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October 31, 2006

The Honorable Magalie R. Salas
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

**Re: California Independent System Operator Corporation
Docket No. ER07-____
Outage Reporting Amendment to the CAISO Tariff**

Dear Secretary Salas:

Pursuant to Section 205 of the Federal Power Act ("FPA"), 16 U.S.C. § 824d, and Section 35.13 of the regulations of the Federal Energy Regulatory Commission ("Commission"), 18 C.F.R. § 35.13, the California Independent System Operator Corporation ("CAISO") respectfully submits for filing an original and five copies of an amendment (the "Outage Reporting Amendment") to the CAISO's Tariff. The Outage Reporting Amendment revises the CAISO Tariff by modifying the generator Outage reporting requirements to include appropriate thresholds for reporting resource availability and Outage reporting in a manner that appropriately balances the CAISO's need to maintain grid reliability with stakeholder concerns regarding reporting burdens and unreasonable exposure to penalties.

As explained below, the CAISO is requesting that the Commission allow these modifications to become effective upon completion of the software upgrades necessary in order to implement these changes. The CAISO is also requesting that the Commission extend its waiver of certain of the Outage reporting provisions.

Two extra copies of this filing are also enclosed. Please stamp these copies with the date and time filed and return them to the messenger.

I. THE PROPOSED AMENDMENTS

The modifications to the CAISO Tariff that the CAISO proposes herein have been approved by the CAISO Board of Governors.¹ These Tariff changes are designed to update the CAISO's generator Outage reporting requirements in a manner that reduces the reporting burden on generators to a manageable level, ensures that they are not unreasonably exposed to sanctions for failure to report Outages, and at the same time, ensures that the CAISO continues to receive generation availability data necessary to ensure the reliable operation of the grid.

A. Background and Basis for Tariff Amendment

On July 22, 2003, the CAISO filed Amendment No. 55 to the CAISO Tariff in order to provide the CAISO with an effective Oversight and Investigation program. Amendment No. 55 established an Enforcement Protocol that defined rules of conduct and set forth penalties for breaches of those rules. In Amendment No. 55, the CAISO proposed, *inter alia*, to require Market Participants to comply with all reporting requirements governing the availability and maintenance of a generating unit or transmission facility, including proper Outage scheduling requirements. This proposed rule also required Scheduling Coordinators or Participating Transmission Owners to immediately notify the CAISO when capacity changes or resource limitations occur that affect the availability of the unit or facility or the ability to comply with Dispatch Instructions. In its order accepting Amendment No. 55, the Commission directed the CAISO to specify in greater detail the prohibited behavior.²

In a May 20, 2004, compliance filing, the CAISO revised the Enforcement Protocol to provide that (1) Market Participants must report to the CAISO Control Center any Outage of a Generating Unit within 30 minutes after the Outage occurs; and (2) each Market Participant must provide, within two working days of the commencement of the forced Outage, an explanation of a Forced Outage to the CAISO that includes a description of the equipment failure or other cause and a description of all remedial actions taken by the Operator. The Commission accepted these proposed revisions.³ By order issued October 28, 2004, the Commission accepted the CAISO's proposed revisions.⁴

¹ A copy of the Board memorandum regarding "Generator Outage Reporting," dated October 12, 2006, is attached hereto as Attachment A.

² *California Independent System Operator Corp.*, 104 FERC ¶ 61,308 (2003) ("Amendment 55 Order") at P 84.

³ *California Independent System Operator Corp.*, 109 FERC ¶ 61,087 (2004).

⁴ Consistent with the Commission's directives, these provisions are currently reflected in Sections 37.4.1.1 and 37.4.3.1 of the CAISO's Tariff.

A separate development, however, changed the intended effect of these rules. When Amendment No. 55 was filed, the CAISO Tariff defined an Outage as a "Disconnection or separation, planned or forced, of one or more elements of an electric system." But the CAISO had pending before the Commission in a different docket an amendment expanding the definition of Outage to include a "reduction in capacity." The Commission subsequently approved the expanded definition and later advanced the effective date, at the request of the CAISO, of the expanded definition to coincide with the effective date of the Enforcement Protocol. Thus, the potential number of Outages that must be reported under the provisions of the CAISO Tariff has increased since the time Amendment No. 55 was filed.

