California Independent System Operator



June 6, 2012

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

> Re: California Independent System Operator Corporation, Docket No. ER12-____ Advance Scheduling Requirement for Transmission Maintenance Outages

Dear Secretary Bose:

The California Independent System Operator Corporation ("ISO") electronically submits for filing proposed amendments to its tariff to set an earlier deadline for submitting requests to schedule transmission maintenance outages.¹ The proposed tariff modifications will require participating transmission owners to submit requests for maintenance outages on their transmission facilities at least seven days prior to the start date of the outage, in place of the current deadline of 72-hours before the outage begins. A request for a transmission maintenance outage that is submitted less than seven days prior to the start date of the outage may be rejected by the ISO as untimely, unless the request qualifies and can be accommodated as an unplanned transmission maintenance outage.

Increasing the length of time between when the ISO receives a transmission maintenance outage request and the start date of the outage will provide additional time for the ISO to undertake activities that will enhance its outage management and ability to maintain reliable system operations. The expected enhancements include:

- Improved outage analysis and coordination processes between the ISO and the participating transmission owners,
- Expanded evaluation of how to best accommodate the 80,000 requests for transmission and generation outages the ISO receives on an annual basis,
- More up-to-date and accurate information about outages included in the ISO's market runs, which begin three days prior to the operating day and are used to optimize a market solution, and

¹ The ISO submits this tariff amendment pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 842d, and Part 35 of the Commission's regulations, 18 C.F.R. Part 35. Capitalized terms not otherwise defined herein have the same meanings as set forth in ISO Tariff, Appendix A, Master Definitions Supplement.

• A better coordinated overall outage schedule to maintain reliability and compliance with Western Electricity Coordinating Council ("WECC)" and North American Electric Reliability Corporation ("NERC") requirements.

The ISO requests that the Commission accept the proposed tariff amendments to become effective 60 days from the date of this filing.

I. BACKGROUND

A. ISO Transmission Outage Management

The ISO provides open and non-discriminatory access to a long-distance, highvoltage transmission grid, comprised of nearly 26,000 circuit-miles of power lines. Operating the grid reliably and efficiently is one of the ISO's core responsibilities. Every five minutes the ISO forecasts electrical demand, accounts for operating reserves and dispatches the lowest cost power plant unit to meet demand while ensuring enough transmission capacity is available to deliver the power. A key input into running the models, optimizing market solutions, and operating the grid in real time, is timely information about the availability or outage of transmission facilities that comprise the ISO controlled grid and generation resources within the ISO balancing authority area.

ISO Tariff Section 9.3 requires participating transmission owners of facilities that comprise the ISO grid, and participating generators, to submit outage requests to the ISO for approval, and gives authority to ISO Outage Coordination to approve or deny such requests. ISO Outage Coordination then evaluates outage requests for reliability impacts, changes to path ratings, necessary changes to network models, and many other considerations that may affect the timing of an outage. ISO Outage Coordination and Engineering perform studies, run models, and forecast the market impact of the requested outages in conjunction with the then-existing schedule or planned outages for the specified period before it approves or denies the outage request. The types of scheduled maintenance coordinated by ISO Outage Coordination include:

- All outages that affect ISO balancing authority area interconnections, which must be coordinated with adjacent balancing authority areas;
- All work on participating transmission owner facilities that form the ISO controlled grid, including associated control or protective equipment;
- All reportable outages or partial curtailments of participating generators with a rated capacity greater than 1MW;
- All reportable outages of reliability must run generating units;
- Energy management system work that disables any portion of ISO grid

monitoring, control or protective equipment including communication circuits;

- Energy management system work that affects automatic generation control or remote intelligent gateway equipment or communication circuits; and
- Ancillary Service certification testing and compliance testing.

Two years ago, the ISO initiated a review of its existing transmission outage management standards and practices to identify opportunities to improve grid reliability, promote market efficiency and reduce overall system operational costs. The review resulted in the *Transmission Outage Whitepaper*, dated February 3, 2010.² The whitepaper presented the ISO's plan for achieving the benefits of the overall strategy by implementing several recommended improvements to the transmission outage reporting and outage coordination practices.

The first step recommended in the plan was for the ISO to change the outage notice requirement from 72-hours in advance of the start date for the outage to a sevenday advance request requirement for transmission outages. This recommendation was made to improve the quality and timeliness of transmission outage information. Having more accurate information would allow ISO Outage Coordination to better assess the impact of transmission outages and develop an outage schedule that would minimize the effect to the electric system and consider potential congestion costs. Having more accurate information would also benefit the advanced runs of the ISO market. At the time the whitepaper was prepared, approximately 80 percent of transmission outage requests were received within 3 to 4 days of the start of the outage. With insufficient time to evaluate the market impacts of requests made this close to the operating day, such requests were often not included in the advanced market analysis, referred to as the Day 3-2-1market runs, which begin three days prior to the operating day and are used to optimize a market solution. Consequently, the requests are processed closer to real-time when prices for energy may be higher and the opportunities to utilize less costly and more efficient resources are limited by availability.³

The ISO implemented the recommendation through its change management process by modifying Section 4.2.1 of the Business Practice Manual ("BPM") for Outage Coordination, effective August 1, 2011. The modification changed the time period for requesting a transmission maintenance outage from 72-hours to seven days in advance of the date the outage would commence. The modification was unopposed and remains in effect today, as follows, in pertinent part:

² The *Transmission Outage Whitepaper* is posted on the ISO's website at the following link: <u>http://www.caiso.com/Documents/WhitePaper-TransmissionOutage.pdf</u>.

³ *Id.* at pp. 4-7.

> Section 4.2.1 Scheduling Requirements Transmission Outage Scheduling

Each Participating TO must submit a new Maintenance Outage or a revision to an Approved Maintenance Outage to CAISO for approval. Such an Outage request must be submitted to the CAISO OCO via the SLIC application no later than Seven Days prior to the start date of the proposed Outage for Transmission facilities, as specified in CAISO Tariff Section 9.3.6.3.1. Outages submitted no later than seven days prior to start date can expect to receive a response by three business days prior to the outage start date. Note: The determination of seven day prior notice excludes the date of submission and the date of the outage. Transmission Outages effecting CRR revenue adequacy must be submitted no later than 30 days prior to the calendar month of the Outage of a Transmission Outage as specified in CAISO Tariff Section 9.3.6.3.2. As previously described in Section 3, Long Range Planning of Maintenance Outages, Participating TOs are asked to submit their request well in advance, to allow them to be analyzed with other proposed outages in the CAISO's long-range planning process.

As discussed below, the participating transmission owners' timeliness in submitting transmission maintenance outage requests to the ISO has improved since the seven-day requirement became effective in the BPM for Outage Coordination, but a sizeable portion of the requests continue to be submitted within seven days of the outage.

