116 FERC ¶ 61,069; TCPM Order, 123 FERC ¶ 61,229; see also ICPM Order, 125 FERC
¶ 61,053.

<sup>231</sup> October 16, 2008 Order, 125 FERC ¶ 61,055 at P 102.

<sup>232</sup> Id. (citing Indep. Energy Producers Ass'n v. Cal. Indep. Sys. Operator Corp., 116 FERC ¶ 61,069 at P 37).

# 5. <u>Eligibility for ICPM Designations</u>

# a. <u>Capacity-Type Services</u>

# i. <u>Comments and Protests</u>

148. WPTF offers that neither the Exceptional Dispatch of energy, nor the regular market dispatch of energy, is a reliable indicator of whether the unit provided reliability service from its non-resource adequacy capacity.<sup>233</sup> According to WPTF, the unit has provided capacity service if the CAISO was relying on that unit to be available to address a contingency, whether the unit was dispatched or not. However, WPTF posits that only the CAISO knows whether it was relying on that unit and, therefore, whether that unit provided a capacity or reliability service.<sup>234</sup>

149. Suppliers generally recommend that the following exceptional dispatches do not provide capacity-type services and, therefore, should not be entitled to the offer of an ICPM designation: (1) exceptional dispatches that reduce the output of a resource, as would be the case during off-peak periods with high levels of fixed generation; (2) exceptional dispatches to accommodate ramping and forbidden operating region limitations; and (3) exceptional dispatches undertaken at the resource owner's request (e.g., for the maximum normal capability of a generator (PMax), ancillary service, and pre-commercial operations testing).<sup>235</sup>

150. Six Cities note that it is not possible to anticipate all of the circumstances that might lead to an Exceptional Dispatch instruction.<sup>236</sup> Therefore, Six Cities request that the Commission limit the offer of ICPM designations to only circumstances in which Exceptional Dispatch instructions are issued to address a need for additional capacity.<sup>237</sup>

<sup>234</sup> Id.

<sup>235</sup> In its reply, CAISO agrees with WPTF's list of exceptional dispatches that should not be offered an ICPM designation. CAISO Reply at 10.

<sup>236</sup> Six Cities November Comments at 8-10. Six Cities also submitted comments on this issue in its November 14, 2008 Request for Clarification or, In the Alternative, Rehearing on Behalf of the Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California, *Cal. Indep. Sys. Operator Corp.*, Docket Nos. ER08-1178-000 and EL08-88-000.

<sup>237</sup> *Id.* at 10.

<sup>&</sup>lt;sup>233</sup> WPTF November Comments at 6.

151. NCPA states that while Exceptional Dispatch will sometimes be used as a backstop for the ICPM's resource adequacy function, it will more often be called on to remedy the limitations associated with incomplete modeling and reduced software functionality. Thus, NCPA argues that only non-resource adequacy capacity that is exceptionally dispatched to resolve real system contingencies, which provide the same reliability benefits to the system as resource adequacy and/or ICPM capacity, should be compensated comparably with resource adequacy resources.<sup>238</sup>

152. The CPUC is "cautiously not opposed" to the Commission's proposal to offer an ICPM designation to non-resource adequacy resources that are providing capacity services, but only if the conditions are clearly defined.<sup>239</sup>

153. Mirant asserts that the clearest example of when a non-resource adequacy unit should receive a capacity payment is when the CAISO forces that unit on or refuses to allow the unit to shutdown when it is no longer in economic merit order for that unit to continue to run.<sup>240</sup> According to Mirant, resource adequacy, ICPM, and reliability must-run resources should provide all of the CAISO's system or local reliability needs, with a margin for contingencies. If not, Mirant asserts that either the resource adequacy program is inadequate or the CAISO has not procured enough ICPM or reliability must-run capacity for local reliability protection. Thus, Mirant contends that the use of Exceptional Dispatch to force a start (or preclude the economic shutdown) of unit not covered by one of these contractual arrangements must mean that the unit is needed to provide a critical reliability function.<sup>241</sup>

# ii. <u>Reply Comments</u>

154. The CAISO argues that it is not possible to equate Exceptional Dispatch with the process for ICPM designations in section 43 of the MRTU Tariff. Specifically, the CAISO states that under section 43.1, ICPM designations are possible only when resource adequacy capacity is insufficient to meet reliability criteria or when there is a Significant Event. Thus, the CAISO claims that activities such as accommodating ramping and forbidden operating region limitations, responding to requests for ancillary services or pre-commercial operation testing, or reducing the output of a unit would not constitute a permissible basis for an ICPM designation because these actions do not

- <sup>239</sup> CPUC November Comments at 6.
- <sup>240</sup> Mirant November Comments at 4.
- <sup>241</sup> Id.

<sup>&</sup>lt;sup>238</sup> NCPA November Comments at 5.

reflect a CAISO need for a resource's capacity. According to the CAISO, requiring a capacity payment under such circumstances would unjustly saddle ratepayers with costs even though the resource did not provide a capacity service.<sup>242</sup>

155. The CAISO states that the only situation in which an ICPM offer is appropriate that was not addressed in the November Proposal is an Exceptional Dispatch for incremental energy that is issued to a resource already in the market but operating at a level below what CAISO operators determine is required to maintain reliability. In this case, the CAISO agrees that it should offer either an ICPM designation or supplemental revenues at the level of the dispatch increment (i.e., the difference between the market level output and the Exceptional Dispatch level) or for the unit's minimum operating level, whichever is greater.<sup>243</sup> The CAISO agrees with Mirant that an offer of an ICPM designation should be triggered whenever the CAISO uses Exceptional Dispatch to force a unit on or to prevent a unit from turning off.<sup>244</sup>

156. Dynegy supports the comments and reply comments submitted by WPTF on what constitutes a capacity-type service. In addition, Dynegy provides that capacity service refers to the capability of a resource to remain available to respond to a CAISO dispatch instruction.<sup>245</sup> Dynegy explains that a resource that is dispatched to a particular operating level to maintain reliability has provided capacity service, at least to that operating level, regardless of whether it was dispatched through or outside the market. Dynegy asserts that if the CAISO commits a non-operating unit, the commitment constitutes a clear indication of need, such that the unit would be providing a capacity service regardless of whether it was dispatched.

157. Similarly, Dynegy argues that the absence of any energy dispatch does not amount to a finding that the unit was not needed. Dynegy asserts that when non-resource adequacy capacity is meeting needs that cannot be met by resource adequacy capacity, such capacity is providing a service comparable to that provided by resource adequacy capacity, such that the unit must be offered an ICPM designation. For these reasons, Dynegy contends that an exceptionally dispatched resource is providing the CAISO with a capacity service when: (1) Exceptional Dispatch is used to commit a non-resource

<sup>242</sup> CAISO Reply at 8.

<sup>243</sup> *Id.* at 10.

<sup>244</sup> *Id.* at 9.

<sup>245</sup> To be clear, this capability is not necessarily limited by a unit's ability to respond over a short (e.g., ten-minute) period of time, because operating limits can be managed over a longer period of time. Dynegy Reply at 2-3.

adequacy unit; and (2) the CAISO utilizes Exceptional Dispatch to provide energy from non-resource adequacy capacity for reasons other than to facilitate the dispatch of, or to respect the unit-specific operating constraints relative to, a market bid voluntarily submitted for that unit's non-resource adequacy capacity.<sup>246</sup> On the other hand, Dynegy specifies that the following types of Exceptional Dispatch do not constitute capacity services: (1) Exceptional Dispatch undertaken to facilitate testing at the owner's request; and (2) decremental Exceptional Dispatch.<sup>247</sup>

158. J.P. Morgan urges the Commission to affirm that capacity based reliability services, such as those necessary to address a Path 26 contingency, will be compensated on a basis comparable to that provided to resource adequacy or ICPM resources.<sup>248</sup>

159. PG&E agrees with the parties that capacity payments are appropriate only when a resource is exceptionally dispatched for a capacity-related purpose. PG&E also agrees that exceptional dispatches for decommitment or decremental energy, or for moving a resource through its forbidden operating region, should not trigger the offer of a capacity payment.<sup>249</sup>

160. Calpine agrees that resources held below their forbidden operating regions by an Exceptional Dispatch should not receive an ICPM designation. However, Calpine asserts that where the CAISO uses its discretion to exceptionally dispatch a combined cycle plant up through a forbidden operating region to reach a stable operating level, such an incremental dispatch does provide a capacity service. Accordingly, Calpine asserts that resources exceptionally dispatched for this purpose should be eligible for ICPM designations. Further, Calpine contends that the fact that the CAISO's shortcomings in modeling require manual interventions does not detract from the capacity service being provided. While the CAISO may end up paying for more capacity than it would have if

<sup>&</sup>lt;sup>246</sup> For example, Dynegy argues that if a scheduling coordinator submitted a market bid for energy from non-resource adequacy capacity and the CAISO uses Exceptional Dispatch to transit that unit through a forbidden operating region or to prevent it from reentering a forbidden operating region, it would not constitute capacity service. *Id.* at 4.

 $<sup>^{247}</sup>$  Id. at 5.

<sup>&</sup>lt;sup>248</sup> J.P. Morgan Reply at 5.

<sup>&</sup>lt;sup>249</sup> PG&E Reply at 3.

modeling limitations did not exist, Calpine asserts that the CAISO should be obligated to pay for the full amount of capacity that it has exceptionally dispatched.<sup>250</sup>

### iii. Commission Determination

161. The Commission finds that the following uses of Exceptional Dispatch provide the CAISO with capacity-type services similar to those procured under the resource adequacy and ICPM programs: (1) to respond to forced transmission or generation outages or de-rates; (2) to respond to on-line capacity-based constraints that are not modeled or are not fully modeled in the full network model, including the south of Path 26 constraint; (3) to provide voltage support; (4) to accommodate resource constraints, including ramping and forbidden operating region limitations; and (5) to respond to environmental constraints, including the Delta Dispatch. Therefore, the Commission directs the CAISO to offer an ICPM designation to any resource dispatched for one of those purposes. The Commission finds that the following instances of Exceptional Dispatch do not provide the CAISO with capacity-type services: (1) exceptional dispatches that reduce the output of a resource, including decremental energy and decommitments; and (2) exceptional dispatches undertaken at the resource owner's request.

162. The uses of Exceptional Dispatch that we find constitute procurement of capacitytype service all involve backstopping the CAISO's various capacity-procurement mechanisms. The Commission finds these types of Exceptional Dispatch mirror the capacity services provided under the resource adequacy and ICPM programs, and help ensure that the CAISO has access to sufficient capacity to respond effectively to system contingencies that threaten grid reliability.

163. Forced outages require the CAISO to call upon additional resources to meet reliability requirements. Therefore, resources that respond to exceptional dispatches for this purpose are providing a reliability benefit by contributing capacity to the grid. Similarly, the CAISO's procurement of capacity to meet contingencies on well-known constraints, like Path 26, requires exceptionally dispatched resources to provide capacity to meet the contingency. This service is similar to a service provided by a resource adequacy or ICPM resource. Because voltage support is needed to maintain reliability, resources exceptionally dispatched to their minimum operating level or to provide voltage support are also providing a capacity-type service to the CAISO. Likewise,

<sup>&</sup>lt;sup>250</sup> Calpine argues that in the absence of optimization software, when the CAISO decides it needs to call on capacity for reliability services, which may require dispatch at a stable output level above a forbidden operating region, the capacity resource should be fully eligible for ICPM compensation for the full amount of the incremental dispatch. Calpine Reply at 7.

environmental constraints, such the Delta Dispatch, involve the commitment and dispatch of capacity needed to maintain reliability.

