UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator Corporation	**)** **)**	**Docket Nos. ER08-1178-___ and EL08-88-___**

STATUS REPORT OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

The California Independent System Operator Corporation ("ISO") hereby submits this status report in compliance with the Commission's "Order on Section 206 Investigation, Technical Conference, Accepting in Part and Rejecting in Part Tariff Provisions, and Implementing Transitional Measures," 126 FERC ¶ 61,150, issued in these proceedings on February 20, 2009 ("February 20 Order").[1]

I. Background and Overview

Under Section 34.9 of the CAISO Tariff, the ISO can issue Exceptional Dispatch instructions – *i.e.*, dispatches issued outside the standard dispatches issued pursuant to the ISO's market software – for specified purposes. On June 27, 2008, the ISO filed a tariff amendment in these proceedings under which the ISO would mitigate bids submitted on behalf of resources that are issued Exceptional Dispatch instructions for certain purposes. In this amendment, the ISO also proposed to clarify a number of the existing tariff provisions regarding Exceptional Dispatch. After a technical conference and comments by various parties, the Commission issued the February 20 Order.

---

[1] The ISO is also sometimes referred to as the CAISO. Capitalized terms not otherwise defined herein have the meanings set forth in the Master Definitions Supplement, Appendix A to the CAISO Tariff.

In the February 20 Order, the Commission conditionally accepted in part and rejected in part a revised Exceptional Dispatch proposal that the ISO filed after the technical conference, effective upon the implementation of the ISO's Market Redesign and Technology Upgrade ("MRTU").[2] The Exceptional Dispatch provisions authorize the ISO to manually commit and/or dispatch resources that are not cleared through the ISO's market software in order to maintain reliability or in other situations specified in Section 34.9.[3] The Commission found Exceptional Dispatch to be just and reasonable while acknowledging that the ISO would need to rely on Exceptional Dispatch to a greater extent than the ISO had originally predicted.[4]

In the February 20 Order, the Commission also directed the ISO to report on the status of three matters. Specifically, the Commission directed the ISO to file a report within 120 days "that details [1] the status of its discussions with stakeholders on the development of a market mechanism for Path 26, [2] the outcome of the voltage support stakeholder process, and [3] its discussions with SWP [the California Department of Water Resources State Water Project] on the Exceptional Dispatch procedures for participating load, as discussed in the body

---

[2] The MRTU market structure is referred to hereafter as the "new ISO market." MRTU became effective on March 31, 2009, for the Day-Ahead Market for the April 1, 2009, Trading Day.

[3] February 20 Order at P 6 (citing *California Independent System Operator Corp.*, 116 FERC ¶ 61,274 (2006), and Section 34.9 of the CAISO Tariff). *See also* CAISO Tariff, Appendix A (defining an "Exceptional Dispatch" as "[a] Dispatch Instruction issued for the purposes specified in Section 34.9").

[4] February 20 Order at P 2 ("[W]e find Exceptional Dispatch to be a just and reasonable mechanism for maintaining grid reliability"); *id.* at P 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, . . . we do not find the CAISO's proposed reliance on Exceptional Dispatch to be unjust or unreasonable.").

of" the February 20 Order.[5] The ISO hereby provides its status report on these three matters.

As discussed below, the ISO has made substantial progress on its discussions with SWP on the procedures for Exceptional Dispatch compensation for Participating Load and will submit a further status report on the status of those discussions within 30 days. The ISO has also conducted initial analyses of Exceptional Dispatch data that will inform stakeholder discussions on potential market mechanisms to address identified needs in the ISO's new markets including a possible 30-minute reserve product that would address Path 26 contingencies or market-based procurement of Voltage Support. As explained below, the ISO believes that further experience with the new ISO market and consideration of various related factors is needed to have a robust stakeholder process on these topics. To the extent the February 20 Order could be construed to contemplate that the stakeholder process on these topics would be completed within 120 days of the order, the ISO requests additional time for stakeholder discussions on these issues for the reasons discussed below.