B. Stakeholder Process

To address the continuing lag in the submission of transmission maintenance outage requests, the ISO undertook a stakeholder initiative to achieve compliance with the seven-day advance request requirement by incorporating it into the tariff. The stakeholder initiative involved conference calls with stakeholders, issuance of several whitepapers discussing the ISO's proposal, and multiple opportunities for stakeholders to provide input into the development of the proposal.⁴

The ISO began the stakeholder process on December 21, 2011 by publishing a straw proposal that described the issues associated with the lag in submitting timely transmission maintenance outage requests and proposed to resolve the situation by adding the requirement to the tariff that participating transmission owners submit such

⁴ The record for the initiative is posted on the ISO's website at: <u>http://www.caiso.com/informed/</u> <u>Pages/StakeholderProcesses/Seven-DayAdvancedOutageSubmittal.aspx</u>. This record includes the ISO's whitepapers, all comments submitted by stakeholders during the stakeholder process, all stakeholder meeting presentations, and the draft tariff language.

requests at least seven days in advance of the start date of the outage, excluding the day of submittal and the day of the outage. The ISO conducted a conference call on the straw proposal on January 4, 2012. Stakeholders were invited to submit written comments on the proposal to the ISO by January 11, 2012. Comments were received from Calpine Corporation ("Calpine"), Southern California Edison Company ("SCE"), and Pacific Gas and Electric Company ("PG&E").

None of the comments opposed the seven-day advance request requirement. They focused on implementation details of the proposal. Calpine's comments supported the proposed seven-day request requirement, but objected to any relaxation of the existing outage reporting requirements that would allow submittal of unplanned transmission outages in less than seven days. Calpine also proposed that the ISO approve planned and unplanned outages three days prior to their start date and that no outages be approved any later than two hours before the submission of day-ahead market bids. PG&E's comments suggested that the ISO's proposal be modified to provide flexibility to accommodate outages necessary for reliability within the seven-day window and to address long-range outages. In its comments, SCE requested that the ISO provide notice of outage approval no less than three full business days prior to the outage for all outages. SCE also suggested that the ISO publicly release transmission outage information as soon as possible to enhance market efficiency.

On January 18, 2012, the ISO published its draft final proposal, which included responses to stakeholder comments on the straw proposal.⁵ In response to Calpine's comments, the ISO explained that it is not proposing to relax its current outage evaluation method and that it endeavors to respond to planned and unplanned outages at least three days prior to the start of the outages. The ISO has developed an internal process to approve, deny or reschedule planned outage requests prior to the Day 3 market runs. Based on PG&E's comments, the ISO included in the draft final proposal additional discussion and examples of outages that may be approved with less than seven-days advance notice. The ISO declined to address long-range outage planning, however, because the existing timelines and process for those outages remain in place and are unaffected by the proposal. In response to SCE, the ISO indicated that it expects to respond by three business days before the start of the outage and explained that it would need outage information earlier than seven days prior to the outage in order to provide a response in all instances no less than three full business days before the outage. While the ISO supports transparency of information for market participants, the ISO explained in response to the comments that the release of transmission outage information is not within the scope of this initiative.

Stakeholders had the opportunity to provide input on the draft final proposal during a stakeholder conference call on January 25, 2012 and through submission of written comments. Only PG&E filed comments, which requested clarifications about

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The draft final proposal is provided in Attachment C to this filing.

the proposal's coverage of emergency or reliability work, the classification of long-range outages as planned outages, and the effect of events within the seven-day window on long-range planned outages. In response to PG&E comments, the ISO explained that long-range outage planning is not affected by the proposal. As discussed below, the ISO modified the proposed tariff language to make clear that the seven-day advance notice requirement for planned transmission maintenance outages does not preclude submission of an advance notice of a forced outage under Section 9.3.10.3 where immediate corrective action is needed because equipment has failed in service, is in danger of imminent failure, or is urgently needed to protect personnel.

The proposal was presented to the ISO Governing Board on February 16, 2012 and the Board authorized this filing.⁶

The ISO posted draft tariff language for this initiative on April 9, 2012. Three stakeholders provided comments on the draft language. SCE's comments focused on implementation details to ensure there is sufficient flexibility to allow for outage requests or re-scheduling due to the dynamic nature of the system. PG&E supported the provision that includes reliability need in the criteria for determining whether an outage qualifies as an unplanned outage, but claimed that the draft tariff language overly restricts the participating transmission owner's ability to modify an approved outage within the seven-day window. These comments are discussed below. PG&E and NRG Energy suggested other minor edits that the ISO has for the most part reflected in this filing. The draft language and comments were discussed during a stakeholder conference call on April 23, 2012.

II. ADVANCE REQUEST REQUIREMENT FOR TRANSMISSION MAINTENANCE OUTAGES

A. Negative Consequences of Late-Noticed Transmission Maintenance Outages

All requests for transmission maintenance outages of facilities that comprise the ISO controlled grid must be submitted to the ISO for approval.⁷ The ISO coordinates outage schedules for maintenance, repair, and construction within the ISO grid to maintain system reliability, maximize schedule feasibility, and ensure effective planning for resource use. Accurate and complete outage scheduling is vital to reliable operation of the transmission system.

The *Transmission Outage Whitepaper* issued in 2010 presented the ISO's plan for addressing areas of improvement within the transmission outage reporting process. Focus was given to areas that will:

⁶ The Memorandum presented to the ISO Board of Governors regarding the Decision on Seven Day Advanced Transmission Outage Proposal is provided as Attachment D to this filing.

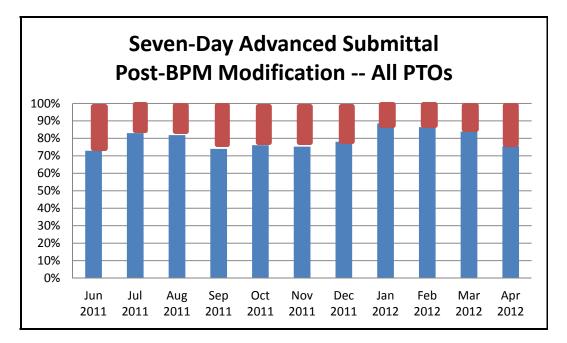
⁷ ISO Tariff Section 9.3.

- Improve grid reliability and market efficiency;
- Reduce grid operating costs;
- Improve transmission outage quality and accuracy; and
- Measure and evaluate the effectiveness of transmission outage management practices in coordination with the participating transmission owners.

Based on the recommendations in the plan, the ISO modified Section 4.2.1 of the BPM for Outage Management to change the outage notice requirement for transmission outages from 72-hours in advance of the start date for the outage to a seven-day advance request requirement. Implementation of this recommendation has significantly improved the timeliness of transmission outage information, which has allowed the ISO to conduct more specific assessments of the impact of transmission outages and to develop outage schedules that minimize the effect to the electric system and consider potential congestion costs.

However, there is still a lag in the timely submission of a sizeable portion of transmission maintenance outage requests. At the time the whitepaper was prepared, approximately 20 percent of transmission outage requests were received more than 3 to 4 days before the start of the outage. As shown on the chart below, following implementation of the BPM modification on June 15, 2011, the percentage of transmission outage requests that have a model impact⁸ that the ISO receives seven or more days in advance of the outage start date has increased to approximately 76 percent. While this represents a significant improvement in the number of transmission outage requests that have a model impact for which the ISO receives adequate advanced notice, approximately 24 percent of these outage requests are not timely submitted.