On December 19, 2005, the Commission issued a Letter Order authorizing the CAISO's Market Monitoring Unit to administer the Enforcement Protocol. During the CAISO's efforts to work through the associated implementation details, Market Participants raised several concerns regarding their ability to comply with the requirements of the Enforcement Protocol relating to Outage reporting. First, Market Participants expressed concerns that the applicability of Section 37.4.1.1 to "any" reduction in capacity, *i.e.*, to any "derate," without qualification would require that all, even infinitesimally small, normal variations of a unit's measurable capacity be reported. Such variations can occur multiple times during a day for a single unit.

Second, Market Participants contended that the current design of the CAISO's SLIC application is not adequate to report Outages at the frequency required to report small variations in unit capacity. This issue was not raised in the original Amendment No. 55 filing, because SLIC was only a concept at that time, and it was assumed that the SLIC tool would be able to adequately accommodate all Outage reporting in a timely manner. It is important to note that the adequacy of SLIC as a tool for Market Participants to report changes in generation availability depends to a large extent on the frequency of reporting and, thus, is inextricably linked to the first issue concerning the level of granularity in reporting.

A final issue that has arisen results from the fact that numerous Generating Units, such as landfill gas units, are less than 10 MW. These units are not required to have telemetry, and are not staffed full time. However, literal compliance with Section 37.4.1.1 would require either that telemetry be installed on these units so that the operator could report Outages in a timely fashion when the unit was unstaffed, with a large cost impact on the generation industry, or that the units be staffed around the clock. Neither is an acceptable alternative.

To address these concerns, the CAISO conducted an initial stakeholder meeting on June 6, 2006. At that time, Market Participants expressed concerns that a small MW threshold for reporting would require an unreasonable level of

reporting and potential exposure to Sanctions given the current functionality provided by the CAISO's SLIC system. In addition, Market Participants noted that the applicability to small Generating Units without telemetry might unjustly expose Generating Unit Owners to frequent Sanctions. Similarly, Market Participants maintained that, without an explicit minimum MW reporting threshold, they could not be assured that any particular level of reporting would be sufficient to avoid Sanctions.

Based on these concerns, the CAISO, on July 12, 2006, filed with the Commission a petition for temporary waiver of Sanctions under Sections 37.4.1.2 and 37.4.3.2 of the CAISO Tariff for failure to report Outages and to provide additional explanations of Forced Outages, as required under those Sections. The CAISO explained that this waiver would allow the CAISO to investigate further the concerns of Market Participants with respect to Outage reporting, and to work with stakeholders to identify and develop potential changes to the Outage reporting requirements that would address Market Participant concerns in a manner that maintains reliable grid operations. The CAISO requested that the waiver be effective as of December 19, 2005, and terminate on the earlier of October 31, 2006, or the effective date of a filing by the CAISO to terminate the waiver. On September 8, 2006 the Commission issued an order approving the CAISO's petition for waiver.

B. Stakeholder Process

Beginning with the initial stakeholder conference on June 6, 2006, the CAISO has conducted a robust stakeholder process aimed at addressing stakeholder concerns with respect to Outage reporting, while ensuring that the CAISO has the necessary tools to maintain grid reliability. Since the initial conference, the CAISO held a meeting and teleconference on August 16, 2006, and another on September 11, 2006. The CAISO also posted on its website and solicited stakeholder comments on a description of the solution that it intended to implement, as well as draft tariff language to implement this solution. Throughout this process, the CAISO has received substantial input from stakeholders, in both oral and written comments.