The ISO recognizes and shares the Commission's objective of analyzing experience with Exceptional Dispatch in the new ISO market and determining, with stakeholder input, how best to reduce reliance on Exceptional Dispatch. The ISO believes that the directives to initiate stakeholder discussions on market mechanisms to address contingencies on Path 26 or market-based procurement of Voltage Support are best satisfied as part of a global effort of the ISO and its stakeholders to consider what additional products or market mechanisms will

[5] February 20 Order at Ordering Paragraph (C).

best enhance the new ISO market. In undertaking this global effort, the ISO believes that various factors should be considered before committing to a market product. For example, the desire of some market participants for new market products to address current needs should be weighed against the possibility that those needs will be reduced or eliminated in the foreseeable future as a result of upgrades to the grid (*i.e.*, transmission upgrades and the addition of generation capacity) or enhancements to the ISO's market software or full network model. Specific examples of the factors that the ISO believes should be considered as part of the evaluation of new market products are discussed below.

II. Status Report

A. Market Mechanism for Path 26

Following the technical conference in these proceedings, some parties filed comments contending that the ISO should address contingencies on the Path 26 transmission lines in Southern California and should procure voltage support through market products rather than through Exceptional Dispatch.[6] In the February 20 Order, the Commission found that the ISO's use of Exceptional Dispatch to address Path 26 contingencies and to procure voltage support was just and reasonable upon the implementation of the new ISO market, but that the ISO should not permanently rely on an out-of-market mechanism to procure ancillary services that could be more appropriately supplied through market products. The Commission noted that the ISO had initiated a stakeholder process on the development of a 30-minute reserve product and "strongly

[6] *See Id.* at PP 38-39.

encourage[d] 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."[7] The Commission also "direct[ed] the CAISO to 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 February 20 Order.[8]

As noted in the February 20 Order, in the fourth quarter of 2008, the ISO undertook a stakeholder effort to evaluate the need for a 30-minute Ancillary Services product in the MRTU markets that could be utilized to address Path 26 contingencies. Following the posting of an Issue Paper, consideration of discussions on the issue during a stakeholder conference call, and review of stakeholder comments, the ISO concluded that there was not sufficient evidence that a 30-minute Ancillary Services product was needed in the immediately foreseeable future.[9]

To date, based on the initial market experience discussed below, the ISO has not initiated any additional stakeholder process on the issue of a market-based solution for Path 26 dispatch using existing or new market products. However, the ISO has continued to evaluate the need for a 30-minute Ancillary Services product and, to this end, has undertaken an analysis of the use of Exceptional Dispatch over the first six weeks of operation of the new ISO

---

[7] *Id.* at P 44.

[8] *Id.*

[9] The Issue Paper, the presentation the ISO gave to stakeholders on the conference call, and the stakeholder comments are available on the ISO's website at the following link: http://www.caiso.com/2078/2078be2d3790.html.

market.[10] In particular, the ISO studied those Exceptional Dispatches that were logged as being performed for mitigation of a contingency occurring in the South of Path 26 region ("SP26"). The ISO is also evaluating the need for other potential products that may be useful for the new ISO market, including a product focused on ramping capabilities with a variety of operational characteristics in order to be operationally responsive to a variety of types of contingency and non-contingency events.

The ISO has compiled Exceptional Dispatch data collected to date related to Path 26 concerns. As shown in Table A, provided in Attachment 1 to this filing, for the first six weeks of the new ISO market, there were 67 Exceptional Dispatches that were logged as having been performed for "SP26 Capacity." The ISO notes that a large percentage these Exceptional Dispatches were the result of unusual circumstances associated with a planned transmission outage in the SP26 area. The outage lasted approximately three times longer than originally planned (and thus required more Exceptional Dispatches than originally anticipated) due to the fact that ambient conditions (high winds) required intermittent resources to remain on-line to protect their physical equipment. The requirement to maintain the intermittent resources on-line in turn required the Transmission Owner to keep a particular (different) transmission line energized

[10] The data used in this analysis are the data that the ISO compiled in preparing its first two periodic reports on Exceptional Dispatch, which the ISO prepared and filed with the Commission in compliance with Paragraph 263 of the February 20 Order. The first periodic report (filed on May 15, 2009, and corrected on May 18, 2009) concerned Exceptional Dispatches that occurred during the time period from April 1 through April 15, 2009, and the second periodic report (filed on June 15, 2009) concerned Exceptional Dispatches that occurred from April 16 through May 15, 2009. Thus, the data used in preparing these reports cover the first six weeks of operation of the new ISO market.

that needed to be de-energized in order to allow the planned work to be completed.