⁸ A transmission maintenance outage that has a model impact is one where the outage will (i) change the power flow of the system due to switch position changes, (ii) affect the generation requirements needed to support the outage, (iii) impact market contingencies (or nomograms), and/or (iv) change flowgate limits used in the Day 3-2-1 market process solutions.



Given that the ISO handles nearly 80,000 requests for transmission and generation outages every year, receiving approximately 24 percent of transmission outage requests that have a model impact only 3 to 4 days, or less, before the outage is scheduled to commence means that ISO Outage Coordination must still analyze thousands of outage requests in an extremely short period of time. This volume of latenoticed transmission maintenance outages with a market impact leaves little time for outage analysis and reduces the efficiency of outage coordination.

Further, when outages are reported late, cancelled on short notice, or extended past the initial outage period, the effectiveness of outage coordination is diminished. These late-noticed outages must be processed closer to real-time, when fewer options may exist to respond to unanticipated outages, and when prices for energy are higher and opportunities to utilize less costly and more efficient resources are limited by availability. ISO Outage Coordination loses the ability to plan and develop an optimal market solution, and must instead react to unexpected outage events. This can lead to inaccuracy in modeling because late-noticed outages may not be included in the Day 3-2-1 process and outages factored into the market runs may not actually occur. It can also increase the overall costs of managing the grid and running the markets.

The ISO's proposal in this proceeding is designed to address the negative consequences of transmission maintenance outage requests being submitted too close to the outage date and to thereby improve the efficiency and effectiveness of outage management. During the stakeholder process, no comments questioned the basis for the ISO's proposal nor opposed the proposal's objective.

B. ISO Proposal

1. Overview

The lag in the participating transmission owners' submission of outage requests and the opportunity to improve the ability of the ISO to better coordinate the outage schedule have led the ISO to propose to amend its tariff to increase the length of time in advance of the outage that requests for planned transmission maintenance outages must be submitted to the ISO. The proposed tariff modifications require participating transmission owners to submit requests for planned maintenance outages on their transmission facilities at least seven days prior to the start date of the outage. A request for an outage that is submitted less than seven days prior to the start date of the outage may be rejected by the ISO as untimely, unless the request qualifies and can be accommodated as an unplanned transmission maintenance outage. The request may be approved as an unplanned transmission maintenance outage if it meets the criteria that the outage is necessary for reliability, system conditions and the overall outage schedule provide an opportunity to take the facilities out of service without a detrimental effect on the efficient use and reliable operation of the ISO controlled grid, and the outage has not already commenced as a forced outage.

2. Seven-Day Advance Outage Request Requirements

Proposed Tariff Section 9.3.6.3.2 establishes the timeframes in which participating transmission owners are required to submit advance requests to schedule an outage or to change an approved maintenance outage for transmission facilities on their systems. Under proposed Section 9.3.6.3.2(2), each participating transmission owner is required to submit a request for a planned transmission maintenance outage⁹ or a request to change an approved maintenance outage at least seven days in advance of the start date for the outage, subject to the conditions of Sections 9.3.6.3.2, 9.3.6.4.1,¹⁰ 9.3.6.8,¹¹ and 9.3.6.9¹². The timeline for submitting the required advance

⁹ A planned transmission maintenance outage is defined as a maintenance outage for transmission facilities that comprise the ISO controlled grid that is requested by a participating transmission owner at least seven days in advance of the start date for the outage.

¹⁰ Proposed Section 9.3.6.4.1 provides that: "The CAISO Outage Coordination Office shall evaluate whether the requested Maintenance Outage or change to an Approved Maintenance Outage is likely to have a detrimental effect on the efficient use and reliable operation of the CAISO Controlled Grid or the facilities of a Connected Entity. The CAISO may request additional information or seek clarification from Participating Generators or Participating TOs of the information submitted in relation to a planned Generating Unit and System Unit Outage or a transmission Maintenance Outage. This information may be used to assist the CAISO in prioritizing conflicting requests for Outages."

¹¹ Section 9.3.6.8 provides that: "The CAISO Outage Coordination Office shall acknowledge receipt of each request to confirm or approve a Maintenance Outage for a Generating Unit, System Unit, or Physical Scheduling Plant. Where the CAISO Outage Coordination Office reasonably determines that the requested

notice is calculated excluding the day the request is submitted and the day the Outage is scheduled to commence.

The seven-day advance request requirement is reasonable and will facilitate development of a well- coordinated outage plan for the system. Increasing the length of time between when the ISO receives a transmission maintenance outage request and the start date of the outage will improve the outage analysis and coordination process between the ISO and the participating transmission owners. There will be more time for the ISO and the participating transmission owners to discuss the schedule being requested for the maintenance work or the change being proposed to the schedule for an approved maintenance outage. If an outage affects another transmission operator or balancing authority area, there will be more time for the ISO to coordinate and develop mitigation actions with the other entity or entities and to undertake the Day 3-2-1 market runs. Based on the results of these market runs, the ISO will be able to post more updated transmission outage information for market participants.

With this additional time and information, the ISO will be better able to evaluate how to optimally accommodate the 80,000 requests for transmission and generation outages the ISO receives annually. For example, transmission maintenance outages often affect specific generators, which could limit their output or require them to be off line during the outage. By increasing the submission time of the transmission outage requests, the affected generators can be properly included (or excluded) in the early market runs for more accurate results, and the scheduling coordinators for the affected generators will have more accurate information to manage their portfolios.

Maintenance Outage or the requested change to an Approved Maintenance Outage, when evaluated together with existing Approved Maintenance Outages, is not likely to have a detrimental effect on the efficient use and reliable operation of the CAISO Controlled Grid, the CAISO shall authorize the Maintenance Outage or change to the Approved Maintenance Outage, and shall so notify the requesting Operator and other entities who may be directly affected."

¹² Section 9.3.6.9 provides that: "Where, in the reasonable opinion of the CAISO Outage Coordination Office, the requested Maintenance Outage or requested change to an Approved Maintenance Outage is likely to have a detrimental effect on the efficient use and reliable operation of the CAISO Controlled Grid, the CAISO Outage Coordination Office may reject the requested Maintenance Outage or requested change to Approved Maintenance Outage. If in the CAISO's determination, any of the Maintenance Outages would cause the CAISO to violate the Applicable Reliability Criteria, the CAISO will notify the relevant Operator, and the Operator will then revise the proposed Maintenance Outage and inform the CAISO of the proposed changes. The CAISO Outage Coordination Office shall, in a rejection notice, identify the CAISO's reliability, security and market concerns which prompt the rejection and suggest possible remedies or schedule revisions which might mitigate any such concerns. The CAISO Outage Coordination Office may provide each Operator in writing with any suggested amendments to those Maintenance Outage requests rejected by the CAISO Outage Coordination Office. Any such suggested amendments will be considered as a CAISO maintenance request and will be approved in accordance with the process set forth in Section 9.3.7. The determination of the CAISO Outage Coordination Office shall be final and binding on the Operator. If, within fourteen (14) days of having made its determination, the Operator requests the CAISO Outage Coordination Office to provide reasons for its determination, it shall do so as soon as is reasonably practicable. The CAISO will give reasons for informational purposes only and without affecting in any way the finality or validity of the determination.