There was no question that there was a continued need for Outage reporting. All participating stakeholders have recognized that ISO real-time knowledge of generator availability is fundamental to reliable operations, and specifically necessary in meeting the requirements of system control and mitigating potential impacts to operating reserve. Therefore, the stakeholder process focused on developing a specific threshold of Outage reporting that strikes the appropriate balance between reducing the reporting burden and unreasonable exposure of market participants to sanctions, while still preserving the CAISO's ability to reliably operate the grid.

Stakeholders suggested Outage reporting thresholds that ranged from 10 MW or 2 percent of P-Max (*i.e.*, unrestricted maximum power output capability on file with the ISO), through 25 MW or 25 percent of P-Max, to a fixed 50 MW minimum threshold. Stakeholders also requested that the CAISO provide that the timeframe for reporting begin to run upon a generator operator's discovery of the change in availability, rather than upon occurrence of the change. One stakeholder requested that the CAISO not require in its Tariff regular availability updates at specified intervals after the occurrence of an event that triggers the reporting threshold, as the CAISO proposed at one point in the process.

Throughout the Stakeholder process it was also made clear to the CAISO that the software reporting tool for Outages (*i.e.* SLIC) needed to be enhanced so as to be equal to the demand of reporting requirements. Stakeholders expressed that the current design of SLIC is too unwieldy to rapidly report Outages and to check information previously reported. Stakeholders requested modifications to SLIC to enable them to expeditiously report the Outage information required within 30 minutes and modifications that would allow them to efficiently view the information that they have reported to the CAISO through SLIC.

C. Proposed Tariff Modifications

As a result of the stakeholder process, the CAISO has developed a generation reporting proposal that successfully balances the needs of Market Participants to avoid overly burdensome reporting requirements and unreasonable exposure to sanctions with the ability of the CAISO to receive the information that it needs in order to continue to operate the grid in a reliable fashion. The main features of this proposal are as follows.

First, Generator operators must report changes from any previous report of the maximum output capability (*i.e.*, the availability) of any resource, if that availability changes by at least 10 MW or five percent of the resource's P-max, whichever is greater, and lasts 15 minutes or longer. These reports must be made within 30 minutes of discovering the change in availability and consist of reporting only the availability change, and not additional information, such as the cause of the Outage, that the CAISO previously required. This revised reporting threshold will substantially reduce the reporting burden on generation operators because they will not be required to report minor, normal variations in the output of their units, or those changes in availability that will be resolved in a short amount of time. As with the previous tariff language, the new language provides a 30 minute reporting window, which is a reasonable time to report Outages. However, the new reporting requirements will require that Generator operators report availability changes that exceed the threshold 30 minutes after discovering such changes, instead of 30 minutes after occurrence. This is a more

reasonable standard, as it will account for undiscovered limitations that are only revealed after a unit attempts to respond to a CAISO dispatch, and for complete outages of unstaffed units that lack telemetry. On the other hand, this threshold is sufficiently low that ISO Real-Time dispatch personnel will still receive timely reports of significant derates, such that they will have the necessary resource availability information to continue to operate the grid in a reliable manner.

Additionally, if on an unplanned basis, any resource is derated from P-max by 40 MW or more or 10 percent of P-max (whichever is greater) for a period of 15 minutes or longer, or if a resource is taken offline (*i.e.*, disconnected from the electric system) on an unplanned basis, a detailed Forced Outage Report must be submitted to the CAISO. This report must be received by the CAISO within two business days of discovery and must include detailed information about the Outage: an explanation of the Forced Outage including a description of the equipment failure or other cause, and a description of all remedial actions taken by the Operator (as is currently required by 9.3.10.5). Adopting a higher threshold for detailed Outage reports than the threshold for 30 minute availability reporting is also appropriate, because it will result in a lower reporting burden for Market Participants, but will still allow the CAISO to meet its responsibility to investigate and report questionable Outages in a timely manner.

The CAISO has also obtained approval from its Board of Governors to implement improvements to the ISO SLIC application in order to accommodate the reporting thresholds described herein, as well as to make the application more user-friendly, more intuitive, and better able to handle reporting requirements, even for Participating Generators with multiple resources.