Relevant to the instant status report, the ISO believes that the Exceptional Dispatches related to this transmission outage are not indicative of need for a 30-minute Ancillary Services product, because the contingency involved a 20-minute rather than a 30-minute stability contingency. However, the ISO acknowledges that a 30-minute Ancillary Services product would have reduced (but would not have eliminated) the need for Exceptional Dispatch related to this particular outage. The handful of Exceptional Dispatches in the Real Time Market that were logged as having been performed for "SP26 Capacity" were performed to ensure that enough resources with ramping capability were on-line to mitigate an overload of Path 26 in the event that that a disruption at an intertie led to such an overload or an internal or external generation disruption occurred. A 30-minute Ancillary Services product could have mitigated the need for these few Exceptional Dispatches, but these are the only Exceptional Dispatches that have been issued to date in order to address 30-minute Path 26 contingencies.

Consideration of a market-based solution for Path 26 dispatch using existing or new market products should also take into account the extent to which Path 26-related Exceptional Dispatches will be reduced in the future due to planned transmission upgrades. Transmission upgrades are expected to reduce not only Path 26-related Exceptional Dispatches but also other circumstances that currently require the issuance of Exceptional Dispatches.

Consistent with the ISO's objective of pursuing a global examination of the need for new market products, the ISO is providing in this status report information on other categories of Exceptional Dispatch that may relate to the benefits of new Ancillary Service products that could address Path 26 contingencies.

Other potential indicators of a need for a 30-minute Ancillary Services product are Exceptional Dispatches issued to address South of Lugo generation requirements and to address modeling limitations regarding the Southern California Import Transmission ("SCIT") nomogram. As shown in Table A, the ISO issued ten Exceptional Dispatches in the first six weeks after the new ISO market was implemented in order to address South of Lugo generation requirements. The ISO is making transmission improvements and modeling enhancements that will reduce or eliminate the need for Exceptional Dispatches to be performed for that purpose. The transmission improvements have been underway since the launch of the new ISO market. These modeling enhancements are also in progress, will reflect the upgraded transmission, and will be completed in 2009.

The SCIT nomogram requires a certain level of inertia, as a result of generation being on-line in Southern California. As discussed below, the ISO believes that software enhancements that are being considered will likely reduce reliance on Exceptional Dispatch to address SCIT by allowing this nomogram to be met through the commitment in the Integrated Forward Market.

As shown in Table A, the ISO issued 62 Exceptional Dispatches in the first six weeks after the new ISO market was implemented in order to address modeling limitations regarding the SCIT nomogram. This is a 20-minute contingency, but a 30-minute Ancillary Services product could reduce the need for Exceptional Dispatches to address this contingency

The limitation of Southern California's dependence on imports is highly complex, and thus not fully modeled. This is because the nomogram can be impacted by events inside and outside the ISO Balancing Authority Area that are not incorporated in the network model. Fortunately, transmission upgrades and the completion of planned seasonal generation outages are resulting in a significant reduction in the need to manage this nomogram manually. The benefits of these changes are observable even now. Further, the ISO is evaluating whether modeling enhancements may address shortcomings in the present SCIT model. If the ISO currently had a 30-minute Ancillary Services product, it could be used to reduce, but not eliminate, the need for Exceptional Dispatch to address SCIT nomogram modeling limitations. Once SCIT is substantially or fully modeled, however, that enhanced modeling would eliminate the need for a significant number of Exceptional Dispatches, which will in turn reduce any need to develop a 30-minute Ancillary Services product.

In summary, the ISO continues to evaluate the use of Exceptional Dispatch in situations under which generation resources could have been alternatively committed through a 30-minute Ancillary Service product, including situations specifically related to Path 26 contingencies. To date, such

Exceptional Dispatches have not appeared to require immediate re-activation of the stakeholder process on such a product. The ISO will continue its assessment and anticipates future stakeholder discussions on the benefits of a 30-minute Ancillary Service product for a variety of reasons, including Path 26-related needs. The ISO notes that the prior stakeholder process sought to evaluate multiple reasons why a 30-minute Ancillary Service product could provide needed capability to the ISO system, including renewable integration requirements and facilitation of demand response. All of these considerations could justify such a product in the future, both for operational and economic efficiency reasons.