The process will also yield more up-to-date information about outages or changes to approved maintenance outages for inclusion in the ISO's market runs , which begin three days prior to the operating day and are used to optimize a market solution. Having more up to date information about the physical status of the system will improve the accuracy of the market model solutions, which in turn will produce better results in the pricing and dispatch of generation.

Moreover, the requirement will allow additional time for the ISO to comply with WECC and NERC requirements for the submission of outage-related information. Under NERC reliability standard IRO-010-1a, requirement R3, each balancing authority must provide data and information, as specified, to the reliability coordinator(s) with which it has a reliability relationship. Under WECC Data Request Specification October 2011, the ISO is required to submit transmission outage information to the reliability coordinator by 10:00 a.m. the day before the outage. This submission, which is used by WECC in their reliability studies, will be more precise when the Day 3 and Day 2 market runs results are analyzed and adjusted as needed.

3. Treatment of Untimely Outage Requests

The ISO recognizes that the complex and dynamic transmission system it operates can experience unanticipated equipment failures at any time and can offer opportunities to perform maintenance of limited scope and duration on short notice. In order to take advantage of these opportunities, the ISO's proposal allows ISO Outage Coordination to accommodate requests for outages made less than seven days in advance of the start date for the outage, in instances where designated criteria are met. In particular, ISO Outage Coordination must find that taking the facility out of service will not detrimentally affect the reliable operation of the system nor impact the network model.¹³

If a participating transmission owner submits a request for a planned transmission maintenance outage or a request to change an approved maintenance outage less than seven days in advance of the start date for the outage, it may qualify as an unplanned transmission maintenance outage¹⁴ under proposed Section 9.3.6.3.2(3). Under this provision, ISO Outage Coordination may, at its discretion, reject an untimely request, or approve the request as an unplanned transmission maintenance outage if it meets certain criteria. In order to qualify as an unplanned transmission

¹³ The proposal does not address nor change the submission of outage requests to perform emergency work for equipment that has failed in service, is in danger of imminent failure, or is urgently needed to protect personnel. Those requests will be handled as forced outages, as they are today.

¹⁴ An unplanned transmission maintenance outage is defined as a maintenance outage for transmission facilities that comprise the ISO controlled grid that is requested by the participating transmission owner less than seven days in advance of the start date for the outage.

maintenance outage, ISO Outage Coordination must have adequate time to analyze the request before the outage begins and the analysis must determine that (i) the outage is necessary for reliability, (ii) system conditions and the overall outage schedule provide an opportunity to take the facilities out of service without a detrimental effect on the efficient use and reliable operation of the ISO controlled grid and without disrupting efficient market operations, and (iii) the outage has not already commenced as a forced outage. ISO Outage Coordination will consider unplanned transmission maintenance outages in the order the requests are received. Proposed Section 9.3.8.5 incorporates language from existing Sections 9.3.8.2 and 9.3.8.3 to make clear that failure to submit a request for an outage to be designated as a forced outage based on the nearness of the request to the requested outage date.

Examples of the types of equipment and maintenance work for which an opportunity outage will be considered include non-test orders, relay work that does not require circuit breakers to be out of service, or equipment hot washing.¹⁵

Proposed Section 9.3.6.3.2(3) is a reasonable measure that will contribute to a more effective outage management process. Allowing late-submitted requests to be considered as unplanned transmission maintenance outages retains the flexibility of participating transmission owners to schedule a myriad of maintenance activities and outages with short notice. Requiring those requests to meet certain criteria to be approved as unplanned transmission maintenance outages allows the ISO to accommodate qualified requests into the overall outage plan as opportunity outages without affecting system reliability or market studies already completed or in progress. This provision, along with the seven-day advance request requirement, will produce a well-coordinated comprehensive outage plan for the system.

Further, this provision appropriately balances the interests of the participating transmission owners in maintaining flexibility to plan their maintenance work, with the needs of the ISO to have sufficient time to properly analyze the requests and develop an effective overall outage plan. In comments about the draft tariff language during the stakeholder initiative, PG&E claimed that proposed Section 9.3.6.3.2(3) is overly restrictive on a participating transmission owner's ability to modify an approved maintenance outage within seven days of the start date of the outage. PG&E suggested that the draft tariff language be modified to give ISO Outage Coordination the discretion to approve late requests to change an approved maintenance outage that do not meet the criteria for consideration as an unplanned transmission maintenance outage.¹⁶

¹⁵ For additional examples, see Draft Final Proposal for Seven-Day Advanced Outage Submittal, pp. 9-10, included as Attachment C to this filing.

¹⁶ PG&E expressed concern that it would be "unfairly penalized" or be subject to "automatic penalties" for changes due to weather conditions or a very minor change to start time The ISO notes that the situations PG&E postulates -- weather conditions or a very minor change to start time – may be accommodated if they meet the stated criteria. There are no automatic penalties in proposed Section

The ISO has not included this modification in its proposal. While the ISO is committed to working with participating transmission owners and accommodating timely outage requests, the ISO intentionally limited consideration of late requests as unplanned transmission maintenance outages only to those outages that are needed for reliability and will not affect the reliability of or transfer capability for any part of the ISO controlled grid or affect efficient market operations. The purpose of the provision is to end last-minute requests to change outage schedules that will impact the operation of grid and the accuracy of the market model solutions. The ISO believes that the benefit gained of a well-coordinated and more efficient overall outage plan outweighs some loss of convenience for participating transmission owners to submit late-notice requests to schedule outages or change approved maintenance outages that have a reliability and/or market impact.

In the alternative to the modification PG&E suggested, the ISO has added a sentence to proposed Section 9.3.6.3.2(2) to clarify that the seven-day advance notice requirement for planned transmission maintenance outages does not preclude submission of an advance notice of a forced outage under Section 9.3.10.3 where immediate corrective action is needed because equipment has failed in service, is in danger of imminent failure, or is urgently needed to protect personnel. The comments of SCE on the draft tariff language support this clarification.

4. CRR Transmission Maintenance Outage Requests

Proposed Section 9.3.6.3.2(1) discusses the request requirements for congestion revenue rights ("CRR") transmission maintenance outages. This provision maintains the existing requirements, which allow an operator to request a CRR transmission maintenance outage upon 30 days notice in advance of the first day of the month the outage is proposed to be scheduled (or within the notice period in the Operating Procedures posted on the ISO website), subject to the conditions of Sections 9.3.6.4.1, 9.3.6.8, 9.3.6.9, and 36.4.3. The description of a CRR transmission maintenance outage is moved from Section 9.3.6.3.2 to Appendix A, where it is defined as an outage that may have a significant effect upon CRR revenue adequacy as defined in Section 36.4.3.