164. We disagree with the CAISO regarding the appropriateness of offering an ICPM designation to resources transiting through forbidden operating regions. We find that failure to offer an ICPM designation to capacity procured to move a resource above its forbidden operating regions is inconsistent with the treatment of other resource-specific constraints in the MRTU Tariff. The MRTU Tariff was accepted under the assumption that the CAISO's software would be able to model forbidden operating regions; this functionality has been delayed.<sup>251</sup> However, the MRTU software properly models the minimum operating characteristics of all generating resources that have submitted bids and will not yield energy awards that are infeasible with each resource's characteristics. Therefore, generators will not be committed below their minimum load output, nor will they be dispatched below their minimum operating level, regardless of whether all of that supply is "needed" by the CAISO for reliability, since the software is able to model those constraints. The fact that a resource is committed to minimum load output or dispatched to its minimum operating level does not imply, therefore, that all of that supply is "needed" by the CAISO for reliability. Rather, it means that the resource is needed for reliability, and that the economic solution is to award that resource an output level equal to its minimum operating level, even though only a percentage of that output may be needed for reliability. In other words, the CAISO may only need 11 eggs from a resource, but due to the resource's minimum operating characteristics and the sustained economic order of the resource, the CAISO must buy the full dozen of eggs from the resource.

165. The same standard must apply to resources exceptionally dispatched above their forbidden operating regions. If the CAISO had been able to implement this functionality as originally proposed, the software would treat forbidden operating regions similarly to minimum operating characteristics described above. Thus, if a resource were dispatched above one of its forbidden operating regions, it would be impossible to know if that entire dispatch amount was needed by the CAISO for reliability, or if the software had adjusted a resource's output award upward to account for its forbidden operating region limitation. Here, the CAISO must "pay for the dozen," as it does for minimum operating characteristics. Thus, all non-resource adequacy capacity that is exceptionally dispatched to transit through a resource's forbidden operating region must be offered an ICPM designation. We find that this treatment of forbidden operating region limitations is consistent with other operating characteristics modeled in the MRTU software. We also

<sup>&</sup>lt;sup>251</sup> See Cal. Indep. Sys. Operator Corp., 126 FERC ¶ 61,081, at P 5-9, 23-30 (2009).

note that our finding here will create additional incentive for the CAISO to implement multi-stage modeling as expediently as possible.

166. Other services procured through Exceptional Dispatch are not capacity-type services because they do not involve procurement of capacity to meet capacity-based or reliability-based concerns in a similar manner to that of the resource adequacy or ICPM programs. We agree with the CAISO that offers of ICPM designations for exceptional dispatches for decommitment or decremental energy are not appropriate. We note that none of the parties have objected to excluding this use of Exceptional Dispatch from the list of services that warrant an ICPM offer. Similarly, exceptional dispatches issued at the request of the resource for testing purposes are not providing the CAISO with capacity service. Neither service provides reliability benefits to the CAISO grid.

# b. <u>Partial Versus Full Designations</u>

### i. <u>Comments and Protests</u>

167. Parties are divided on the issue of whether the CAISO should offer ICPM designations for the full or partial capacity of a resource when only a portion of a resource's capacity is necessary to maintain reliability. Mirant, WPTF, and Reliant all favor full, balance-of-unit designations, while PG&E, NCPA, Six Cities and the CPUC support partial designations. Mirant contends that every time the CAISO starts a unit, that unit is providing a reliability service that cannot be differentiated between the first and last megawatt. Further, Mirant elaborates that the same is true for units that are prevented from shutting down. Therefore, according to Mirant, non-resource adequacy units that are turned on or prevented from shutting down should receive capacity payments for their full rated capacity.<sup>252</sup>

168. Mirant also states that resource adequacy and ICPM resources that receive an Exceptional Dispatch request above the amount of capacity that is already designated should receive a 30-day ICPM equivalent capacity payment for the entire difference between the resource adequacy/ICPM designation and the maximum rated output of that unit. Mirant provides that for units that are self-scheduled or running in merit order, the amount of capacity qualifying for a 30-day ICPM equivalent capacity payment should

<sup>&</sup>lt;sup>252</sup> Mirant November Comments at 6. Mirant states that while Delta Dispatch highlights the fact that Exceptional Dispatch for environmental reasons has the potential to be more than an occasional event, it also highlights the fact that these units are providing a reliability service akin to resource adequacy or ICPM resources and that they should be compensated accordingly.

equal the difference between the output level of the unit when it receives the Exceptional Dispatch request and the maximum rated output of the unit.<sup>253</sup>

169. WPTF submits that the ICPM designation level should be offered based on at least the quantity of the resource's capacity beyond the level that is already scheduled in or dispatched by the CAISO's markets or committed under the ICPM or a capacity contract.<sup>254</sup>

170. Reliant opposes partial unit designations, claiming that a partial unit designation would place the entire unit under the de facto control of the CAISO, while providing compensation for only a portion of the unit's fixed costs. Reliant argues that providing for the compensation of capacity-related exceptional dispatches at less than the unit's eligible capacity will result in a material and unfair shortfall in fixed cost recovery.<sup>255</sup> Further, Reliant claims that compensating exceptionally dispatched non-resource adequacy resources at any amount less than the unit's full eligible capacity is inconsistent with the ICPM Order. This is because partial unit designations unduly discriminate against non-resource adequacy resources by providing a monthly capacity payment that is not comparable to the payment resource adequacy and reliability must-run units receive for providing essentially the same service.<sup>256</sup> In the alternative, if the Commission approves partial unit designations, then Reliant asks the Commission to direct the CAISO, through a stakeholder process, to develop a set of criteria similar to those developed in the TCPM proceeding to guide the CAISO's administration of partial unit designations.<sup>257</sup>

171. In contrast, the CPUC supports partial unit ICPM designations for exceptionally dispatched units, and argues that partial unit designations are necessary to maintain consistency with the ICPM and resource adequacy programs. Specifically, the CPUC asserts that non-resource adequacy units that are exceptionally dispatched should receive an offer of an ICPM designation that covers the cost of the unit's minimum operating requirements, whereas, partial-resource adequacy units that are exceptionally dispatched should only receive an ICPM designation for the capacity in excess of the unit's resource

<sup>255</sup> Reliant November Comments at 7-8.

<sup>256</sup> *Id.* at 11.

<sup>257</sup> *Id.* at 12.

<sup>&</sup>lt;sup>253</sup> Mirant November Comments at 9-10.

<sup>&</sup>lt;sup>254</sup> WPTF November Comments at 5-6.

adequacy commitment.<sup>258</sup> Likewise, Six Cities argue that to avoid procurement of excess capacity, the ICPM designation should be limited to the amount of capacity that is actually needed, subject to minimum load requirements.<sup>259</sup>

### ii. <u>Reply Comments</u>

172. The CAISO argues that mandatory whole unit commitments are inconsistent with both the resource adequacy program and the ICPM program, both of which permit partial unit designations and provide for capacity payments only for the amount of capacity that is needed. The CAISO asserts that requiring balance-of-unit designations is contrary to the principle espoused in the October 16, 2008 Order that non-resource adequacy resources that provide reliability service to the grid should be treated in a similar manner as resource adequacy resources.<sup>260</sup> Further, the CAISO notes that requiring designations for a unit's entire capacity could provide an incentive for a unit that was needed in response to a Significant Event to decline a partial ICPM designation, knowing that the CAISO would likely need to exceptionally dispatch it, after which it would obtain a full-unit ICPM designation.<sup>261</sup>

173. Dynegy, J.P. Morgan, Reliant and WPTF continue to oppose partial unit designations, arguing that when the CAISO commits a resource, the unit's entire resource adequacy and non-resource adequacy capacity is available to respond to dispatch instructions. Further, Dynegy, J.P. Morgan, Reliant and WPTF explain that even when energy from non-resource adequacy capacity units has not been bid into the CAISO's markets, the unit is still obligated to respond to any Exceptional Dispatch instructions from the CAISO.

174. Dynegy argues that the Exceptional Dispatch of energy from the non-resource adequacy capacity of a partial resource adequacy unit should prompt the offer of an ICPM designation for the non-resource adequacy portion of the unit's capacity. Dynegy argues that otherwise buyers would be encouraged to procure less than the full amount of capacity from resources, even though such units would still incur the same amount of fixed costs. Dynegy further posits that failure to offer ICPM designations for the exceptionally dispatched non-resource adequacy capacity would inappropriately treat capacity as energy. This would also allow the CAISO to have no-cost access to every

<sup>261</sup> *Id.* at 14.

<sup>&</sup>lt;sup>258</sup> CPUC November Comments at 6-7.

<sup>&</sup>lt;sup>259</sup> Six Cities November Comments at 6.

<sup>&</sup>lt;sup>260</sup> CAISO Reply at 14 (citing ICPM Order, 125 FERC  $\P$  61,053).

unit's full capacity, regardless of how much of the unit's capacity was resource adequacy capacity.<sup>262</sup> J.P. Morgan asserts that a resource provides a capacity service simply by being available. Therefore, J.P. Morgan contends that the CAISO should offer an ICPM designation for the resource's entire capacity.<sup>263</sup>

175. Reliant disagrees with the CAISO's claim that offering an exceptionally dispatched resource an ICPM designation for the entire capacity of the unit would be inconsistent with the goal of treating exceptionally dispatched resources in a comparable manner to resource adequacy and ICPM resources. Reliant asserts that because Exceptional Dispatch represents that last opportunity for the CAISO to procure backstop capacity, and because fixed costs are incurred on a full rather than partial unit basis, there is no justification for permitting partial unit ICPM offers for exceptional dispatches.<sup>264</sup>

176. Reliant further contends that setting the ICPM settlement amount at the highest level of exceptionally dispatched energy output makes cost recovery dependent on whether a unit, once committed under Exceptional Dispatch, receives additional exceptional dispatches for energy. Reliant argues that the CAISO's proposal not only leads to highly uncertain cost recovery for units committed under Exceptional Dispatch that incur fixed costs, whether dispatched for energy or not, but also gives too much discretion to the CAISO.<sup>265</sup> Reliant asserts that because the November Proposal inappropriately treats fixed capacity costs as if they were variable energy costs and fails to account for the fact that a resource incurs fixed costs annually and monthly, and not based on energy output, the November Proposal may still result in compensation that is unduly discriminatory.<sup>266</sup>

<sup>262</sup> Dynegy Reply at 6-7.

<sup>263</sup> An exceptionally dispatched resource can be dispatched up to its full capacity and is not only available to generate energy at its minimum operating level. J.P. Morgan Reply at 6.

<sup>264</sup> Reliant Reply at 7-8.

<sup>265</sup> Reliant reiterates its concern that this type of discretion is analogous to the CAISO's discretion regarding the determination of Significant Events that ultimately led to the establishment of a TCPM designation for a single must-offer waiver denial. Reliant now asks the Commission to temper the CAISO's discretion with respect to Exceptional Dispatch by requiring the CAISO to perform an objective and transparent analysis of the capacity it needs, and make ICPM offers based on those analyses. *Id.* at 4.

<sup>266</sup> *Id.* at 3.

177. WPTF similarly argues that the CAISO appears to be trying to procure capacity, while paying for that service as if it were energy. Moreover, WPTF points out that the CAISO may not need additional energy from that unit unless a particular contingency occurs. According to WPTF, the CAISO may be relying on undispatched capacity to maintain reliability. Thus, WPTF maintains that the lack of an energy dispatch from committed non-resource adequacy capacity does not mean that the unit did not provide capacity reliability service.<sup>267</sup>

178. In contrast, NCPA supports compensating exceptional dispatches for the partial capacity of a unit through a method that accomplishes the following objectives: (1) allows the CAISO to exceptionally dispatch only part of a resource's total capacity; (2) does not obligate the CAISO to pay for more capacity than actually procured; and (3) distinguishes between compensation for a non-resource adequacy resource, which would be paid the greater of the dispatched unit's minimum operating level or the amount of capacity actually called upon, and a partial resource adequacy unit, which would be compensated only for that portion of its total capacity that exceeds its resource adequacy commitment.<sup>268</sup>

179. NCPA asserts that the Commission should reject the arguments of suppliers that support compensation based on the full capacity of the unit (or the full non-resource adequacy capacity, in the case of a partial resource adequacy unit), regardless of the amount of capacity exceptionally dispatched. NCPA argues that such a compensation scheme would amount to over-procurement of capacity and a windfall to resources.<sup>269</sup>

180. Six Cities, PG&E, and the CPUC also support partial designations. Six Cities argue that none of the suppliers have demonstrated that it is just and reasonable to require compensation for capacity beyond what the CAISO actually needs.<sup>270</sup> Moreover, Six Cities find some inconsistency in the fact that the suppliers complain that they are unable to recover their fixed costs, absent full capacity compensation, yet they have elected to remain participants in the CAISO's markets, even with the stringent must-offer obligation

<sup>269</sup> Id. at 4.