B. Voltage Support Services

In the February 20 Order, the Commission found that Voltage Support services may be appropriately procured through a competitive market product. The Commission "direct[ed] 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."[11]

As noted in the February 20 Order, the Commission in 2005 directed the ISO to submit a proposed structure and timeline for considering competitive procurement of Voltage Support and Black Start services.[12] Pursuant to the Commission's directives, in January 2006 the ISO submitted a filing that explained that it had begun identifying alternatives to its then-current

[11] February 20 Order at P 45.

[12] *California Independent System Operator Corp.*, 112 FERC ¶ 61,350, at P 21-22 (2005).

procurement strategies for those services. The ISO submitted a conceptual framework and a timeline that included seeking stakeholder input on the development of a proposed conceptual design in mid-2006.[13] A stakeholder meeting was held on June 29, 2006.[14] Stakeholder input and the ISO's own analysis indicated that implementing competitive procurement of Voltage Support and Black Start services was not a high-priority item compared with other items to be included in MRTU. Therefore, the ISO set aside the development of a proposed conceptual design while it worked on completing those other items in time for implementation of the new ISO market.[15]

As explained below, the ISO has studied the first six weeks of Exceptional Dispatch data as well as the incidence of Reliability Must-Run ("RMR") dispatches. However, the ISO has not yet re-initiated a stakeholder process on the market-based procurement of Voltage Support outside of Exceptional Dispatch, because it has determined that several additional months of data are needed in order to make such a stakeholder process meaningful. The ISO will initiate a stakeholder process after it has obtained the additional months of data. Although the ISO intends to initiate a stakeholder process, the ultimate conclusion as to whether a Voltage Support product is needed should await the outcome of that process.

---

[13] ISO Compliance Filing, Docket No. ER98-3760-012 (Jan. 30, 2006), at 2-3. The Commission has not yet issued an order regarding this ISO filing.

[14] The agenda and materials provided to stakeholders for the June 29, 2006 meeting are available on the ISO's website at: http://www.caiso.com/181c/181ca4c9731f0.html.

[15] *See* CAISO Department of Market & Product Development, "Market Initiatives Roadmap Process – Final Report on Ranking of High Priority Market Initiatives" (July 7, 2008), at 10-11 (explaining that the implementation of competitive procurement of Voltage Support was assigned a "Low rank due to limited interest from stakeholders and low feasibility. Black start ranked Medium due to higher feasibility."). This document is available on the ISO's website at: http://www.caiso.com/1ff9/1ff9aee434530.pdf.

The ISO's study of the first six weeks of Exceptional Dispatches yielded data that are of limited usefulness to any decisions regarding the procurement of Voltage Support outside of Exceptional Dispatch. As indicated in Table A, only two Exceptional Dispatches during the six-week time period were logged as having been performed specifically for Voltage Support (both in the Humboldt area). There were a number of Exceptional Dispatches for local reliability during this period, however, and those instances are described briefly in the bulleted list below.

In addition, there were a number of RMR dispatches to address local reliability. Table B, provided in Attachment 1 to this status report, has a separate listing of RMR dispatches for local reliability during the relevant period. Table B shows that there was a total of 139 RMR dispatches over the first six weeks of operation of the new ISO market. The majority of these were for local reliability in the San Diego and San Francisco areas. RMR dispatches are treated separately from Exceptional Dispatches as they are not Exceptional Dispatches under the CAISO Tariff and are, therefore, not included in the data on Exceptional Dispatches in Table A.