These revisions to Section 9.3.6.3.2 and Appendix A maintain the existing outage request requirements for CRR transmission maintenance outages and distinguish those requirements from the proposed requirements applicable to the remainder of the transmission maintenance outages addressed in the ISO's proposal in this proceeding. The ISO submits that these revisions are necessary and appropriate and should be approved.

5. Conforming and Other Minor Changes

The ISO's proposal additionally contains the following revisions to existing tariff language. These revisions are conforming changes and other minor modifications that result from the proposed tariff provisions discussed above. These revisions are appropriate and necessary to implement the ISO's proposal and should also be approved.

Proposed Tariff Section 9.3.3 contains a conforming change to remove reference to requests for outages of facilities that comprise the ISO controlled grid from that provision. Such requests are no longer permitted within the 72-hour window of Section 9.3.3 and are now subject to the seven-day advance request requirement in proposed Section 9.3.6.3.2.

Proposed Tariff Section 9.3.6 adds reference to proposed Section 9.3.6.3.2 and existing Section 9.3.6.11 as provisions subject to which a participating transmission owner may request to schedule a maintenance outage or change an approved maintenance outage for its transmission facilities.

Proposed Tariff Sections 9.3.6.1.2, 9.3.6.4, 9.3.6.4.1, and 9.3.6.7 contain references to planned maintenance outages that are changed to refer to maintenance outages for transmission facilities, which encompasses the newly defined categories of planned and unplanned transmission maintenance outages.

Proposed Tariff Section 9.3.8.1 contains a conforming change to add reference to Section 9.3.6.3.2 as a provision with which participating transmission owner requests to confirm or change an Approved Maintenance Outage must comply.

Proposed Tariff Sections 9.3.8.2, and 9.3.8.3 contain conforming changes to remove discussion of participating transmission owner requests to confirm or change an approved transmission outage with three-day or one-day prior notification and to instead refer to Section 9.3.6.3.2

III. EFFECTIVE DATE

The ISO requests that the Commission approve the proposed tariff modifications to become effective 60 days after the date of this filing.

IV. EXPENSES

No expense or cost associated with this filing has been alleged or judged in any judicial proceeding to be illegal, duplicative, unnecessary, or demonstratively the product of discriminatory employment practices.

V. COMMUNICATIONS

Correspondence and other communications regarding this filing should be directed to the following individuals. The individuals identified with an asterisk are the persons designated for service pursuant to 18 C.F.R. § 203(b)(3) with respect to this proceeding.

*Anthony Ivancovich, Assistant General Counsel
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VI. SERVICE

The ISO has served copies of this transmittal letter, and all attachments, on the Public Utilities Commission of the State of California, the California Energy Commission, and all parties with Scheduling Coordinator Agreements under the ISO Tariff. In addition, the ISO has posted a copy of the filing on the ISO Website.

VII. CONTENTS OF THIS FILING

The following documents, in addition to this transmittal letter, support the instant filing:

Attachment A:	Revised ISO tariff sheets clean
Attachment B:	Revised ISO tariff sheets – blackline
Attachment C:	ISO's Draft Final Proposal, Seven-Day Advanced Outage Submittal
Attachment D:	Memorandum to the ISO Board of Governors Re Decision on Seven Day Advanced Transmission Outage Proposal

VIII. CONCLUSION

For the foregoing reasons, the ISO respectfully requests that the Commission accept the tariff revisions proposed in the instant filing, without modification, suspension or hearing, so they become effective and can be implemented 60 days after the date of this filing.

Respectfully submitted, **By:** /s/ Beth Ann Burns Nancy Saracino General Counsel, Anthony Ivancovich Assistant General Counsel Beth Ann Burns Senior Counsel, California Independent System Operator Corporation 250 Outcropping Way Folsom, CA 95630 Tel: (916) 608-7146 Fax: (916) 608-7222 bburns@caiso.com

June 6, 2012

California Independent System Operator Corporation

Fifth Replacement FERC Electric Tariff

Attachment A – Clean Tariff

Seven Day Advanced Outage Reporting Amendment to Tariff

June 6, 2012

9.3.3 Requests For Generation Outages In Real-Time Operation

Requests for Outages of Generating Units of Participating Generators in Real-Time operation shall be made by the Operator to the CAISO Control Center. The CAISO will not approve any Outage request made within seventy-two (72) hours of the requested Outage start time unless: (i) the requested Outage could not have been reasonably foreseen and scheduled through the Outage coordination process provided in Section 9.3, (ii) the requested Outage will not compromise CAISO Controlled Grid reliability and (iii) with respect to requests to convert from a Forced Outage to a Maintenance Outage for Resource Adequacy Resources subject to the Availability Standards of Section 40.9, the CAISO determines, in its reasonable discretion, that the Outage does not require the CAISO to implement backstop procurement measures to replace the capacity at the time of the Outage request.

* * *

9.3.6 Maintenance Outage Planning

Each Operator shall, by not later than October 15 each year, provide the CAISO with a proposed schedule of all Maintenance Outages it wishes to undertake in the following year. The proposed schedule shall include all of the Operator's transmission facilities that comprise the CAISO Controlled Grid and Generating Units subject to a Participating Generator Agreement, QF PGA, or Pseudo-Tie Participating Generator Agreement (including its Reliability Must-Run Units). In the case of a Participating TO's transmission facilities, that proposed schedule shall be developed in consultation with the UDCs interconnected with that Participating TO's system and shall take account of each UDC's planned maintenance requirements. The nature of the information to be provided and the detailed Maintenance Outage planning procedure shall be established by the CAISO. This information shall include:

The following information is required for each Generating Unit of a Participating Generator:

- (a) the Generating Unit name and Location Code;
- (b) the MW capacity unavailable;
- (c) the scheduled start and finish date for each Outage; and
- (d) where there is a possibility of flexibility, the earliest start date and the latest finish date, along with the actual duration of the Outage once it commences.

The following information is required for each transmission facility:

- (a) the identification of the facility and location;
- (b) the nature of the proposed Maintenance Outage;
- (c) the preferred start and finish date for each Maintenance Outage; and
- (d) where there is a possibility of flexibility, the earliest start date and the latest finish date, along with the actual duration of the Outage once it commences.

The CAISO, pursuant to Section 9.3.7 may at any time request a change to an Approved Maintenance Outage. A Participating Generator may, as provided in Section 9.3.6.3, schedule with the CAISO Outage Coordination Office a Maintenance Outage of its Generating Units or System Units, subject to the provisions of Sections 9.3.6.4.1, 9.3.6.8, and 9.3.6.9. A Participating TO may, as provided in Section 9.3.6.3, request that the CAISO Outage Coordination Office schedule a Maintenance Outage or change an Approved Maintenance Outage for transmission facilities on its system, subject to the provisions of Sections 9.3.6.3.2, 9.3.6.4.1, 9.3.6.8, 9.3.6.9, and 9.3.6.11.