<sup>270</sup> See Six Cities Reply at 4.

<sup>&</sup>lt;sup>267</sup> WPTF Reply at 8.

<sup>&</sup>lt;sup>268</sup> NCPA Reply at 3-4.

under the current market design.<sup>271</sup> PG&E asserts that WPTF has offered no explanation as to why an Exceptional Dispatch for a portion of a unit's capacity should result in an ICPM designation for the unit's total available capacity, regardless of the CAISO's actual need.<sup>272</sup>

181. Reliant, Dynegy, and WPTF argue that the Commission should reject the November Proposal to disqualify any capacity that is voluntarily bid into the market or self-scheduled from receiving an ICPM designation. Reliant argues that such a disqualification unduly discriminates against non-resource adequacy resources and is not supported by the CAISO's own conceptual framework for compensating resources for reliability services. Reliant contends that whether or not a unit provides the CAISO with compensable capacity service depends on whether the CAISO needs the unit, not on whether the unit was participating in the CAISO's markets.<sup>273</sup>

182. Dynegy contends that this aspect of the November Proposal confuses capacity service with energy dispatch. Dynegy explains that a unit dispatched to provide energy to maintain reliability at a particular operating level is providing capacity service up to that operating level, regardless of whether that unit reached that operating level entirely through Exceptional Dispatch or through a combination of market-based dispatch and Exceptional Dispatch. Thus, Dynegy urges the Commission to find that any Exceptional Dispatch of non-resource adequacy capacity for reliability purposes should trigger an offer of a balance-of-unit ICPM designation. Should the Commission find, however, that the CAISO should only be required to offer an ICPM designation to the level to which the unit was dispatched under Exceptional Dispatch, Dynegy states that the Commission should recognize that the unit is providing capacity service at least up to that level.<sup>274</sup>

<sup>272</sup> PG&E Reply at 7.

<sup>273</sup> Reliant illustrates its point by arguing that in the example provided on page 10 of the November Proposal, if a 100 MW unit with 60 MW of resource adequacy capacity bids in the CAISO markets, and is accepted for a 25 MW bid and has a self-schedule for 55 MW, and then that unit is exceptionally dispatched to 100 MW, this unit should receive an ICPM offer for 40 MW, and not only 20 MW, because the Exceptional Dispatch to 100 MW demonstrates that the CAISO required the full 40 MW of non-resource adequacy capacity. Reliant Reply at 5-6.

<sup>274</sup> Dynegy Reply at 9.

<sup>&</sup>lt;sup>271</sup> Six Cities point out that suppliers can file with the Commission to receive higher payments under the ICPM, enter into a resource adequacy contract, or seek designation as a reliability must-run resource to help guarantee fixed cost recovery. *Id.* at 4-5.

183. WPTF argues that the fact that a unit is operating voluntarily in the CAISO's markets does not mean that the unit is not providing the CAISO with compensable capacity service. Moreover, WPTF argues that the primary service purchased through a resource adequacy contract is the obligation to bid into the CAISO's markets. Therefore, WPTF submits that it would be discriminatory to take the position that a unit that is bidding into the CAISO's markets because it is under a resource adequacy contract is unquestionably entitled to the separate capacity compensation it is receiving through its resource adequacy contract, while a non-resource adequacy unit that is voluntarily bidding into or self-scheduled in the CAISO's markets, and also providing capacity service, is not eligible for comparable capacity compensation.<sup>275</sup>

184. Calpine and WPTF object to the Market Monitor's suggestion in the November Proposal that capacity must be bid into the CAISO's markets in order to be eligible for an ICPM offer. Both Calpine and WPTF assert that such a requirement would indirectly reimpose the must-offer obligation, which has intentionally not been incorporated into MRTU.<sup>276</sup>

185. Further, WPTF argues the Market Monitor's suggestion in the November Proposal for supplemental revenues is flawed. WPTF notes that when MRTU is implemented, the must-offer obligation will cease, and the obligation to offer into the CAISO's markets will only be attached to resources with resource adequacy contracts. Thus, WPTF argues that it is appropriate to limit the obligation to offer into the CAISO's markets to resource adequacy capacity so as to create the proper incentive to secure the amount of resource adequacy capacity necessary to reliably operate the CAISO bulk power system. WPTF posits that to require a non-resource adequacy resource to bid into the CAISO's markets in order to be eligible for an ICPM designation or supplemental revenues improperly extends the must-offer obligation.<sup>277</sup>

186. The CPUC does not believe that the commitment of resources should be the benchmark for determining eligibility for an ICPM designation. Rather, the CPUC recommends that ICPM eligibility should be determined based on whether the resource has a bid in the market. According to the CPUC, only those non-resource adequacy resources without bids in the market should be eligible for ICPM designations, whereas, non-resource adequacy resources with bids in the market should be determined be eligible for

<sup>276</sup> Calpine Reply at 5; WPTF Reply at 12.

<sup>277</sup> WPTF Reply at 12.

<sup>&</sup>lt;sup>275</sup> WPTF Reply at 9-10.

supplemental revenues. The CPUC believes that any concerns about withholding that may be raised by this approach will be resolved by the resource adequacy program.<sup>278</sup>

#### iii. Commission Determination

187. The Commission accepts the CAISO's proposal to offer partial ICPM designations to exceptionally dispatched resources for capacity that is not under a resource-adequacy contract, a reliability-must-run contract, or subject to an ICPM designation. We find that the payment scheme for Exceptional Dispatch must strike a balance between, on the one hand, providing appropriate compensation to resources that are called upon to provide capacity services, and, on the other hand, avoiding incentives for suppliers to seek exceptional dispatches instead of ICPM designations or resource adequacy contracts. As we note above, we have found that resources providing similar reliability should be similarly compensated.<sup>279</sup> We find that paying for capacity "as-needed," through the partial ICPM designation approach, is consistent with capacity procurement in both the ICPM and resource adequacy programs. The ICPM allows partial designations,<sup>280</sup> and the resource adequacy program allows contracts for a portion of a resource's capacity. i.e., partial resource adequacy resources. Thus, we conclude that requiring the CAISO to offer full ICPM designations to non-resource adequacy resources that are committed under Exceptional Dispatch would be unjust, unreasonable, and unduly discriminatory.

188. In addition, the Commission is concerned that requiring full balance-of-unit designations could distort the incentives for suppliers to participate in the resource adequacy or ICPM programs, and may persuade resources to avoid contracts in hopes of receiving exceptional dispatches. A compensation structure that leaves an exceptionally dispatched resource better off than a resource that has bilaterally contracted at least a portion of its capacity, or voluntarily elected to accept at least a partial ICPM designation, is inappropriate. Structuring Exceptional Dispatch compensation to avoid a financial incentive to "hold out" for Exceptional Dispatch instead of a resource adequacy contract or ICPM designation will encourage participation in voluntary ICPM and resource adequacy programs. Thus, to maintain proper incentives for resources to participate in these programs, we find that the CAISO should be able to offer partial ICPM designations to exceptionally dispatched resources providing capacity-type services.

<sup>&</sup>lt;sup>278</sup> CPUC Reply at 5. The CPUC asserts that the CAISO needs to define "commitment" more precisely in order to avoid confusion.

<sup>&</sup>lt;sup>279</sup> October 16, 2008 Order, 125 FERC ¶ 61,055 at P 103.

<sup>&</sup>lt;sup>280</sup> ICPM Order, 125 FERC ¶ 61,053 at P 94.

189. The Commission disagrees with various sell-side parties' assertion that, because fixed costs are incurred on a per unit basis, not a per megawatt basis, ICPM designations for the full available capacity of a unit are appropriate. Consistent with the principle that partial designations may be offered to resource adequacy resources and ICPM resources for similar capacity services, we find that exceptionally dispatched resource's need only be paid for the capacity that the CAISO needs, not the entirety of the resource's potential output.<sup>281</sup> Specifically, we find that the CAISO should only compensate the resource adequacy resource for the incremental amount that is exceptionally dispatched above its resource adequacy contract. Consistency between the resource adequacy, ICPM, and Exceptional Dispatch programs is essential to maintaining proper incentives for participants to bilaterally contract for capacity and/or accept ICPM designations.

190. We also accept the CAISO's proposal to guarantee that the ICPM designation level offered to any non-resource adequacy resource that is exceptionally committed will be at least that unit's minimum operating level. Commitment of a resource to its minimum operating level requires that resource to operate at a level for which it will be compensated; the remainder of its capacity is available for sale and under no obligation to be bid into the CAISO's markets. We disagree with suppliers' argument that commitment to a resource's minimum operating level effectively gives the CAISO access to the exceptionally dispatched resource's entire available capacity for additional incremental exceptional dispatches. Rather, we find that resources that are committed to their minimum operating level are not precluded from selling the remainder of their available capacity in other markets, as they are under no obligation to bid this capacity into the CAISO's markets. Further, we accept the CAISO's proposal to offer an ICPM designation for any amount of incremental energy above a resource's minimum operating level that is exceptionally dispatched. The incremental output dispatched by the CAISO represents capacity it needs for reliability, and thus it is appropriate to provide an offer of a similar capacity payment as that enjoyed by all other capacity service providers in the CAISO markets.

191. In addition, the Commission accepts the November Proposal to offer ICPM designations for the incremental amount of the Exceptional Dispatch above the self-scheduled and market-bid capacity for non-resource adequacy resources. We do not agree with Dynegy that a unit dispatched to provide energy to maintain reliability at a particular operating level is providing capacity service up to that operating level, regardless of whether that unit reached that operating level entirely through Exceptional

<sup>&</sup>lt;sup>281</sup> See Cal. P.U.C. Decision 04-10-035; *Opinion on Local Res. Adequacy Requirements*, Decision 06-06-064, Cal. P.U.C. (June 29, 2006) (approving partial unit resource adequacy contracts); ICPM Order, 125 FERC ¶ 61,053 at P 94 (approving partial unit ICPM designations).

Dispatch or through a combination of market-based dispatch and Exceptional Dispatch. We find that subtracting self-scheduled and market-bid capacity from ICPM designation offers for Exceptional Dispatch is reasonable because this will maintain proper incentives for suppliers to participate in the resource adequacy and ICPM programs.

### 6. <u>Election of ICPM Designation</u>

#### a. <u>Comments and Protests</u>

192. Mirant contends that exceptionally dispatched units should not receive mandatory ICPM designations. Because of the interplay between the ICPM and Exceptional Dispatch, Mirant argues that if the Commission were to impose an after-the-fact mandatory ICPM obligation on a unit that was committed under Exceptional Dispatch, the Commission would be providing the CAISO with a perverse incentive to avoid offering before-the-fact ICPM designations.<sup>282</sup>

193. However, Mirant asserts that while a resource may decline an ICPM designation because it does not want the corresponding obligation to participate in the CAISO's markets, it does not view this scenario as likely. Rather, Mirant argues that a resource would prefer to have a stable, known revenue stream. In addition, Mirant notes that the Commission has a regulatory tool at its disposal,<sup>283</sup> i.e., penalty authority, which did not exist in 2000-2001, to dissuade resources from using Exceptional Dispatch to game the market. Consequently, Mirant argues that resources are not going to game the system by holding out for Exceptional Dispatch in lieu of accepting an ICPM designation.<sup>284</sup>

194. Reliant argues that if the Commission decides to eliminate choice and instead implement a single form of Exceptional Dispatch compensation, it should reject supplemental revenues and require ICPM designation offers. Reliant also emphasizes that if the Commission intends to allow a choice between an ICPM payment and the CAISO's bid-based supplemental revenues, this choice should be left to the resource.<sup>285</sup>

195. Calpine asserts that the CAISO's proposed reliance on an energy bid-based approach to compensate units subject to Exceptional Dispatch would not be appropriate

<sup>&</sup>lt;sup>282</sup> Mirant November Comments at 7. Mirant points out that it would be inconsistent for the Commission to impose a mandatory ICPM obligation on a resource.

<sup>&</sup>lt;sup>283</sup> 18 C.F.R. § 1c.2 (2008) (Prohibition of Electric Energy Market Manipulation).

<sup>&</sup>lt;sup>284</sup> Mirant November Comments at 7.