Exceptional Dispatches and RMR dispatches for local reliability address numerous local reliability requirements, which also often address Voltage Support requirements at the same time. As is the case with the use of Exceptional Dispatch to address Path 26 contingencies (see Section II.A, above), if modeling and software enhancements can reduce the need to rely on Exceptional Dispatch and RMR dispatches to commit the appropriate resources

for the San Diego local area (and other areas where those resources are needed), there will likely be fewer Exceptional Dispatches and RMR dispatches required strictly for Voltage Support.[16] It should be noted that there are no RMR units for the Southern California Edison area and very few Exceptional Dispatches. The ISO is also making efforts to reduce the need for RMR and Exceptional Dispatch in the Greater Bay Area and San Diego for local reasons, as noted in the following:

- As shown in Table B, for the first six weeks after the new ISO market was implemented, the ISO issued 51 Exceptional Dispatches and/or RMR dispatches to address San Diego local reliability requirements. Additionally, some of the San Diego Area commitment was done to protect against generation contingencies that result in voltage constraint issues. The software does not currently commit to protect against voltage constraints caused by generation contingencies. There is currently an effort underway to investigate the development of nomograms to reduce the number of Exceptional Dispatch commitments to protect against voltage issues related to the loss of generation resources.

- As shown in Table A, for the first six weeks after the new ISO market was implemented, the ISO issued only thirteen Exceptional Dispatches for local generation requirements within the Southern California Edison Company ("SCE") area. Significant upgrades to the software to enable it to model this requirement are underway to be completed during 2009.

- As shown in Table B, for the first six weeks after the new ISO market was implemented, the ISO issued 51 RMR dispatches for San Francisco generation commitment to satisfy local reliability requirements, including Voltage Support. Once the Trans Bay Cable is energized anticipated for late 2009 or early 2010, the ISO's need to rely on Potrero resources for RMR services will be reduced and one unit -- Unit 3 -- which is heavily relied on today, will be able to be

[16] The San Diego local area is the local area with the most local area requirements due to transmission constraints. The ISO anticipates that new transmission upgrades and new local capacity will reduce the need for Exceptional Dispatches and RMR dispatches related to this area.

retired. The ISO will still need peaking capacity in San Francisco for the foreseeable future, however, from the remaining Potrero units.

- As shown in Table A, for the first six weeks after the new ISO market was implemented, the ISO issued 17 Exceptional Dispatches for Humboldt area transmission management. Although the ISO experienced modeling issues with the Humboldt area upon implementation of the new ISO market, most of the 17 Exceptional Dispatches occurred during the first 15 days. Accordingly, the ISO believes that that this issue has been largely resolved.

- In addition to the above-listed areas, for the first six weeks after the new ISO market was implemented, the ISO issued three Exceptional Dispatches for the Drum area, as shown in Table A. This branch group is not modeled in the network model. The Drum area is a relatively small corridor and is comprised almost entirely of hydroelectric generation. Even if the ISO can model the nomogram, this area is likely to require Exceptional Dispatch because the area involves watershed management which cannot, like Delta Dispatch, be modeled due to environmental constraints. When environmental constraints are overlaid upon engineering constraints, complex nonlinear requirements result that cannot reasonably be modeled.

The ISO also believes that the other enhancements it is working on will reduce the need for RMR or Exceptional Dispatches for Voltage Support to commit resources for these needs. In addition, the CAISO Tariff already provides for opportunity cost compensation to resources that are directed to minimize output for Voltage Support.[17]

Accordingly, the ISO believes that it is premature to resume the stakeholder process on the procurement of Voltage Support outside of Exceptional Dispatch and RMR at this time. Additional data on Exceptional Dispatch for Voltage Support are required in order to make such a stakeholder process meaningful, because the data that the ISO has for the first six weeks after the new ISO market was implemented are not a particularly representative

[17] *See* CAISO Tariff Section 11.10.1.4.

and therefore useful set of information for that purpose. This is the case partly because of phenomena associated with the start-up of the new market design. These phenomena include Exceptional Dispatches to ensure a reliable transfer to the new ISO market as well as a number of instances in which the market software failed – some of which the ISO has already addressed and some of which the ISO is actively addressing. In addition, the fact that the launch of the new ISO market occurred in the spring, which is a shoulder period when generation and transmission outages are scheduled, make the six weeks of data less useful than they would have been if the market launch had occurred in a non-shoulder period. Further, the ISO had to deal with unplanned outages during the six-week period, including fires in the San Diego area. The ISO believes that several additional months of empirical data, which will constitute a more representative set of information, should be generated prior to its resumption of the stakeholder process on competitive procurement of Voltage Support.