9.3.6.1 Quarterly Updates

9.3.6.1.1 Each Participating Generator will provide the CAISO with quarterly updates of its long-range Outage schedule referred to in Section 9.3.6 for Generating Units and System Units by the close of business on the fifteenth (15th) day of each January, April, and July. These updates must identify known changes to any previously planned Generating Unit Outages and any additional Outages anticipated over the next twelve (12) months from the time of this report. In this report, each Participating Generator must include all known planned Outages for the following twelve (12) months.

9.3.6.1.2 Each Participating TO will provide the CAISO with quarterly updates of the data provided under Section 9.3.6 by close of business on the fifteenth (15th) day of each January, April, and July. These updates must identify known changes to any previously planned CAISO Controlled Grid facility Maintenance Outages and any additional Outages anticipated over the next twelve (12) months from the time of the report. As part of this update, each Participating TO must include all known Maintenance Outages for the following twelve (12) months.

* * *

9.3.6.3.2 Transmission Maintenance Outages

A Participating TO shall submit a request for a Maintenance Outage or a request to change an Approved Maintenance Outage for transmission facilities on its system in advance of the start date for the Outage, as follows:

- An Operator may, upon thirty (30) days notice in advance of the first day of the month the Outage is proposed to be scheduled (or within the notice period in the Operating Procedures posted on the CAISO Website), schedule with the CAISO Outage Coordination Office a CRR Transmission Maintenance Outage for transmission facilities on its system, subject to the conditions of Sections 9.3.6.4.1, 9.3.6.8, 9.3.6.9, and 36.4.3.
- 2. A Participating TO shall submit a request for a Planned Transmission Maintenance Outage or a request to change an Approved Maintenance Outage to the CAISO Outage Coordination Office at least seven days in advance of the start date for the Outage, subject to the provisions of Sections 9.3.6.3.2, 9.3.6.4.1, 9.3.6.8, and 9.3.6.9. The timeline for submitting the required advance notice is calculated excluding the day the request is submitted and the day the Outage is scheduled to commence. This requirement does not preclude submission of a request for a forced outage under Section 9.3.10.3 where immediate corrective action is needed because equipment has failed in service, is in danger of imminent failure, or is urgently needed to protect personnel.
- 3. If a Participating TO submits a request for a Planned Transmission Maintenance Outage or a request to change an Approved Maintenance Outage less than seven days in advance of the start date for the Outage, the CAISO Outage Coordination Office may, at its discretion, reject the request as untimely, or approve the request as an Unplanned Transmission Maintenance Outage provided that the CAISO Outage Coordination Office has adequate time to analyze the request before the Outage begins and the analysis determines that (i) the Outage is necessary for reliability, (ii) system conditions and the overall Outage schedule provide an opportunity to take the facilities out of service without a detrimental effect on the efficient use and reliable operation of the CAISO Controlled Grid and without disrupting efficient market operations, and (iii) the Outage has not already commenced as a Forced Outage, The CAISO Outage Coordination

Office will consider Unplanned Transmission Maintenance Outages in the order the requests are received.

9.3.6.4 Changes to Maintenance Outages

A Participating TO may submit changes to its Maintenance Outage information at any time, provided, however, that if the Participating TO cancels an Approved Maintenance Outage after 5:00 a.m. of the day prior to the day upon which the Outage is scheduled to commence and the CAISO determines that the change was not required to preserve System Reliability, the CAISO may disregard the availability of the affected facilities in determining the availability of transmission capacity in the Day-Ahead Market. The CAISO will, however, notify Market Participants and reflect the availability of transmission capacity in the HASP and Real-Time Market as promptly as practicable.

9.3.6.4.1 The CAISO Outage Coordination Office shall evaluate whether the requested Maintenance Outage or change to an Approved Maintenance Outage is likely to have a detrimental effect on the efficient use and reliable operation of the CAISO Controlled Grid or the facilities of a Connected Entity. The CAISO may request additional information or seek clarification from Participating Generators or Participating TOs of the information submitted in relation to a planned Generating Unit and System Unit Outage or a transmission Maintenance Outage. This information may be used to assist the CAISO in prioritizing conflicting requests for Outages.

* * *

9.3.6.7 Each Participating Generator or Participating TO which has scheduled a Maintenance Outage pursuant to Section 9.3.4 must schedule and receive approval of the Outage from the CAISO Outage Coordination Office prior to initiating the Approved Maintenance Outage. The CAISO
Outage Coordination Office will review the Maintenance Outages to determine if any one or a combination of Maintenance Outage requests relating to CAISO Controlled Grid facilities, Generating Units or System Units may cause the CAISO to violate the Applicable Reliability Criteria. This review will take consideration of factors including, but not limited to, the following:

(a) forecast peak Demand conditions;

- (b) other Maintenance Outages, previously Approved Maintenance Outages, and anticipated Generating Unit Outages;
- (c) potential to cause Congestion;
- (d) impacts on the transfer capability of Interconnections; and
- (e) impacts on the market.

* * *

9.3.8.1 Data Required

The Operator of a Generating Unit owned or controlled by a Participating Generator shall submit to the CAISO pursuant to Sections 9.3.4 and 9.3.5.2.1 its request to confirm the schedule of a planned Maintenance Outage or to change the schedule of a planned Maintenance Outage. Such request must be made to the CAISO Outage Coordination Office by no later than 11:30 a.m. three (3) working days prior to the starting date of the proposed Outage (or as specified on the CAISO Website). Likewise, all Participating TOs shall submit a formal request to confirm or change an Approved Maintenance Outage with respect to any CAISO Controlled Grid facility to the CAISO Outage Coordination Office in accordance with Sections 9.3.6.3.2, 9.3.8.2 and 9.3.8.3.

Such schedule confirmation request shall specify the following:

- (a) the Generating Unit or System Unit name and Location Code, or the identification of the transmission system element(s) to be maintained including location;
- (b) the nature of the maintenance to be performed;
- (c) the date and time the Outage is to begin;
- (d) the date and time the Outage is to be completed;
- the time required to terminate the Outage and restore the Generating Unit to normal capacity or the transmission system to normal operation;
- (f) identification of primary and alternate telephone numbers for the Operator's single point of contact; and
- (g) in the case of a request for a change to an Approved Maintenance Outage, the date and time of the original Approved Maintenance Outage.

9.3.8.2 Three (3) Day Prior Notification

Any request by a Participating Generator to confirm or change an Approved Maintenance Outage must be submitted no later than 11:30 a.m. at least three (3) working days prior to the starting date of the Approved Maintenance Outage (or as posted on the CAISO Website). Any request by a Participating TO to confirm or change an Approved Maintenance Outage less than seven (7) days in advance of the start date for the Outage is subject to Section 9.3.6.3.2.

9.3.8.3 One (1) Day Prior Notification

Any request by a Participating Generator to confirm or change the schedule for an Approved Maintenance Outage requiring only one (1) day notice (as detailed on the CAISO Website) must be submitted no later than 11:30 am at least one (1) day prior to the starting date of the Outage (or as specified on the CAISO Website). Any request by a Participating TO to confirm or change an Approved Maintenance Outage less than seven (7) days in advance of the start date for the Outage is subject to Section 9.3.6.3.2.