<sup>&</sup>lt;sup>285</sup> Reliant November Comments at 6.

because, among other reasons, it would "fail to provide non-resource adequacy resources with sufficient compensation for the reliability services they provide under Exceptional Dispatch."<sup>286</sup>

196. PG&E asserts that immediate implementation of a mandatory ICPM offer eliminates the need for any energy adder. In addition, PG&E submits that additional compensation toward fixed costs should not be provided to an exceptionally dispatched resource that declines an ICPM designation.<sup>287</sup>

197. SoCal Edison asserts that units that refuse an ICPM designation, or units that are exceptionally dispatched only for incremental energy, should receive only supplemental revenues, capped at the equivalent of a monthly ICPM payment, and not ICPM-based capacity payments.<sup>288</sup>

#### b. <u>Reply Comments</u>

198. Calpine argues that there is no need to make the ICPM designation voluntary, to offer an optional supplemental revenue approach to compensation, or to provide rules by which resources must make monthly elections. Since Exceptional Dispatch instructions will typically be issued in real-time or near real-time, Calpine asserts that the issuance of such instructions should trigger an automatic ICPM designation and an entitlement to the full ICPM capacity price, obviating the need for the supplemental revenue option.<sup>289</sup>

199. PG&E states that if an Exceptional Dispatch for capacity-type services triggers an offer of ICPM designation, this alternative "completely moots the need for an energybased going-forward fixed costs compensation scheme."<sup>290</sup> PG&E theorizes that a resource that declines an ICPM designation must believe it can make more money by following another course, thereby eliminating the need for any fallback scheme. Therefore, PG&E submits that because resources are assured fair compensation through

<sup>&</sup>lt;sup>286</sup> Calpine November Comments at 1 (citing October 16, 2008 Order, 125 FERC ¶ 61,055 at P 98).

<sup>&</sup>lt;sup>287</sup> PG&E November Comments at 2.

<sup>&</sup>lt;sup>288</sup> SoCal Edison November Comments at 5.

<sup>&</sup>lt;sup>289</sup> Calpine Reply at 3.

<sup>&</sup>lt;sup>290</sup> PG&E Reply at 4.

the option of an ICPM designation, the CAISO's alternative compensation scheme is unnecessarily complex and overly generous to exceptionally dispatched resources.<sup>291</sup>

200. Reliant finds no foundation in the CAISO's speculation that a resource would turn down an ICPM offer for Exceptional Dispatch in the hope of getting a better deal by waiting to be actually dispatched under Exceptional Dispatch. Reliant maintains that a resource with uncontracted capacity would almost certainly accept an ICPM designation that guarantees recovery of some or all fixed costs. Moreover, Reliant asserts that little may be gained by turning down an ICPM offer, as the CAISO can still exceptionally dispatch an ICPM resource.<sup>292</sup>

201. Six Cities oppose Mirant's argument that exceptionally dispatched units should be entitled to capacity compensation for the full available capacity of the unit, while remaining exempt from the requirement to accept an ICPM offer and the corresponding obligation to make capacity available by bidding into the CAISO's markets. Six Cities argue that the promise to comply with any Exceptional Dispatch instructions during the 30-day period associated with the capacity payment is insufficient. Therefore, Six Cities assert that if a supplier declines an ICPM offer, it should lose its chance to earn a monthly capacity payment because it is not providing any ongoing reliability service.<sup>293</sup>

202. Dynegy states that if Exceptional Dispatch is infrequent and unpredictable, the fears that parties will decline the 30-day certainty of an ICPM designation are overstated. However, if Exceptional Dispatch becomes frequent and predictable, Dynegy asserts that there are more appropriate tools for addressing the fear that parties will unduly profit. To that end, Dynegy offers that a unit could be offered a resource adequacy contract or enter into a reliability must-run contract.<sup>294</sup>

203. WPTF adds that Exceptional Dispatch is hardly exceptional if the resource knows it is needed for reliability. Thus, WPTF argues that if a reliability need is predictable enough that the owner knows when it is needed, the unit should be under a long-term contract or should receive an ICPM offer. WPTF submits that either a contract or an ICPM offer would provide the CAISO with access to cost-based energy and the owner with a predictable and sufficient source of fixed cost recovery.<sup>295</sup>

<sup>291</sup> Id.

<sup>292</sup> Reliant Reply at 8.

<sup>293</sup> Six Cities Reply at 6-7.

<sup>294</sup> Dynegy Reply at 8.

<sup>295</sup> WPTF Reply at 17.

#### c. <u>Commission Determination</u>

204. The Commission will accept the November Proposal to provide resources with the month-to-month option of accepting an ICPM designation or earning bid-based, hourly payments for any incremental energy provided as a result of an Exceptional Dispatch. We further agree that non-resource adequacy resources that do not want the ICPM designation should have the opportunity to earn supplemental revenues up to the ICPM payment level in situations where the Exceptional Dispatch is subject to mitigation. Including this option is necessary to preserve the voluntary nature of the ICPM program and to avoid the imposition of a bidding requirement on every exceptionally dispatched resource. We disagree that offering resources a choice between two Exceptional Dispatch compensation methods is unnecessarily complex. Rather, we find that the CAISO's proposal to require a resource to make an election seven days before the first day of the month,<sup>296</sup> with a default to the ICPM option if no election is made, strikes an appropriate balance between the CAISO's need for administrative simplicity and the resource's need for flexibility.

#### 7. <u>Supplemental Revenues</u>

#### a. <u>Comments and Protests</u>

205. WPTF, J.P. Morgan, and Mirant oppose the imposition of a 30-day cap on the amount of revenue a resource can earn from Exceptional Dispatch. According to WPTF, the ICPM payment is a floor on revenues and not a cap because ICPM resources are free to keep any market energy and ancillary services revenues earned, in addition to the ICPM capacity payment. WPTF argues that to limit the revenue potential of such resources would be to treat them very differently from other units providing resource adequacy services. Further, WPTF notes that the CAISO proposed to cap Exceptional Dispatch revenues at \$41/kW-year to discourage parties from declining ICPM designations. Because the ICPM payment guarantees at least a minimum revenue stream, WPTF maintains that it seems unlikely that a rational supplier would decline a 30-day ICPM designation offer if Exceptional Dispatch were unpredictable and infrequent.<sup>297</sup>

<sup>&</sup>lt;sup>296</sup> In the November Proposal, the CAISO had proposed to require resources to make an election "by the first day of each calendar month." November Proposal at 6. In its Reply, the CAISO appears to have modified this requirement and now proposes to require a resource to indicate seven days before the first day of the month which compensation method it prefers for that month. CAISO Reply at 3.

<sup>&</sup>lt;sup>297</sup> WPTF November Comments at 7-8.

206. Mirant argues that an exceptionally dispatched resource's revenues should not be capped for any reason.<sup>298</sup> Similarly, J.P. Morgan argues that in order to compensate non-resource adequacy resources on a basis comparable to resource adequacy and ICPM resources, the Commission must allow non-resource adequacy resources to collect the established capacity payment, while also allowing them to earn energy market revenues limited only by the established bid cap and local market power mechanisms.<sup>299</sup>

207. The CPUC and SoCal Edison argue that the CAISO should include residual unit commitment payments<sup>300</sup> in determining whether a non-resource adequacy unit has reached the supplemental revenue cap. The CPUC argues that not including residual unit commitment payments in supplemental revenues will allow resources to collect fixed costs through supplemental revenues, as defined by the CAISO, while also earning residual unit commitment payments that they would not receive under the ICPM.<sup>301</sup>

### b. <u>Reply Comments</u>

208. Dynegy, Calpine, J.P. Morgan, and WPTF object to the 30-day revenue cap. Dynegy states that an ICPM designation does not impose a cap on revenues, as parties subject to an ICPM designation are allowed to earn energy and ancillary service revenues above their ICPM payment.<sup>302</sup>

209. According to WPTF, the CAISO's proposed cap on total revenues reflects a failure to recognize that exceptional dispatches may utilize capacity services that are distinct from energy services. Specifically, WPTF argues that the November Proposal continues to mix energy services with capacity services in the following ways: (1)

<sup>299</sup> J.P. Morgan November Comments at 7.

<sup>300</sup> The CAISO utilizes the residual unit commitment process if the scheduled demand bid into the day-ahead market is less than the original CAISO forecast of CAISO demand. The residual unit commitment process procures capacity to ensure that enough committed capacity is available and on-line to meet forecasted demand as well as any forecasted shortfalls of minimum generation requirements. Resources selected in the residual unit commitment process are paid the locational marginal price and are also eligible for residual unit commitment availability uplift payments. For a discussion of residual unit commitment payments, *see generally* MRTU Order, 116 FERC ¶ 61,274 at P 130-134

<sup>301</sup> CPUC November Comments at 7.

<sup>302</sup> Dynegy Reply at 8.

<sup>&</sup>lt;sup>298</sup> Mirant November Comments at 8.

introducing an option for compensating exceptional dispatches that provide capacity services through supplemental energy payments; (2) linking a cap on these supplemental energy payments to existing compensation levels that are a function of capacity; and (3) requiring providers to relinquish supplemental Exceptional Dispatch payments under some circumstances.<sup>303</sup> WPTF also maintains that requiring a non-resource adequacy resource to bid into the CAISO's markets in order to be eligible for an ICPM designation or supplemental revenues improperly extends the must-offer obligation.<sup>304</sup>

210. WPTF provides that the CAISO's proposal to limit energy payments is seriously flawed because it requires capping a provider's total compensation for reasons other than market power mitigation, and/or requires that all Exceptional Dispatch services that warrant an ICPM designation also require energy market power mitigation. Thus, WPTF argues that the Commission should reject this element of the November Proposal and should, instead, permit the CAISO to limit energy market revenues only to those instances in which the CAISO can affirmatively demonstrate the exercise of market power, or a high likelihood that providers have the ability to exercise market power.<sup>305</sup>

211. Further, WPTF objects to the notion that a resource that incurs costs over an entire year could somehow be double paid over a 30-day period as speculative and inappropriate. Moreover, WPTF notes that the terms of other capacity compensation mechanisms such as the ICPM and resource adequacy programs do not restrict the energy revenues a provider can receive through the CAISO's markets. WPTF observes that the level of ICPM compensation that providers receive is expressly premised on the opportunity to earn market energy margins in addition to the ICPM capacity payments.<sup>306</sup>

212. Calpine argues that the November Proposal's double payment rule is unduly complex and unnecessary. Calpine provides that resources subject to Exceptional Dispatch should receive their capacity compensation in the form of an ICPM payment and not be subject to any cap on their energy revenues, just as resource adequacy and ICPM resources are not subject to caps on their energy revenues. Further, Calpine remains skeptical about the opportunity to game the system under the CAISO's elective approach to Exceptional Dispatch compensation by choosing supplemental energy

<sup>304</sup> *Id.* at 12.

<sup>305</sup> *Id.* at 14.

<sup>306</sup> *Id.* at 13.

<sup>&</sup>lt;sup>303</sup> WPTF Reply at 4.

revenues for a few discrete hours and then accepting a 30-day ICPM designation, thereby potentially earning more than a unit could earn under the ICPM.<sup>307</sup>

213. Calpine argues that to assure comparability of capacity compensation, exceptionally dispatched resources should receive ICPM designations automatically. Calpine explains that automatic ICPM designations would prevent exceptionally dispatched resources from being subject to limitations on energy revenues, just as resource adequacy resources are not subject to any such limits. Calpine states that it is important that the Commission establish that resources that provide reliability services and are compensated for a portion of their capacity costs should not be precluded from earning full market energy rents. Further, Calpine argues that the November Proposal for elective supplemental energy payments is not needed and provides insufficient justification for capping energy revenues of exceptionally dispatched resources. Thus, Calpine submits that exclusive reliance on a supplemental energy revenue approach to compensation would not be just and reasonable.<sup>308</sup>

214. NCPA and Six Cities support a cap on Exceptional Dispatch compensation, while NCPA, SoCal Edison, PG&E and the CPUC agree that residual unit commitment payments should be included in the supplemental revenue cap for units that decline an ICPM designation.<sup>309</sup> NCPA asserts that the inclusion of residual unit commitment payments in the supplemental revenue cap is critical to ensuring appropriate fixed cost recovery under the supplemental revenue compensation scheme because residual unit commitment payments, like supplemental revenues, are intended to contribute towards a unit's fixed cost recovery.<sup>310</sup> Six Cities oppose WPTF's request that the combined ICPM and Exceptional Dispatch revenues not be capped. In Six Cities' opinion, the cap was not, as WPTF argues, solely a mechanism for encouraging resources to accept ICPM designations. Rather, Six Cities claim that the revenue cap is needed "to eliminate the potential for resources to attempt to obtain double payments for providing the same reliability service through two disparate procurement (and compensation) mechanisms."<sup>311</sup>

<sup>307</sup> Calpine Reply at 3.