In order to implement this proposal, the CAISO is proposing changes to several sections of the CAISO Tariff. The most significant modification consists of the addition of a new section, Section 9.3.10.2.1. This section makes clear that if prior notice of a Forced Outage cannot be given, an Operator must notify the CAISO within 30 minutes of discovery of a Forced Outage that results in a reduction in the maximum output capability of at least 10 MW or 5 percent of the value registered in the CAISO's Master File, whichever is greater, from the value registered in SLIC, and that lasts for 15 minutes or longer.

The CAISO is also proposing to modify Section 9.3.10.5 to state that Operators must provide a detailed explanation of a Forced Outage only if that Outage results in a reduction in maximum output capability of at least 40 MW below the value registered in the Master File or 10 percent of the value registered in the Master File, whichever is greater. The CAISO is also proposing to change the timeframe for providing this report from 48 hours to two business days to be consistent with Section 37.4.3.1 .

The CAISO is also proposing a number of minor Tariff modifications in order to harmonize other Tariff provisions with this new reporting scheme. In particular, the CAISO has made changes to the enforcement provisions of the Tariff that address availability reporting and related sanctions (Sections 37.4.1.1, 37.4.2.1, and 37.4.3.1). Such modifications have also been proposed to Sections 9.3.10.1A, 9.3.10.2, and 40.6A.3.

II. COMMUNICATIONS

Communications regarding this filing should be addressed to the following individuals, whose names should be placed on the official service list established by the Secretary with respect to this submittal:

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III. EFFECTIVE DATE AND REQUEST FOR EXTENSION OF WAIVER

In order to implement the proposed Outage reporting revisions discussed herein, the CAISO will first need to complete the upgrades to its SLIC system noted above, including testing of these upgrades and familiarizing Market Participants with their operation. The CAISO anticipates that this process will be completed by the end of December, 2006, but in any event no later than March 31, 2007. The CAISO will issue a market notice when it completes this process, and will file this notice with the Commission for informational purposes. The CAISO requests that the Commission permit the enclosed Tariff amendments to become effective as of the later of December 30, 2006 (sixty days subsequent to this filing) or 24 hours after the CAISO files a market notice with the Commission. When these sheets become effective, the CAISO will also make an informational filing with the Commission containing the modified tariff sheets with the final effective date indicated.

In addition, because the CAISO will not be able to implement this new generator availability reporting mechanism prior to completing the necessary SLIC upgrades, the CAISO requests that the Commission grant an extension of its waiver of Sanctions for failure to report Outages and to provide additional explanations of Forced Outages, as set forth in Sections 37.4.1.2 and 37.4.3.2 of

the CAISO Tariff. The CAISO requests that the Commission extend this waiver until the time at which the modifications proposed herein become effective.

IV. SERVICE

The CAISO has served copies of this transmittal letter, and all attachments, on the California Public Utilities Commission, the California Energy Commission, the California Electricity Oversight Board, all parties with effective Scheduling Coordinator Service Agreements under the CAISO Tariff. In addition, the CAISO is posting this transmittal letter and all attachments on the CAISO Home Page.

V. ATTACHMENTS

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

Attachment A	Clean Tariff Sheets
Attachment B	Blackline Sheets showing changes to Tariff language
Attachment C	Board Memo Concerning Generator Outage Reporting

Two extra copies of this filing are also enclosed. Please stamp these copies with the date and time filed and return them to the messenger. Please feel free to contact the undersigned if you have any questions concerning this matter.

Respectfully submitted,



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ATTACHMENT A

9.3.8.5 Delay. The ISO Outage Coordination Office may delay its approval of an Approved Maintenance Outage schedule if sufficient or complete information is not received by the ISO Outage Coordination Office within the time frames provided in Sections 9.3.8.2 and 9.3.8.3.