* * *

9.3.8.5 Delay

Failure to submit a request for an Outage by the proper time may mean a delay in approval from the CAISO or may cause that Outage to be designated as a Forced Outage based on the nearness of the request to the requested Outage date. The CAISO Outage Coordination Office may delay its approval of a Maintenance Outage or an Approved Maintenance Outage schedule if sufficient or complete information is not received by the CAISO Outage Coordination Office within the time frames provided in Sections 9.3.8.2 and 9.3.8.3.

* * *

Appendix A

Master Definitions Supplement

* * *

- CRR Transmission Maintenance Outage

An Outage that may have a significant effect upon CRR revenue adequacy as defined in Section 36.4.3.

- Planned Transmission Maintenance Outage

A Maintenance Outage for transmission facilities that comprise the CAISO Controlled Grid that is

requested by a Participating TO at least seven (7) days in advance of the start date for the Outage.

* * *

- Unplanned Transmission Maintenance Outage

A Maintenance Outage for transmission facilities that comprise the CAISO Controlled Grid that is

requested by a Participating TO less than seven (7) days in advance of the start date for the Outage.

* * *

California Independent System Operator Corporation

Fifth Replacement FERC Electric Tariff

Attachment B – Marked Tariff

Seven Day Advanced Outage Reporting Amendment to Tariff

June 6, 2012

9.3.3 Requests For <u>Generation</u> Outages In Real-Time Operation

Requests for Outages of: (i) facilities that comprise the CAISO Controlled Grid or (ii) Generating Units of Participating Generators in Real-Time operation shall be made by the Operator to the CAISO Control Center. The CAISO will not approve any Outage request made within seventy-two (72) hours of the requested Outage start time unless: (i) the requested Outage could not have been reasonably foreseen and scheduled through the Outage coordination process provided in Section 9.3, (ii) the requested Outage will not compromise CAISO Controlled Grid reliability and (iii) with respect to requests to convert from a Forced Outage to a Maintenance Outage for Resource Adequacy Resources subject to the Availability Standards of Section 40.9, the CAISO determines, in its reasonable discretion, that the Outage does not require the CAISO to implement backstop procurement measures to replace the capacity at the time of the Outage request.

* * *

9.3.6 Maintenance Outage Planning

Each Operator shall, by not later than October 15 each year, provide the CAISO with a proposed schedule of all Maintenance Outages it wishes to undertake in the following year. The proposed schedule shall include all of the Operator's transmission facilities that comprise the CAISO Controlled Grid and Generating Units subject to a Participating Generator Agreement, QF PGA, or Pseudo-Tie Participating Generator Agreement (including its Reliability Must-Run Units). In the case of a Participating TO's transmission facilities, that proposed schedule shall be developed in consultation with the UDCs interconnected with that Participating TO's system and shall take account of each UDC's planned maintenance requirements. The nature of the information to be provided and the detailed Maintenance Outage planning procedure shall be established by the CAISO. This information shall include:

The following information is required for each Generating Unit of a Participating Generator:

- (a) the Generating Unit name and Location Code;
- (b) the MW capacity unavailable;
- (c) the scheduled start and finish date for each Outage; and

(d) where there is a possibility of flexibility, the earliest start date and the latest finish date, along with the actual duration of the Outage once it commences.

The following information is required for each transmission facility:

- (a) the identification of the facility and location;
- (b) the nature of the proposed Maintenance Outage;
- (c) the preferred start and finish date for each Maintenance Outage; and
- (d) where there is a possibility of flexibility, the earliest start date and the latest finish date, along with the actual duration of the Outage once it commences.

<u>The</u>Either the CAISO, pursuant to Section 9.3.7 , or an Operator, subject to Section 9.3.6.11, may at any time request a change to an Approved Maintenance Outage. <u>A Participating Generator</u> <u>An Operator</u> may, as provided in Section 9.3.6.3, schedule with the CAISO Outage Coordination Office a Maintenance Outage on its systemof its Generating Units or System Units, subject to the conditionsprovisions of Sections 9.3.6.4.1, 9.3.6.8, and 9.3.6.9. <u>A Participating TO may</u>, as provided in Section 9.3.6.3, request that the CAISO Outage Coordination Office schedule a Maintenance Outage or change an Approved Maintenance Outage for transmission facilities on its system, subject to the provisions of Sections 9.3.6.4.1, 9.3.6.8, 9.3.6.9, and 9.3.6.11.

9.3.6.1 Quarterly Updates

9.3.6.1.1 Each Participating Generator will provide the CAISO with quarterly updates of its long-range Outage schedule referred to in Section 9.3.6 for Generating Units and System Units by the close of business on the fifteenth (15th) day of each January, April, and July. These updates must identify known changes to any previously planned Generating Unit Outages and any additional Outages anticipated over the next twelve (12) months from the time of this report. In this report, each Participating Generator must include all known planned Outages for the following twelve (12) months.

9.3.6.1.2 Each Participating TO will provide the CAISO with quarterly updates of the data provided under Section 9.3.6 by close of business on the fifteenth (15th) day of each January, April, and July. These updates must identify known changes to any previously planned CAISO Controlled Grid facility Maintenance Outages and any additional Outages anticipated over the next twelve (12) months from the

time of the report. As part of this update, each Participating TO must include all known <u>Maintenanceplanned</u> Outages for the following twelve (12) months.

9.3.6.3.2 <u>For</u> Transmission <u>Maintenance</u> Facilities Outages

Except for Outages that may have a significant effect upon CRR revenue adequacy as defined in Section 36.4.3, an Operator may, upon seventy two (72) hours advance notice (or within the notice period in Operating – that may have a significant effect upon CRR revenue adequacy as defined in Section 36.4.3, an Operator may, upon seventy-two (72) hours advance notice (or within the notice period in the Operating Procedures posted on the CAISO Website), schedule with the CAISO Outage Coordination Office a Maintenance Outage for transmission facilities on its system, subject to the conditions of Sections 9.3.6.4.1, 9.3.6.8 and 9.3.6.9. A Participating TO shall submit a request for a Maintenance Outage an Approved Maintenance Outage for transmission facilities on its system in advance of the start date for the Outage, as follows:

- For Outages that may have a significant effect upon CRR revenue adequacy as defined in Section 36.4.3, an <u>An</u> Operator may, upon thirty (30) days notice in advance of the first day of the month the Outage is proposed to be scheduled (or within the notice period in the Operating Procedures posted on the CAISO Website), schedule with the CAISO Outage Coordination Office a <u>CRR Transmission</u> Maintenance Outage for transmission facilities on its system, subject to the conditions of Sections 9.3.6.4.1, 9.3.6.8, 9.3.6.9, and 36.4.3.
- 2. A Participating TO shall submit a request for a Planned Transmission Maintenance Outage or a request to change an Approved Maintenance Outage to the CAISO Outage Coordination Office at least seven days in advance of the start date for the Outage, subject to the provisions of Sections 9.3.6.3.2, 9.3.6.4.1, 9.3.6.8, and 9.3.6.9. The timeline for submitting the required advance notice is calculated excluding the day the request is submitted and the day the Outage is scheduled to commence. This requirement does not preclude submission of a request for a forced outage under Section 9.3.10.3 where immediate corrective action is needed because equipment has failed in service, is in danger of imminent failure, or is urgently needed to protect personnel.