<sup>308</sup> *Id.* at 3-4.

<sup>309</sup> See SoCal Edison Reply at 4, PG&E Reply at 5, and CPUC Reply at 9.

<sup>310</sup> NCPA Reply at 5.

<sup>311</sup> Six Cities Reply at 8. Six Cities note that the CAISO's revised pricing proposal adopts this approach.

PG&E challenges WPTF's argument that it is inappropriate to apply a combined 215. cap to Exceptional Dispatch revenues. Specifically, PG&E is not persuaded by WPTF's claims that the cap is unnecessary when Exceptional Dispatch is unpredictable and infrequent, and that a resource should have a resource adequacy or reliability-must run contract if the use of Exceptional Dispatch is more predictable. PG&E reasons that if the ICPM payment provides a fair level of fixed cost recovery in unpredictable situations, as WPTF appears to concede, then it is fair to adopt that level of payment as a cap, considering that all resources are given the choice of whether or not to accept an ICPM designation. But if the CAISO's supplemental revenue approach is approved, PG&E maintains that a cap at the ICPM monthly payment level is necessary to avoid overcompensation of resources that decline the ICPM designation. PG&E further asserts that WPTF's argument that resource adequacy or reliability must-run contracts should be provided when the Exceptional Dispatch of a particular resource is predictable and regular is beyond the scope of a determination on the appropriate level of Exceptional Dispatch compensation.<sup>312</sup>

216. The CPUC sees a need to impose additional responsibilities on those resources that choose the supplemental revenue option and reach the ICPM cap. In such a case, the CPUC believes that an equitable approach would be to subject those resources either to the same must-offer obligations as resources that chose the ICPM designation option, or to full mitigation under Exceptional Dispatch. The CPUC argues that these resources should be allowed to decline the must-offer obligation, but that they should be subject to the CAISO's full mitigation proposal.<sup>313</sup> Additionally, the CPUC reiterates that residual unit commitment payments need to be included in the calculation of supplemental revenues because they help suppliers recover fixed costs.<sup>314</sup>

217. The CAISO argues that a cap on supplemental revenues is necessary. In rejecting Mirant's claim that a unit's revenues should not be capped for any reason, the CAISO points out that the Commission found in the October 16, 2008 Order that a cap is necessary to prevent the possibility of double payment.<sup>315</sup> Further, the CAISO states that a cap is needed to ensure that resource adequacy and non-resource adequacy units are treated consistently with one another and to avoid upsetting the balance established

<sup>314</sup> *Id.* at 9.

<sup>315</sup> CAISO Reply at 20 (citing October 16, 2008 Order, 125 FERC ¶ 61,055 at P 107).

<sup>&</sup>lt;sup>312</sup> PG&E Reply at 6.

<sup>&</sup>lt;sup>313</sup> CPUC Reply at 6-7.

between the resource adequacy and ICPM programs.<sup>316</sup> Finally, the CAISO explains that the monthly cap applies only to supplemental revenues and does not hinder the accrual of locational marginal price (i.e., energy market) revenues. Rather, the CAISO submits that the cap limits the opportunity to accrue additional high supplemental revenues when locational marginal prices are low and a resource submits high bids.<sup>317</sup>

218. The CAISO rejects the argument that residual unit commitment revenues should be included in calculating the cap. According to the CAISO, the cap addresses market power issues when the CAISO needs to procure non-market capacity from a unit. The CAISO points out that residual unit commitment payments are received through the market and states that a resource electing supplemental revenues would be eligible to retain all market revenues earned during the 30-day period.<sup>318</sup>

219. Finally, the CAISO notes that it will have to implement the tariff revisions regarding Exceptional Dispatch, including any revisions directed by the Commission, through a manual process. Thus, the CAISO anticipates that it will not be able to calculate supplemental revenues until after settlement statements for any affected months have been published. Therefore, because the 30-day period for determining supplemental revenues will often straddle two calendar months, the CAISO states that supplemental revenues will not be calculated until after the final settlement statements for the second month are issued.<sup>319</sup>

#### c. <u>Commission Determination</u>

220. We find that the CAISO's proposal to offer non-resource adequacy resources the opportunity to earn supplemental revenues to recover some contribution toward fixed costs is just and reasonable and hereby accept it. However, since supplemental revenues are only available where mitigation applies, and we have rejected the CAISO's proposed mitigation measures for the majority of the instances of Exceptional Dispatch, supplemental revenues will only be available to non-resource adequacy resources in a narrow range of circumstances. First, during the four-month transition period in which the Commission is instituting a cap on all revenues earned through Exceptional Dispatch, non-resource adequacy resources that meet all other eligibility requirements will have the

<sup>319</sup> *Id.* at 30. Also, the CAISO anticipates calculating the ICPM payment after the final settlement statements for each month are issued.

<sup>&</sup>lt;sup>316</sup> *Id.* at 20.

<sup>&</sup>lt;sup>317</sup> *Id.* at 21.

<sup>&</sup>lt;sup>318</sup> *Id.* at 19-20.

supplemental revenues option. Beyond the initial four-month transition period, supplemental revenues will be available only to those non-resource adequacy resources responding to exceptional dispatches related to non-competitive transmission constraints or the Delta Dispatch. A non-resource adequacy resource that elects the supplemental revenue compensation method, and responds to an Exceptional Dispatch in one of these scenarios, will earn the higher of its energy bid, its default energy bid, or the locational marginal price, up to the supplemental revenue cap, which is set at the ICPM payment level. In cases where supplemental revenues are not available, resources still have a monthly choice between accepting either an ICPM designation or earning bid-based, hourly compensation pursuant to the MRTU Tariff, i.e., the higher of their bid, locational marginal price, or default energy bid.

221. The primary need for the supplemental revenue option stems from the voluntary nature of the ICPM program, which could be undermined if ICPM designations were automatic and mandatory for all exceptionally dispatched resources providing capacity-type services. The Commission recognizes that some resources may not want to assume the daily bidding obligations that accompany an ICPM designation. We also appreciate the need to provide all resources that provide capacity-type services with a means to recover some contribution towards fixed costs. Therefore, we find that it is necessary to provide non-resource adequacy resources with a reasonable fixed-cost recovery alternative to an ICPM designation. Specifically, we find that the CAISO's supplemental revenue proposal strikes an appropriate balance between requiring a resource to bid into the CAISO's markets and providing an opportunity to recover fixed costs. Moreover, the CAISO's supplemental revenue proposal preserves an incentive structure that will encourage suppliers to seek capacity contracts or accept voluntary ICPM designations, rather than withholding in the hope of being exceptionally dispatched.

222. The Commission finds that the CAISO's proposal to cap the amount of supplemental revenues that a resource can accrue at the ICPM payment level is appropriate and necessary to ensure proper incentives for long-term capacity contracting and voluntary ICPM participation. While the Commission must ensure that all Exceptional Dispatch compensation is just and reasonable, we find that the payment structure must not overcompensate suppliers. Imposing a cap on supplemental revenues helps to achieve this objective by ensuring that suppliers do not receive higher compensation by forgoing ICPM offers in favor of supplemental revenues.

223. We agree with WPTF that the ICPM payment is a floor and not a ceiling, but are not persuaded that this entitles an exceptionally dispatched resource to unlimited revenues under circumstances in which all other resources are subject to a fixed capacity payment and automatic mitigation. For resource adequacy and ICPM resources, total revenues are limited to the set monthly capacity payment plus energy market revenues. Like the set capacity payments made to resource adequacy and ICPM resources, supplemental revenues are intended to contribute towards a non-resource adequacy

resource's fixed cost recovery. For this reason, the CAISO's proposal permits nonresource adequacy resources that select the supplemental revenues option to earn unmitigated energy market revenues up to a level equivalent to the ICPM capacity payment. Once a non-resource adequacy resource has reached the supplemental revenue cap it is entitled to keep any mitigated energy market revenues that it earns. Thus, the supplemental revenue cap is not a cap on energy market revenues, but rather a trigger for when the mitigation of bids begins. Without a cap on supplemental revenues, an exceptionally dispatched resource could potentially earn far more during a 30-day period through its unmitigated energy bids than a resource adequacy or ICPM resource could earn through the combination of its fixed capacity payment and mitigated energy market revenues. Therefore, allowing exceptionally dispatched resources to earn uncapped, unmitigated revenues would unduly discriminate against ICPM or resource adequacy resources. Such preferential treatment of non-resource adequacy resources could also distort the incentives for suppliers to participate in the CAISO's voluntary capacity procurement programs, thereby exposing customers to unreasonably high rates due to unlimited monopoly rents earned by exceptionally dispatched resources with market power.<sup>320</sup>

224. We disagree with WPTF's contention that capping supplemental revenues improperly mixes capacity services with energy services. We find that the CAISO's proposal does not mix energy and capacity services because the CAISO must dispatch a unit for incremental energy in order for the resource to be eligible to receive supplemental revenues. We find nothing improper about the fact that these energy-based payments, like capacity payments, provide an opportunity for non-resource adequacy resources to recover fixed costs. Accordingly, we find that it is just and reasonable for the CAISO to offer this alternative method of fixed-cost recovery.

225. We also disagree with WPTF's claim that it is inappropriate to require a resource to submit bids into the CAISO's markets in order to be eligible for supplemental revenues. As the CAISO explains, it would have no way to calculate the amount of a bid-based payment if there were no corresponding bid. Importantly, if multiple resources are available to address a real-time reliability need, the CAISO can factor the resources' bids into its selection of the best resource to exceptionally dispatch. We find that this is an appropriate method of both introducing competition into the Exceptional Dispatch environment and controlling costs under MRTU. Furthermore, a non-resource adequacy unit has the option of accepting an ICPM designation, which provides a just and reasonable payment for the capacity services provided. By accepting the supplemental

<sup>&</sup>lt;sup>320</sup> We reiterate that after the first four months of MRTU, supplemental revenues only apply in instances where market power has been shown.

revenue proposal, the Commission is providing suppliers with additional flexibility by allowing them to select the fixed-cost recovery method that best suits their needs.

226. With respect to the "double payment" rule, we find that such a rule is necessary and appropriate to preserve the proper incentives for participation in the CAISO's voluntary capacity programs.<sup>321</sup> Therefore, we accept the CAISO's proposal to subtract from the applicable ICPM payment any supplemental revenues earned by a resource during a 30-day period in which it accepts an ICPM designation. We agree with the CAISO that this measure is necessary to ensure that a resource cannot earn more revenue towards its fixed costs than it otherwise would have gained from an ICPM designation. We remind parties that in the ICPM Order we determined that capacity compensation on a monthly basis is just and reasonable.<sup>322</sup> We also disagree with the parties who claim that the supplemental revenue option makes Exceptional Dispatch compensation too complex. We find that allowing suppliers to choose between an ICPM designation and bid-based, hourly compensation for incremental energy is a workable approach that ensures just and reasonable compensation, while providing both the CAISO and resources with an appropriate level of flexibility.

227. We will not approve the CPUC's and SoCal Edison's suggested revision to the CAISO's proposal to include residual unit commitment payments in the calculation of supplemental revenues. Doing so would be inconsistent with the Commission's above finding that the CAISO will pay for capacity on an as-needed basis. The residual unit commitment process is a day-ahead mechanism that is separate and distinct from the Exceptional Dispatch mechanism. Resources selected in the residual unit commitment provide to the CAISO in that competitive bidding process.