9.3.9 Final Approval, Delay and Withholding.

On the day on which an Approved Maintenance Outage is scheduled to commence, the Operator shall contact the ISO Control Center for final approval of the Maintenance Outage. No Maintenance Outage shall commence without such final approval (including the time of release, in hours and minutes) being obtained from the ISO Control Center whose decision shall be final. The ISO Outage Coordination Office may delay its approval of a scheduled Maintenance Outage for a Participating Generator if sufficient or complete information is not received by the ISO Outage Coordination Office within the time frames set forth in Section 9.3.8.1. The ISO Control Center shall have the authority to withhold a Final Approval for an Approved Maintenance Outage for reasons of System Reliability, security or system status of the ISO Controlled Grid or market impact. The ISO Control Center shall immediately notify the relevant Operator of its intention to withhold the Final Approval. The Generator Maintenance Outage or ISO Controlled Grid facility Maintenance Outage will then be rescheduled pursuant to this ISO Tariff.

9.3.10 Forced Outages.

9.3.10.1 Coordination of all Forced Outages (consistent with Sections 9.3.4 and 9.3.5.2A) will be through the single point of contact between the Operator and the ISO Control Center.

9.3.10.1A Each Participating TO shall report any change or potential change in equipment status of the Participating TO's transmission assets turned over to the control of the ISO or in equipment that affects transmission assets turned over to the control of the ISO immediately upon discovery to the ISO (this will include line and station equipment, line protection, Remedial Action Schemes and communication problems, etc.). Each Participating TO shall also keep the ISO immediately informed upon discovery as to any change or potential change in the Participating TO's transmission system that could affect the reliability of the ISO Controlled Grid. This would include, but is not limited to, adverse weather conditions, fires, bomb threats, system failures, etc.

9.3.10.2 Any Operator, upon identification of a situation likely to result in a Forced Outage within the next twenty-four (24) hours unless immediate corrective action is taken, where such action requires the removing from service or reducing the maximum output capability of a Generating Unit by 10 MW or more from the value most recently recorded in SLIC, or removing a transmission facility from service, shall communicate directly with the ISO Control Center. All such notifications of Forced Outages shall be communicated to the ISO Control Center with as much notice as possible in order that the necessary security analysis and ISO Controlled Grid assessments may be performed. Any Operator, upon identification of a situation likely to result in a Forced Outage but of a nature not requiring a removal from service until some time more than twenty-four (24) hours in the future will be subject to the provisions of Section 9 of this ISO Tariff with respect to any necessary Outage except the requirements imposing time limits for notification will be waived and the request will be expedited by the ISO provided notice is given as soon as possible.

9.3.10.2.1 If prior notice of a Forced Outage cannot be given, the Operator of a Generating Unit is required to notify the ISO within 30 minutes after discovering any change in the maximum output capability of at least 10 MW or 5% of the value registered in the Master File, whichever is greater, from the value registered in SLIC that lasts for 15 minutes or longer.

9.3.10.3 The ISO Control Center shall coordinate any operational changes necessary to accommodate a Forced Outage and Market Participants shall comply with the ISO's instructions given for that purpose.

9.3.10.4 All Forced Outages shall be communicated by the ISO Control Center to Operators likely to be affected by the Outage using the same procedures adopted for Maintenance Outage coordination procedures.

9.3.10.5 With Respect to Forced Outages of Generating Units that result in a reduction in maximum output capability of 40 MW or more below the value registered in the Master File or 10% of the value registered in the Master File, or which result in the unit being separated from the ISO Controlled grid, the Operator shall provide to the ISO an explanation of the Forced Outage, including a description of the equipment failure or other cause and a description of all remedial actions taken by the Operator, and the estimated return time, within two (2) Business Days from discovery of the Forced Outage. Upon request of the ISO, Operators, and where applicable, Eligible Customers, Scheduling Coordinators, UDCs and MSSs promptly shall provide information requested by the ISO to enable the ISO to review the changes made to the maximum output capability or to provide further information relative to the explanation of the Forced Outages submitted by the Operator and to prepare reports on Forced Outages. If the ISO determines that any Forced Outage may have been the result of gaming or other questionable behavior by the Operator, the ISO shall submit a report describing the basis for its determination to the FERC. The ISO shall consider the following factors when evaluating the Forced Outage to determine if the Forced Outage