When the ISO resumes the stakeholder process on competitive procurement of Voltage Support, the ISO expects to discuss with stakeholders other factors that have led the ISO, as well as other independent system operators and regional transmission organizations, to rely on alternatives to the competitive procurement of Voltage Support.[18] The ISO also believes this

[18] For example, as the ISO noted in its earlier analysis of a Voltage Support product, the competitive procurement of Voltage Support faces some unique challenges compared to other ancillary services. Due to its electrical characteristics, reactive power is absorbed close to the proximity in which the reactive power is provided in order to support the local voltage. In other words reactive power cannot be transported long distances like real power. This creates the potential for local market power. That analysis further noted that Voltage Support can be provided both dynamically from generating units or synchronous condensers or via various static

stakeholder process should consider the scope of participants that are available to provide a competitive Voltage Support product and the limited geographical need for this service.

Consistent with the global approach to market enhancements described above, the ISO will also be assessing the need for other, possibly more critical products and services needed for efficient market operations, and may initiate stakeholder processes to consider such other products and services. These stakeholder processes are expected to run in parallel with the stakeholder process on the procurement of Voltage Support outside of Exceptional Dispatch which will commence after the ISO has obtained several more months of empirical data.

C. Discussions with SWP on Exceptional Dispatch Compensation for Participating Load

In response to the revised Exceptional Dispatch proposal that the ISO filed after the technical conference in these proceedings, SWP filed comments in which it stated that Participating Load should be fully compensated for Exceptional Dispatch on a comparable basis to generation.[19] In the February 20 Order, the Commission agreed with SWP that Participating Load should receive Exceptional Dispatch compensation that is commensurate with the Exceptional Dispatch service the Participating Load provides to the ISO. The Commission also found, however, that "the unique characteristics of participating load may distinguish it sufficiently from generation resources so as to require different

---

devices, such as capacitors and reactors, and it is important that the competitive procurement not produce unintended consequences as a result of the different functions these static and dynamic resources serve.

[19] *See* February 20 Order at P 235.

capacity compensation rules." After noting the ISO's belief that it could use continued discussions with SWP to develop "more specific assurances and procedures . . . in recognition of the unique characteristics of SWP's participating load," the Commission "direct[ed] the CAISO to report to the 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."[20] The ISO has engaged in several discussions with SWP leading to significant consensus as to the fundamentals of procedures for Exceptional Dispatch compensation for Participating Load. SWP and the ISO agree that Participating Load should have the same options as other supply resources subject to the specific needs of Participating Loads. Although the ISO and SWP have made considerable progress, implementation details still need to be worked out. The ISO commits to file a further status report on these discussions within 30 days of the date of this status report.

[20] *Id.* at P 242.

III. Conclusion

For the foregoing reasons, the ISO requests that the Commission accept this status report as complying with the applicable directives in the February 20 Order. Please contact the undersigned with any questions concerning this filing.

Respectfully submitted,

/s/ Sidney M. Davies

Sidney M. Davies
Assistant General Counsel
California Independent System
Operator Corporation
151 Blue Ravine Road
Folsom, CA 95630
Tel: (916) 351-4400
Fax: (916) 608-7296
E-mail: sdavies@caiso.com

Dated: June 22, 2009

ATTACHMENT 1

The following table describes the Exceptional Dispatches that occurred in the first six weeks of operations under the new ISO market. The reasons given here are, in some instances, aggregated into slightly broader categories than reflected in the Exceptional Dispatch reports in order to facilitate analysis. Some of these reasons are discussed in Sections II.A and II.B of this status report.

TABLE A

	Apr1 - Apr14	Apr15 - Apr30	May1 - May15	Total
Exceptional Dispatches	**– Frequency –**			
Drum Area Operations			3	**3**
Generation Outage Mitigation	8			**8**
Humbolt Area Transmission Management	5	7	5	**17**
Over-Generation Mitigation	11	19		**30**
Ramp Rate Mitigation	13	72	22	**107**
SCE Area Generation Requirement	7	5	1	**13**
Software Error Compensation	95	46	56	**197**
South of Lugo Generation Requirements	1	7	2	**10**
Southern California Import Transmission (SCIT) Nomogram	6	56		**62**
SP26 Capacity		51	16	**67**
System Capacity	10	6	3	**19**
Transmission Outage Mitigation	38	176	139	**353**
Unit Testing			1	**1**
Local Reliability/Voltage Support			2	**2**
TOTAL	**194**	**445**	**250**	**889**