228. For the purposes of Exceptional Dispatch, none of the capacity committed in the residual unit commitment process is available to be called upon through Exceptional Dispatch, and is similar to capacity contractually committed via the resource adequacy or ICPM programs. Indeed, any non-resource adequacy capacity that is selected in the residual unit commitment process becomes part of the resource's operating schedule, thus obligating the resource to meet its scheduled output. The only capacity that would possibly be available for Exceptional Dispatch would be that amount that was not selected in the residual unit commitment process. Such exceptionally dispatched capacity must be compensated exactly the same as all other non-resource adequacy capacity, i.e., it must receive an ICPM designation offer. The reason that the balance of a resource's capacity is unavailable for Exceptional Dispatch is moot: whether contracted in the

<sup>&</sup>lt;sup>321</sup> See generally October 16, 2008, 125 FERC ¶ 61,055 at P 107.

<sup>&</sup>lt;sup>322</sup> ICPM Order, 125 FERC ¶ 61,053.

resource adequacy, reliability must-run, or ICPM programs, or voluntarily bid and selected in the residual unit commitment process, that capacity is reasonably compensated, and is not available for manual dispatch in real-time. Thus, the Commission finds it reasonable to treat capacity provided in the residual unit commitment process like capacity procured via the longer-term capacity procurement programs, and will approve the CAISO's proposal to compensate exceptionally dispatched capacity consistently on an as-needed basis.

### V. <u>Miscellaneous Issues</u>

## A. <u>Participating Load</u>

# 1. <u>Comments and Protests</u>

229. SWP raises questions regarding the role of participating load under MRTU. SWP states that although it pays the CAISO reliability charges and must meet resource adequacy requirements applied to firm load, the Commission has recently declined its request to clarify that its load "is in fact firm and not interruptible load except for those instances in which it has been bid into CAISO markets to drop load."<sup>323</sup> Thus, SWP requests that the issue of whether participating load is firm load be resolved in this proceeding.

230. SWP states that it is unclear whether the CAISO intends to exceptionally dispatch SWP's participating load to provide voltage support for the grid. Accordingly, SWP argues that the CAISO should be required to consult with SWP and to clarify the following: (1) the precise services the CAISO intends to employ when exceptionally dispatching participating load; and (2) the circumstances under which the CAISO expects to exceptionally dispatch participating load.<sup>324</sup>

231. SWP states that it does not object to voluntary curtailments, requests for increased consumption, or other adjustments to its operations through Exceptional Dispatch, when water conditions permit. However, SWP strongly objects to any involuntary dispatch or adjustment of pump loads outside of genuine emergency conditions. SWP contends that to do otherwise would be to discriminate against participating load in terms of the reliability of transmission service provided. According to SWP, participating load pays for and expects firm transmission service from the CAISO, equivalent to that provided to

 $^{324}$  SWP notes that two of its pumping stations have been designated as located in a CAISO load pocket. *Id.* at 5-6.

<sup>&</sup>lt;sup>323</sup> SWP November Comments at 4 (citing *Cal. Indep. Sys. Operator Corp.*, 124 FERC ¶ 61,205, at P 17, 25 (2008)).

other loads – except when SWP consents to adjustments. In the alternative, SWP argues that if participating load is interruptible, it should not be required to pay the same per unit CAISO reliability charges, meet the same resource adequacy requirements, or be charged the same firm transmission rate as loads that are receiving firm transmission service. According to SWP, the imposition of reliability costs on its participating loads is justified by the CAISO's representation that "they would never be interruptible on an involuntary basis."<sup>325</sup> SWP argues that nothing in MRTU warrants a reversal of this policy.<sup>326</sup>

232. SWP also argues that the involuntary dispatch or adjustment of participating load erects significant barriers to demand response in contravention of federal and California initiatives that require the CAISO to promote demand response.<sup>327</sup>

233. SWP expresses concern that under the current MRTU Tariff, it has no clear means of declining an involuntary dispatch instruction, despite the fact that compliance could potentially jeopardize water management operations or damage the system's structural integrity. Further, SWP is concerned that it cannot decline such a unilateral CAISO directive without risking sanctions, potential market violation investigations, or significant allocation of costs under the CAISO Tariff.<sup>328</sup>

234. SWP argues that Exceptional Dispatch must provide comparable treatment to participating load as it does to other market participants, and that such a mechanism should: (1) allow participating load to notify the CAISO of declined involuntary dispatch and permit the CAISO to use other resources to address the need in question; (2) hold participating load harmless from cost allocations attributable to deviations resulting from participating load's rejection of involuntary adjustments; and (3) protect participating load from investigations or other penalties associated with the refusal of involuntary dispatch instructions that are not applied equally to equally effective individual non-participating loads.<sup>329</sup>

235. Finally, SWP argues that participating load should be paid for its consensual agreement to an Exceptional Dispatch on a comparable basis to generation, but speculates

<sup>325</sup> Id. at 9.
<sup>326</sup> Id.

<sup>327</sup> Id. at 11 (citing Wholesale Competition in Regions with Organized Electric Markets, FERC Stats & Regs. ¶ 31,281, at P 82 (2008) and the Energy Policy Act of 2005, Pub. L. No. 109-58, § 1252, 119 Stat. 594 (2005)).

<sup>328</sup> *Id.* at 12-15.

<sup>329</sup> *Id.* at 16-17.

that participating load may be subject to uncompensated Exceptional Dispatch.<sup>330</sup> SWP contends that the uncertainty around whether participating load will be treated as interruptible under MRTU further complicates any consideration of compensation. SWP contends that if participating load is subject to involuntary interruption, it is effectively standing by for curtailment or involuntary adjustment every minute it is on-line consuming power, thereby providing a compensable capacity service to the CAISO. SWP is also concerned that, regardless of whether participating load is treated as firm or interruptible, it may be required to pay the costs of Exceptional Dispatch.<sup>331</sup> Therefore, SWP asks the Commission to require the CAISO to specify the following: (1) how SWP's participating load will be compensated for each category of Exceptional Dispatch it may provide; and (2) how such compensation is comparable to that provided to resources providing the same Exceptional Dispatch service.<sup>332</sup>

# 2. <u>Reply Comments</u>

236. Six Cities agree that participating load should receive compensation commensurate with services actually provided, but caution the CAISO that participating load should not be overcompensated. Specifically, Six Cities disagree with SWP's suggestion that if participating load is subject to involuntary Exceptional Dispatch, it should receive capacity payments any time it is on-line consuming power. Six Cities reason that if suppliers are not entitled to capacity payments based merely on their existence, neither should participating load. Six Cities acknowledge that if participating load is treated as interruptible at the CAISO's discretion, then such loads should receive appropriate credit against otherwise applicable resource adequacy obligations. Six Cities argue that the credit would provide reasonable compensation for the capacity benefit associated with the CAISO's ability to curtail such loads, making any additional capacity payments for the same service duplicative.<sup>333</sup>

237. The CAISO asserts that SWP's issues are best addressed outside this proceeding, and states that it has engaged SWP in discussions regarding the treatment of participating

<sup>330</sup> *Id.* at 17.

<sup>331</sup> For example, SWP claims that if participating load is exceptionally dispatched to increase consumption, it would be charged for the Exceptional Dispatch energy cost. Moreover, SWP argues that to the extent that capacity costs are socialized to loads, SWP's participating load would effectively be required to pay for the same capacity service that it should be paid for providing.

<sup>332</sup> SWP November Comments at 19.

<sup>333</sup> Six Cities Reply at 12-13.

load. The CAISO states that it commits to pursuing these discussions diligently in an effort to address these issues as expeditiously as possible. In the interim, the CAISO notes that SWP is the only participating load. Further, the CAISO provides that section 22.13 of the MRTU Tariff ensures that SWP will not need to violate any of its legal obligations as a result of CAISO dispatches.<sup>334</sup>

238. SWP acknowledges that it has begun discussions with the CAISO and is hopeful that a mutually satisfactory solution will be reached. SWP requests that the Commission order the CAISO to continue to work with it to ensure that the Exceptional Dispatch of participating load will occur only on a voluntary or consensual basis. Additionally, SWP expresses concern that participating load may be subject to involuntary Exceptional Dispatch to redress unexpected price outcomes that may fall within the definition of market disruption. SWP argues that the CAISO has not justified this use of Exceptional Dispatch, which would have the effect of denying firm service to participating load.<sup>335</sup>

# 3. <u>Commission Determination</u>

239. We find that the issues raised by SWP are not properly before us. We note that the CAISO is already required to submit, at least 62 days prior to the implementation of MRTU, a filing that includes clarification of the parameters that govern the CAISO's procedures for limiting potentially severe reduction of demand at a load aggregation point.<sup>336</sup> The MRTU amendments submitted by the CAISO in Docket No. ER09-240-000 address this outstanding compliance requirement.<sup>337</sup> Thus, we find that the issue of whether participating load is firm load is best resolved in the context of that proceeding.

240. Further, the CAISO has reiterated its commitment to discussions with SWP to resolve issues related to the role of participating load under MRTU as expeditiously as possible.<sup>338</sup> The Commission has also directed the CAISO to work with interested

<sup>334</sup> CAISO Reply at 11.

 $^{335}$  SWP Reply at 2-5.

<sup>336</sup> Notice of Extension of Time, Docket Nos. ER06-615, *et al*, (February 1, 2008); *Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,313, at P 162-64 (2007). We note that the relevant MRTU Tariff section has been renumbered from 31.3.1.2 to 31.3.1.3 since the Commission directed the above-referenced clarification filing. Issues regarding the details of section 31.3.1.3 are currently being addressed in Docket No. ER09-240-000.

<sup>337</sup> CAISO November 4, 2008 Amendments to MRTU Tariff to Include Market Parameters, Docket No. ER09-240-000, Transmittal Letter at 19-24.

<sup>338</sup> CAISO Reply at 11; CAISO Answer at 20.

stakeholders to develop proposals for integrating demand response resources into the MRTU markets.<sup>339</sup> The CAISO has worked to comply with this directive and its schedule provides for the enhancements to demand response participation in the MRTU Tariff to be filed 2009.<sup>340</sup>

241. The CAISO has specifically acknowledged that it will continue to work with SWP to address issues regarding circumstances where Exceptional Dispatch could potentially interfere with SWP's water management responsibilities.<sup>341</sup> However, we note that we have previously held that "section 22.13 of the MRTU Tariff sufficiently ensures that the CAISO will dispatch SWP's participating load to increase consumption only when SWP voluntarily agrees to such an increase in order to avoid damage to water-management equipment."<sup>342</sup> In addition, as SWP itself points out, the CAISO has "unequivocally committed that SWP pump loads would in the future be adjusted or interrupted only when bid into CAISO markets or on an otherwise voluntary basis."<sup>343</sup> We see nothing in the record in this proceeding to indicate that the CAISO has changed its position on this issue. Although SWP raises valid concerns about the status of participating load as firm or interruptible and the associated rights and responsibilities, these issues are beyond the scope of this proceeding, as discussed above.

242. With respect to SWP's concerns regarding capacity payments for participating load, we agree with SWP and Six Cities that participating load should receive compensation that is commensurate with the services it provides to the CAISO. However, we find that the unique characteristics of participating load may distinguish it sufficiently from generation resources so as to require different capacity compensation rules. The CAISO recognizes that more specific assurances and procedures may be appropriate in recognition of the unique characteristics of SWP's participating load. Further, the CAISO believes that any such assurances and procedures can be developed through continued discussions. Accordingly, we urge SWP and the CAISO to continue to work together to resolve these issues. We direct the CAISO to report to the

<sup>339</sup> MRTU Order, 116 FERC ¶ 61,274 at P 689-90.

<sup>340</sup> CAISO Demand Response Integration Working Group Meeting Introduction & Overview (December 12, 2008). The CAISO's timeline can be found at: http://www.caiso.com/209b/209b856053f80.pdf.

<sup>341</sup> CAISO Answer at 20.

<sup>342</sup> Cal. Indep. Sys. Operator Corp., 119 FERC ¶ 61,313, at P 186.

<sup>343</sup> SWP November Comments at 9 (citing Sept. 2, 2005 Reply Brief of the CAISO in Docket No. ER04-835-000 at 27-28).

Commission on the status of its discussions with SWP regarding the Exceptional Dispatch procedures for participating load within 120 days of the date of this order.