3. If a Participating TO submits a request for a Planned Transmission Maintenance Outage or a request to change an Approved Maintenance Outage less than seven days in advance of the start date for the Outage, the CAISO Outage Coordination Office may, at its discretion, reject the request as untimely, or approve the request as an Unplanned Transmission Maintenance Outage provided that the CAISO Outage Coordination Office has adequate time to analyze the request before the Outage begins and the analysis determines that (i) the Outage is necessary for reliability. (ii) system conditions and the overall Outage schedule provide an opportunity to take the facilities out of service without a detrimental effect on the efficient use and reliable operation of the CAISO Controlled Grid and without disrupting efficient market operations, and (iii) the Outage has not already commenced as a Forced Outage. The CAISO Outage Coordination Office will consider Unplanned Transmission Maintenance Outages in the order the requests are received.

9.3.6.4 Changes to Planned Maintenance Outages

A Participating TO may submit changes to its-planned Maintenance Outage information at any time, provided, however, that if the Participating TO cancels an Approved Maintenance Outage after 5:00 a.m. of the day prior to the day upon which the Outage is scheduled to commence and the CAISO determines that the change was not required to preserve System Reliability, the CAISO may disregard the availability of the affected facilities in determining the availability of transmission capacity in the Day-Ahead Market. The CAISO will, however, notify Market Participants and reflect the availability of transmission capacity in the HASP and Real-Time Market as promptly as practicable.

9.3.6.4.1 The CAISO Outage Coordination Office shall evaluate whether the requested Maintenance Outage or change to an Approved Maintenance Outage is likely to have a detrimental effect on the efficient use and reliable operation of the CAISO Controlled Grid or the facilities of a Connected Entity. The CAISO may request additional information or seek clarification from Participating Generators or Participating TOs of the information submitted in relation to a planned Generating Unit and System Unit Outage or a transmissionplanned Maintenance Outage. This information may be used to assist the CAISO in prioritizing conflicting requests for Outages.

9.3.6.7 Each Participating Generator or Participating TO which has scheduled a planned Maintenance Outage pursuant to Section 9.3.4 must schedule and receive approval of the Outage from the CAISO Outage Coordination Office prior to initiating the Approved Maintenance Outage. The CAISO Outage Coordination Office will review the Maintenance Outages to determine if any one or a combination of Maintenance Outage requests relating to CAISO Controlled Grid facilities, Generating Units or System Units may cause the CAISO to violate the Applicable Reliability Criteria. This review will take consideration of factors including, but not limited to, the following:

- (a) forecast peak Demand conditions;
- (b) other Maintenance Outages, previously Approved Maintenance Outages, and anticipated Generating Unit Outages;
- (c) potential to cause Congestion;
- (d) impacts on the transfer capability of Interconnections; and
- (e) impacts on the market.

* * *

9.3.8.1 Data Required

The Operator of a Generating Unit owned or controlled by a Participating Generator shall submit to the CAISO pursuant to Sections 9.3.4 and 9.3.5.2.1 its request to confirm the schedule of a planned Maintenance Outage or to change the schedule of a planned Maintenance Outage. Such request must be made to the CAISO Outage Coordination Office by no later than 11:30 a.m. three (3) working days prior to the starting date of the proposed Outage (or as specified on the CAISO Website). Likewise, all Participating TOs shall submit a formal request to confirm or change an Approved Maintenance Outage with respect to any CAISO Controlled Grid facility to the CAISO Outage Coordination Office in accordance with Sections 9.3.<u>6.3.2, 9.3.</u>8.2 and 9.3.8.3.

Such schedule confirmation request shall specify the following:

(a) the Generating Unit or System Unit name and Location Code, or the identification
 of the transmission system element(s) to be maintained including location;

- (b) the nature of the maintenance to be performed;
- (c) the date and time the Outage is to begin;
- (d) the date and time the Outage is to be completed;
- the time required to terminate the Outage and restore the Generating Unit to normal capacity or the transmission system to normal operation;
- (f) identification of primary and alternate telephone numbers for the Operator's single point of contact; and
- (g) in the case of a request for a change to an Approved Maintenance Outage, the date and time of the original Approved Maintenance Outage.

9.3.8.2 Three (3) Day Prior Notification

Any request by a Participating Generator to confirm or change an Approved Maintenance Outage-that may affect the transfer capability of any part of the CAISO Controlled Grid must be submitted no later than 11:30 a.m. at least three (3) working days prior to the starting date of the Approved Maintenance Outage (or as posted on the CAISO Website). Any request by a Participating TO to confirm or change an Approved Maintenance Outage less than seven (7) days in advance of the start date for the Outage is subject to Section 9.3.6.3.2 This Section applies to facilities as described on the CAISO Website and in the applicable Business Practice Manual.

Failure to submit a request for an Outage by the proper time may mean a delay in approval from the CAISO or may cause that Outage to be designated as a Forced Outage based on the nearness of the request to the requested Outage date.

9.3.8.3 One (1) Day Prior Notification

Any request <u>by a Participating Generator</u> to confirm or change the schedule for an Approved Maintenance Outage requiring only one (1) day notice (as detailed on the CAISO Website) must be submitted no later than 11:30 am at least one (1) day prior to the starting date of the Outage (or as specified on the CAISO Website). <u>Any Failure to submit a request by a Participating TO to confirm or</u> <u>change for an Approved Maintenance</u> Outage less than seven (7) days in advance of by the <u>start date for</u> proper time may mean a delay in approval from the CAISO or may cause that Outage is subject to Section 9.3.6.3.2 be designated as a Forced Outage.

* * *

9.3.8.5 Delay

Failure to submit a request for an Outage by the proper time may mean a delay in approval from the CAISO or may cause that Outage to be designated as a Forced Outage based on the nearness of the request to the requested Outage date. The CAISO Outage Coordination Office may delay its approval of a Maintenance Outage or an Approved Maintenance Outage schedule if sufficient or complete information is not received by the CAISO Outage Coordination Office within the time frames provided in Sections 9.3.8.2 and 9.3.8.3.

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Appendix A

Master Definitions Supplement

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- CRR Transmission Maintenance Outage An Outage that may have a significant effect upon CRR revenue adequacy as defined in Section 36.4.3.

* * *

- Planned Transmission Maintenance Outage A Maintenance Outage for transmission facilities that comprise the CAISO Controlled Grid that is requested by a Participating TO at least seven (7) days in advance of the start date for the Outage.

* * *

<u>Unplanned Transmission Maintenance Outage</u>
 <u>A Maintenance Outage for transmission facilities that comprise the CAISO Controlled Grid that is</u>
 requested by a Participating TO less than seven (7) days in advance of the start date for the Outage.