Please note that the data in this Table A are broken into three two-week periods. The relatively low number of Exceptional Dispatches in the first period is likely the result of very few generation or transmission outages being planned due to the start-up of the new markets. A greater number of Exceptional Dispatches were issued in the subsequent two weeks, as those outages were taken for planned spring maintenance and upgrades. In the final two-week period of the data analyzed here, the number of Exceptional Dispatches diminished as the outages were completed, refinements were made to the ISO systems, and experience and confidence in the new ISO market were gained.

The following are brief explanations of some of these reasons for Exceptional Dispatches as reflected in Table A:

- Generation Outage Mitigation (resulted in a total of eight Exceptional Dispatches in the first six weeks) – In the event that an outage occurs after the close of the market, Exceptional Dispatch is used to commit an alternative unit for the one the market committed but which is no longer available.

- System Capacity (resulted in a total of 19 Exceptional Dispatches in the first six weeks) – Load forecasts provide one load value per interval, as well as an error estimate that indicates the certainty or risk associated with the forecast. Dispatch, however, is based on the one load value. If ISO operators determine that there is not enough capacity on-line to mitigate enough of the potential error around the forecasted value, additional capacity can be exceptionally dispatched to ensure that system reliability is maintained.

- Transmission Outage Mitigation (resulted in a total of 353 Exceptional Dispatches in the first six weeks) – There are small areas within the network model for which branch groups have not yet been defined. As a result, no nomogram could be defined to capture the transmission constraints in those small areas. Additional branch groups will be evaluated and defined based on experience and changing grid topology. This is part of the ongoing refinement of the Full Network Model. Additionally, operators performed Exceptional Dispatches to compensate for intermittent resources in the East Bay Area of Northern California that are not scheduling accurately in the Day-Ahead the amount that their output would be in Real-Time. Again, some branch groups have yet to be defined in the Full Network Model for this area.

- Over-Generation Mitigation (resulted in a total of 30 Exceptional Dispatches in the first six weeks) – The types of events that could lead to over-generation mitigation are conservative scheduling in the Day-Ahead, Market Disruptions in the HASP, intertie declines, hydroelectric/pumping load generation issues, and Uninstructed Deviations.

- Ramp Constraint Mitigation (resulted in a total of 107 Exceptional Dispatches in the first six weeks) – This results from limitations in the look-ahead with respect to ramp capability, Moving resources up to operating ranges with higher ramp rates, and lossless shift factors moving units inefficiently.

- Software Error Compensation (resulted in a total of 197 Exceptional Dispatches in the first six weeks) – The ISO issued Exceptional Dispatches to mitigate shortcomings of the software because prices were inconsistent with dispatches, the software did not run in a timely manner, or dispatches needed to be pre-empted. The ISO considers these to be software shortcomings to be the result of issues arising during the start-up of the new ISO market and does not expect to

see them on an ongoing basis. Additionally categorized as "Software Error Compensation" were instances in which the inaccuracy of load forecasts led to intertie schedules in the HASP that were insufficient to meet the actual Real-Time Load that occurred a full hour later. This is simply a matter of the timeline of the HASP scheduling one-hour blocks of energy an hour in advance.

- Unit Testing (resulted in one Exceptional Dispatch in the first six weeks) – In order to test and thus ensure that the stated operating capabilities of units are accurate, the ISO engages in occasional tests of generating units.

Table B

The following table provides frequencies of dispatches of RMR units to meet local reliability requirements. Among these requirements may be the need for Voltage Support.

	Apr1 - Apr14	Apr15 - Apr30	May1 - May15	Total
RMR Dispatches	**– Frequency –**			
Greater Bay Area			2	**2**
Oakland	1	14	6	**21**
San Diego	2	14	35	**51**
Sierra		8	6	**14**
SF/Potrero	18	28	5	**51**
Total	**21**	**64**	**54**	**139**

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing documents upon all of the parties listed on the official service list for the above-referenced proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Washington, D.C. this 22nd day of June, 2009.

/s/ Bradley R. Miliauskas
Bradley R. Miliauskas
(202) 756-3300