### B. <u>Sunset Provisions</u>

### 1. <u>Comments and Protests</u>

243. WPTF and J.P. Morgan recommend that, if the Commission decides to authorize mitigation of any energy payments for Exceptional Dispatch, such mitigation expire no later than 12 months after MRTU implementation. WPTF notes that the CAISO is already required to implement a number of enhancements by the end of the first year of MRTU to improve the depth, liquidity and credibility of its markets, such as scarcity pricing, convergence bidding, and direct participation by demand response. Thus, WPTF argues that terminating mitigation of energy payments for Exceptional Dispatch at the same time creates appropriate urgency for the CAISO to put in place mechanisms for procuring the products it needs through its markets.<sup>344</sup> In contrast, the CPUC recommends that Exceptional Dispatch sunset on December 31, 2010, so that it ends simultaneously with the ICPM.<sup>345</sup> On the other hand, Reliant believes that the ICPM election is a necessary component of adequate compensation for non-resource adequacy resources and must, therefore, continue because the expiration of the mitigation provisions will not materially impact the fixed cost recovery of non-resource adequacy resources.<sup>346</sup>

### 2. <u>Reply Comments</u>

244. The CAISO agrees with the CPUC that a termination date is appropriate, but believes that two years of experience with MRTU is necessary in order to evaluate the continuing need for these programs or for a replacement. The CAISO therefore suggests that Exceptional Dispatch mitigation terminate 24 months after the implementation of MRTU and that the termination date for ICPM be revised accordingly. The CAISO states that the complexity of the MRTU market and the changes that will be made to that market suggest that it is prudent to maintain the Exceptional Dispatch mitigation provisions for the first 24 months after MRTU go-live and then to evaluate whether the mitigation provisions should be maintained or terminated.<sup>347</sup>

<sup>346</sup> Reliant November Comments at 14-15.

<sup>347</sup> CAISO Reply at 23-24.

<sup>&</sup>lt;sup>344</sup> WPTF November Comments at 12.

<sup>&</sup>lt;sup>345</sup> CPUC November Comments at 8.

245. The CAISO also disagrees that capacity compensation should continue beyond the expiration of Exceptional Dispatch mitigation. Under its November Proposal, the CAISO states that to prevent any double payment to a resource during a 30-day period, a resource committed through Exceptional Dispatch would not be permitted to earn, through the sum of ICPM capacity payments and supplemental revenues, payments greater than the applicable monthly ICPM payment during the 30-day period. Accordingly, the CAISO claims that if Exceptional Dispatch mitigation is permitted to terminate while Exceptional Dispatch capacity compensation continues, it would create the risk of double payments in certain situations.<sup>348</sup>

246. The CPUC asserts that the use of mitigation should sunset along with the other Exceptional Dispatch provisions and reiterates its earlier position that the Exceptional Dispatch sunset date should coincide with the sunset of the ICPM.<sup>349</sup>

## 3. <u>Commission Determination</u>

247. The Commission agrees with the CAISO that the Exceptional Dispatch mitigation provisions should sunset 24 months after MRTU implementation and that ICPM should be revised to sunset simultaneously with the Exceptional Dispatch mitigation provisions.<sup>350</sup> Because we have determined that the offer of an ICPM designation ensures a just and reasonable option for Exceptional Dispatch compensation, we find that it is necessary to coordinate the sunset dates for the two programs. Therefore, pursuant to our authority under section 206 of the FPA, the Commission directs the CAISO to make a compliance filing within 30 days that revises the ICPM so that it sunsets simultaneously with the Exceptional Dispatch mitigation provisions, 24 months after MRTU implementation.

248. Additionally, the Commission notes that broad Exceptional Dispatch mitigation measures will be in effect only for the first four months of MRTU. After this four-month period, mitigation will only continue in instances where the CAISO has made a specific showing that the potential for exercise of market power exists, which includes Delta Dispatch, non-competitive constraints, and any other specific instances in the future for which the CAISO demonstrates that market power exists. If, however, the CAISO finds

<sup>348</sup> *Id.* at 24-25.

<sup>349</sup> CPUC Reply at 11.

<sup>350</sup> Following the sunset of the Exceptional Dispatch mitigation provisions, exceptionally dispatched resources, that were previously subject to Exceptional Dispatch mitigation, will be compensated pursuant to section 11.5.6 of the MRTU Tariff and receive the higher of their bid or the locational marginal price.

a need to extend the ICPM program and/or Exceptional Dispatch mitigation provisions beyond 24 months from the date of MRTU implementation, it must submit a filing under section 205 of the FPA<sup>351</sup> explaining why an extension is necessary. We note that because the ICPM sunsets 24 months after MRTU implementation, and because the Exceptional Dispatch provisions will remain in place, the potential exists that exceptionally dispatched non-resource adequacy resources will receive inadequate compensation for the reliability services they provide. Thus, if the CAISO still intends to exceptionally dispatch these non-resource adequacy resources, we require the CAISO to file no later than 120 days prior to the sunset of Exceptional Dispatch mitigation and ICPM, a compensation proposal applicable to such resources that is consistent with the precedent established in the RCST, TCPM, and ICPM proceedings.<sup>352</sup> Alternatively, the CAISO may revise the MRTU Tariff to clarify that non-resource adequacy resources will not be subject to Exceptional Dispatch.

# C. <u>Alternate Proposals</u>

### 1. WPTF November 2008 Proposal

249. As an alternative to the November Proposal, WPTF proffers the following: (1) an incremental Exceptional Dispatch should trigger an ICPM designation offer in all cases other than exceptional dispatches that reduce the output of a resource, exceptional dispatches to accommodate ramping and forbidden operating region limitations, and exceptional dispatches undertaken at the resource owner's request; and (2) ICPM compensation should cover at least the lesser of the quantity of capacity exceptionally dispatched, or the remaining capacity that is not under a resource adequacy contract, designated under an ICPM, or subject to a reliability must-run contract.<sup>353</sup> WPTF also proposes the following compensation scheme: (1) if a resource has bid into the market, an Exceptional Dispatch should be paid the higher of its bid or the locational marginal price; or (2) if a resource does not have a bid in the market, or if it is being used to provide a service that the Commission deems should be subject to market power

<sup>351</sup> 16 U.S.C. § 824d (2006).

<sup>352</sup> See ICPM Order, 125 FERC ¶ 61,053 at P 117 (citing Cal. Indep. Sys. Operator, Corp., 121 FERC ¶ 61,281 (2007)).

<sup>353</sup> WPTF stipulates that a unit committed through Exceptional Dispatch should receive an ICPM designation for its full capacity quantity that is not already paid under resource adequacy, another ICPM designation, or a reliability must-run contract.

mitigation, it should be paid the higher of the locational marginal price or its default energy bid.<sup>354</sup>

# 2. <u>SoCal Edison November 2008 Proposal</u>

250. SoCal Edison proposes that a 30-day ICPM designation be offered to a nonresource adequacy resource only when the CAISO requests a commitment via Exceptional Dispatch of that unit. If the unit refuses the ICPM designation, SoCal Edison proposes that it should lose its eligibility to receive another ICPM offer for 30 days. In addition, SoCal Edison states that a request by a resource for a commitment via Exceptional Dispatch should not result in an ICPM offer. Moreover, SoCal Edison recommends that bids from resources with ICPM contracts should be subject to market power mitigation by utilizing their default energy bids throughout the 30-day term of the ICPM contract. However, SoCal Edison asserts that any unit receiving only incremental energy instructions should not be eligible for an ICPM designation. Exceptional dispatches for incremental energy should, in SoCal Edison's opinion, be subject to market power mitigation using default energy bids.<sup>355</sup>

251. SoCal Edison recommends that any unit that refuses an ICPM offer should be paid the greater of its energy bid or the locational marginal price, and be subject to a monthly supplemental revenue cap. When supplemental energy revenues reach the equivalent of a monthly ICPM payment, SoCal Edison asserts that additional mitigation should be applied so that energy bids would utilize the default energy bids. SoCal Edison suggests that this additional mitigation should end 30 days after the initial Exceptional Dispatch. Finally, SoCal Edison recommends that if the Commission decides that ICPM designations can be offered for exceptional dispatches after the initial commitment of a unit, the sum of the supplemental payments and the additional ICPM payments should not be allowed to exceed the monthly ICPM payment, thereby avoiding the possibility of double payments for capacity.<sup>356</sup>

# 3. PG&E December 2008 Alternate Proposal

252. PG&E recommends that only resources exceptionally dispatched for capacity-like services should have the option of receiving a 30-day ICPM designation. With respect to energy payments, PG&E proposes that all exceptionally dispatched resources should be

<sup>356</sup> Id.

<sup>&</sup>lt;sup>354</sup> WPTF November Comments at 13-14.

<sup>&</sup>lt;sup>355</sup> SoCal Edison November Comments at 8.

paid for energy at the higher of the relevant locational marginal price or the resource's default energy bid.<sup>357</sup>

### 4. <u>Reply Comments</u>

253. WPTF claims the November Proposal requires cumbersome methods for tracking the costs and revenues of exceptional dispatches, including the potential for constantly adjusting ICPM designation levels and for prorating revenues across the months. Thus, WPTF states that the Commission should reject the November Proposal and instead adopt the approach outlined by WPTF.

### 5. <u>Commission Determination</u>

254. Pursuant to section 205 of the FPA, the Commission limits its evaluation of a utility's proposed tariff revisions to an inquiry into "whether the rates proposed by a utility are reasonable – and not to extend to determining whether a proposed rate schedule is more or less reasonable to alternative rate designs."<sup>358</sup> The proposed revisions "need not be the only reasonable methodology."<sup>359</sup> As a result, even if an intervenor develops an alternative proposal, the Commission must accept a section 205 filing if it is just and reasonable, regardless of the merits of the alternate proposal.<sup>360</sup> Similarly, when the Commission determines that a rate or practice is "unjust, unreasonable, unduly discriminatory or preferential," section 206 of the FPA requires the Commission to impose a just and reasonable replacement rate or practice.<sup>361</sup> For the reasons set forth above, we have determined that the November Proposal, as modified in this order, is just

<sup>357</sup> PG&E Reply at 2.

<sup>358</sup> City of Bethany v. FERC, 727 F.2d 1131, 1136 (D.C. Cir. 1984).

<sup>359</sup> Oxy USA v. FERC, 64 F.3d 679, 692 (D.C. Cir. 1995).

<sup>360</sup> Southern California Edison Co., et al, 73 FERC ¶ 61,219, at 61,608 n.73 (1995) ("Having found the Plan to be just and reasonable, there is no need to consider in any detail the alternative plans proposed by the Joint Protestors." (*citing City of Bethany*, 727 F.2d at 1136)).

<sup>361</sup> See PJM Interconnection, LLC, 122 FERC ¶ 61,082, at P 67 and n.87 (2008) (citing *Petal Gas Storage*, *L.L.C. v. FERC*, 496 F.3d 695, 703 (D.C. Cir. 2007) (The Commission is not required to choose the best solution, only a reasonable one)); *Exxon Mobil Oil Corp. v. FERC*, 487 F.3d 945, 955 (D.C. Cir. 2007) (The Commission need not adopt the best possible policy as long as the agency has acted within the scope of its discretion and reasonably explained its actions).

and reasonable. Likewise, we have shown that the Commission's four-month transitional cap on Exceptional Dispatch revenues is just and reasonable. Accordingly, we need not further consider the alternative proposals put forth by WPTF, SoCal Edison, and PG&E.<sup>362</sup>

# D. <u>Reporting</u>

# 1. <u>Comments and Protests</u>

255. To allow market participants and the Commission to have a thorough understanding of the CAISO's Exceptional Dispatch authority, Six Cities assert that the CAISO should issue a market notice upon issuance of each Exceptional Dispatch instruction, detailing the megawatt amounts dispatched and the reasons for the instruction.<sup>363</sup>

256. Reliant argues that the CAISO should transparently publish the reasons for exceptional dispatches in order to highlight which market products need to be prioritized in order to eliminate reliance on Exceptional Dispatch.<sup>364</sup>

257. The CAISO proposes to post monthly reports on its website, 30 days after the end of each month, indicating the reasons for any exceptional dispatches. The CAISO states that it will use the information from these reports to "direct the allocation of resources to improved modeling in areas that are most likely to reduce reliance on Exceptional Dispatch." <sup>365</sup>

# 2. <u>Reply Comments</u>

258. NCPA argues that the CAISO should identify each instance of Exceptional Dispatch and explain the reasons behind it to enable market participants to thoroughly understand, evaluate, or challenge the CAISO's use of Exceptional Dispatch.<sup>366</sup>

<sup>364</sup> Reliant November Comments at 14.

 $^{365}$  November Proposal at 22 (citing the Commission's requirement to post information on Exceptional Dispatch in the MRTU Order, 116 FERC ¶ 61,274 at P 267).

<sup>366</sup> NCPA Reply at 6.

<sup>&</sup>lt;sup>362</sup> Nevertheless, in evaluating the justness and reasonableness of the November Proposal, as modified, the Commission has taken the alternate proposals into account.

<sup>&</sup>lt;sup>363</sup> Six Cities November Comments at 11.

259. Reliant reiterates that if the Commission approves partial unit designations, it should also direct the CAISO to perform and provide an objective analysis of the level of capacity actually used for reliability purposes whenever a partial unit ICPM offer is made, and to post such analyses on a timely basis. Reliant argues that such reporting is necessary to reasonably assure that the CAISO's discretion in offering partial unit designations is administered without preference or undue discrimination.<sup>367</sup>

260. SWP suggests that ad hoc interventions by the CAISO in the MRTU markets represent a failure of normal market operations, thereby signifying market disruptions. Thus, SWP warns that interventions intended to remedy abnormal market outcomes may well cause unintended consequences, including additional abnormal or out-of-market outcomes. Therefore, SWP asserts that any attempts by the CAISO to remove bids or self-schedules should be carefully documented, reported, and reviewed to reassure market participants that the market is operating without undue or unexplained interference.<sup>368</sup>

261. The CAISO states that Reliant's request for a transparent list detailing why each Exceptional Dispatch has occurred is redundant, as the Commission has already established a reporting requirement for Exceptional Dispatch. The CAISO confirms that it will create an automated posting process with regard to the information required by the MRTU Order, and will publish summary reports on the CAISO website concerning the reasons for conducted exceptional dispatches.<sup>369</sup>

262. The CAISO now states that it will not publish Exceptional Dispatch reports as quickly as originally proposed, due to the need to rely on manual processes to validate exceptional dispatches, including the reasons for the exceptional dispatches. Thus, the CAISO now proposes to include information on the reasons for validated exceptional dispatches in its quarterly reports. The CAISO explains that in the quarter after an Exceptional Dispatch occurs, it may still be in the process of validating the exceptional dispatches, in which case the information will be reported in the next quarterly report.<sup>370</sup>

<sup>367</sup> Reliant Reply at 9.

<sup>368</sup> SWP Reply at 5.

 $^{369}$  CAISO Reply at 29 (citing MRTU Order, 116 FERC ¶ 61,274 at P 267). The CAISO provides that in the MRTU Order, the Commission directed it to publish all instances of Exceptional Dispatch, including total hourly volumes and hourly weighted average prices by transmission operator service territory, on the CAISO's Open Access Same-Time Information System.

<sup>370</sup> *Id.* at 29.

# 3. <u>Commission Determination</u>

The Commission acknowledges that the CAISO's need to rely on manual 263. processes to validate exceptional dispatches, including documenting the reasons for the exceptional dispatches, may make the currently-accepted monthly reporting schedule difficult. However, the Commission does not agree that it is appropriate for the CAISO to include details about its use of Exceptional Dispatch in its general quarterly reports. The Commission is concerned that quarterly reporting does not provide sufficient transparency into the frequency, volume, costs, causes, and degree of mitigation of exceptional dispatches.<sup>371</sup> The Commission finds that more regular reporting will provide the necessary transparency to enable stakeholders to remain informed about the use of Exceptional Dispatch, and that more frequent reporting should help facilitate any stakeholder processes concerning the development of additional market mechanisms to address situations that frequently give rise to exceptional dispatches. Therefore, the Commission directs the CAISO to make a compliance filing within 30 days of the date of this order that establishes a 60-day reporting process that details the frequency, volume, costs, causes, and degree of mitigation of exceptional dispatches. The Commission finds that 60-day reporting appropriately balances the CAISO's need to rely on manual processes to validate exceptional dispatches with the stakeholders' interest in obtaining timely information about the use of Exceptional Dispatch.<sup>372</sup>

## E. <u>NCPA's Request to Subject the Entire MRTU Tariff to a Section 206</u> <u>Investigation</u>

# 1. <u>Comments and Protests</u>

264. According to NCPA, at least some of the expected increase in the frequency of Exceptional Dispatch instructions is the result of full network model limitations, software limitations, and reduced market functionality. NCPA claims that these limitations undermine the fundamental purpose of MRTU, which was to "minimize the need for manual operations in real time."<sup>373</sup> Thus, NCPA asserts that some of the existing

<sup>373</sup> NCPA November Comments at 2.

<sup>&</sup>lt;sup>371</sup> The Commission notes that Six Cities raised similar concerns that reporting should be made available as soon as an Exceptional Dispatch occurs, and that in no instances should it be reported on less than a monthly basis. Six Cities December 24, 2008 Response to Post-Technical Conference Reply Comments at 6-7.

<sup>&</sup>lt;sup>372</sup> The Commission's decision that the 60-day reporting requirement, described above, is appropriate does not preclude the imposition of additional reporting requirements in other proceedings.

problems attributed to known constraints in the system will continue to impact the market under MRTU. Specifically, NCPA points out that additional filings seeking to impose a price cap and floor (ER09-241-000) and to alter software parameters determining when certain economic and uneconomic bids or constraints are taken or relaxed (ER09-240-000) raise concerns that the CAISO is tinkering with tariff fundamentals at the last minute in an attempt to work around design flaws and missing functionality that were supposed to be resolved when the MRTU Tariff was conditionally approved. NCPA contends that the Commission must recognize that this degradation in functionality will inevitably harm ratepayers by reducing promised efficiencies and increasing costs.<sup>374</sup>

265. NCPA contends that increased use of Exceptional Dispatch creates particular risks for ratepayers. Specifically, NCPA submits that where Exceptional Dispatch results from the inability of MRTU software to accommodate operating limitations, it increases the chance of issuing infeasible schedules and, to the extent the problems are known and predictable, increases gaming opportunities for bidders. NCPA states that customers have no way of protecting themselves from increased uplift required by problems with the CAISO market software, and have little option but to bear such potentially unfair costs until such time as the CAISO is able to make the functionality work. Thus, NCPA argues that the Commission's statutory responsibility to protect consumers and ensure just compensation for resources obliges the Commission to initiate its own section 206 investigation into the continued justness and reasonableness of the overall MRTU Tariff, and to ensure the maximum protection of consumers by making the MRTU Tariff implementation in its entirety, subject to refund.<sup>375</sup>

### 2. <u>Reply Comments</u>

266. The CAISO argues that the Commission should disregard NCPA's assertions that it is tinkering with tariff fundamentals at the last minute. Further, the CAISO claims that there is no relationship between other MRTU Tariff amendment proceedings and the proceedings here, other than in the superficial sense that all of these proceedings concern various provisions of the MRTU Tariff. Thus, the CAISO argues that the Commission should limit its inquiry in the instant proceeding to a determination regarding a just and reasonable level of Exceptional Dispatch compensation. Accordingly, the CAISO submits that there is no reason to subject the entire MRTU Tariff to investigation and refund.<sup>376</sup>

<sup>374</sup> *Id.* at 2-3.

<sup>375</sup> *Id.* at 3-4.

<sup>376</sup> See CAISO Reply at 27-28.

### 3. <u>Commission Determination</u>

267. We deny NCPA's request to establish a FPA section 206 investigation to reexamine the justness and reasonableness of the MRTU Tariff in the instant proceeding. We find this request too broad and unsubstantiated to warrant relief. Parties seeking Commission action must, at a minimum, make specific allegations and provide some basis to question the reasonableness of the tariff.<sup>377</sup> The Commission has, in the past, interpreted the section 206 burden to require a customer seeking an investigation into accepted rates to provide some basis to question the reasonableness of the overall rate level, taking into account changes in all cost components, and not just the challenged component.<sup>378</sup> We find that NCPA's challenges to the continued justness and reasonableness of Exceptional Dispatch and its vague references to proposed MRTU amendments in other proceedings are insufficient to call into question the justness and reasonableness of the entire MRTU Tariff.

268. The Commission notes that the limited focus of the instant proceeding is to ensure just and reasonable compensation for resources that are exceptionally dispatched and to protect ratepayers where there is clear potential for the exercise of market power. By approving the November Proposal, as modified in this order, and by establishing a cap on Exceptional Dispatch for four months following MRTU implementation, the Commission has fulfilled its statutory duty to ensure just and reasonable rates. Further, the Commission notes that the CAISO has committed to exploring a number of potential improvements to MRTU functionality after go-live, some of which should limit the need for exceptional dispatches. Therefore, the Commission finds that issues regarding distinct components of the MRTU Tariff are being appropriately addressed in their respective proceedings, currently before the Commission in separate dockets, and through any required compliance filings.<sup>379</sup>

<sup>377</sup> Algoma Group v. Wis. Pub. Serv. Corp., 61 FERC ¶ 61,265, at 61,959 (1992).

<sup>378</sup> See Ameren Servs. Co. v. MISO, 121 FERC ¶ 61,205, n.25 (2007) (citing Sithe/Independence Power Partners, L.P. v. FERC, 165 F.3d 944, 951 (D.C. Cir. 1999)).

<sup>379</sup> The Commission has discretion to decide when and where it will resolve an issue. *See, e.g., Mobil Oil Exploration v. United Distrib. Cos.*, 498 U.S. 211, 230 (1991) ("An agency enjoys 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). *See also, e.g., Tennessee Gas Pipeline Co v. FERC*, 972 F.2d 376, 381 (D.C. Cir. 1992) ("The agency is entitled to make reasonable decisions about when and in what type of proceeding it will deal with an (continued...)

#### VI. Section 206 Investigation and Miscellaneous Tariff Revisions

269. In the October 16, 2008 Order, the Commission found that due to changed circumstances stemming from the CAISO's significantly increased anticipated usage of Exceptional Dispatch, and the evolution of the Commission's policy that non-resource adequacy resources should receive compensatory payment for the resource adequacy services they provide, Exceptional Dispatch, as accepted in the MRTU Order, may no longer be just and reasonable.<sup>380</sup> At the time of the October 16, 2008 Order, the Commission was considering Exceptional Dispatch in light of the June Proposal. Subsequently, the CAISO filed its November Proposal, which superseded the June Proposal. As discussed above, we have found that the November Proposal, as modified in this order, is just and reasonable. Therefore, we no longer need to address the issue of whether the June Proposal was just and reasonable. In concluding that the November Proposal, as modified by this order, resolves our concerns about the Exceptional Dispatch mechanism as a whole, we find that the Exceptional Dispatch mechanism is just and reasonable. With respect to the proposed sections that are not contested and not specifically discussed herein, we find that they are just, reasonable and hereby accepted for filing.

### The Commission orders:

(A) The Commission accepts in part and rejects in part the November Proposal, subject to the modifications discussed in the body of this order, effective upon MRTU implementation.

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

(C) The Commission directs the CAISO to file a report with the Commission within 120 days of the date of this order that details the status of its discussions with stakeholders on the development of a market mechanism for Path 26, the outcome of the voltage support stakeholder process, and its discussions with SWP on the Exceptional Dispatch procedures for participating load, as discussed in the body of this order.

actual problem"); *Nadar v. FCC*, 520 F.2d 182, 195 (D.C. Cir. 1975) ("[T]his court has upheld in the strongest terms the discretion of regulatory agencies to control the disposition of their caseload.").

<sup>380</sup> October 16, 2008 Order, 125 FERC ¶ 61,055 at P 97-99.

(D) The Commission directs the CAISO to make a filing no later than 120 days prior to the sunset of Exceptional Dispatch mitigation and the ICPM, as discussed in the body of this order.

By the Commission. Commissioner Kelliher is not participating.

(SEAL)

Nathaniel J. Davis, Sr., Deputy Secretary.