was the result of gaming or other questionable behavior by the Operator: 1) if the Forced Outage coincided with certain market conditions such that the Forced Outage may have influenced market prices or the cost of payments associated with out-of-sequence dispatches, out-of-market dispatches, or Real Time Market dispatches above the Marginal Proxy Clearing Price or Non-Emergency Clearing Price Limit, as applicable; 2) if the Forced Outage coincided with a change in the bids submitted for any units or resources controlled by the Operator or the Operator's Scheduling Coordinator; 3) if the ISO had recently rejected a request for an Outage for, or to shut down, the Generating Unit experiencing the Forced Outage; 4) if the timing or content of the notice of the Forced Outage provided to the ISO was inconsistent with subsequent reports of or the actual cause of the Outage; 5) if the Forced Outage or the duration of the Forced Outage was inconsistent with the history or past performance of that Generating Unit or similar Generating Units; 6) if the Forced Outage created or exacerbated Congestion; 7) if the Forced Outage was extended with little or no notice; 8) if the Operator had other alternatives to resolve the problems leading to the Forced Outage; 9) if the Operator took reasonable action to minimize the duration of the Forced Outage; or 10) if the Operator failed to provide the ISO an explanation of the Forced Outage within two (2) Business Days or failed to provide any additional information or access to the generating facility requested by the ISO within a reasonable time.

9.3.10.6 Other Control Areas.

The ISO Outage Coordination Office shall make all reasonable efforts to coordinate Outages involving other Control Areas or affecting an intertie, import or export capability not under the Operational Control of the ISO to the extent that they may affect the reliability of the ISO Controlled Grid.

9.4 Outage Coordination For New Facilities.

9.4.1 Coordination by ISO. The procedure to energize and place in service any new or relocated piece of equipment, connected to the ISO Controlled Grid, must be set out by the Operator or Connected Entity in a written procedure and coordinated by the ISO Outage Coordination Office.

37.4.1.1 Expected Conduct.

A Market Participant shall notify the ISO Control Center of any Outage reportable pursuant to Section 9.3.10.2.1 of the ISO Tariff of a Generating Unit subject to Section 4.6 of the ISO Tariff within thirty (30) minutes after the Outage is discovered.

37.4.1.2 Sanctions.

The Sanctions for a violation of Section 37.4.1 shall be as follows: for the first violation in a rolling twelve (12) month period, a warning letter; for the second violation in a rolling twelve (12) month period, \$1,000; for the third violation in a rolling twelve (12) month period, \$2,000; for the fourth and subsequent violations in a rolling twelve (12) month period, \$5,000. A Market Participant shall not be subject to more than one Sanction per Generating Unit per calendar day for violating Section 37.4.1. A "violation" shall mean each failure to report an Outage for a specific Generating Unit as required by Section 9.3.10.2.1 of the ISO Tariff.

37.4.2 Scheduling and Final Approval of Outages.

37.4.2.1 Expected Conduct.

A Market Participant shall not undertake an Outage except as approved by the ISO Outage Coordination Office in accordance with Section 9.3.2, Section 9.3.9, and Section 9.3.6.6 of the ISO Tariff. A Market Participant shall not commence any Outage without obtaining final approval from the ISO Control Center in accordance with Sections 9.3.9 and 9.3.10 of the ISO Tariff.

37.4.2.2 Sanctions.

The Sanctions for a violation of Section 37.4.2 shall be as follows: for the first violation within a rolling twelve (12) month period, \$5,000; for subsequent violations within a rolling twelve (12) month period, \$10,000. A "violation" shall mean each Outage undertaken for which all required approvals were not obtained.

37.4.3 Explanation of Forced Outages.

37.4.3.1 Expected Conduct.

A Market Participant must provide a detailed explanation of a Forced Outage within two (2) Business Days after the commencement of a Forced Outage as specified in Section 9.3.10.5 of the ISO Tariff. An Operator must promptly provide information requested by the ISO to enable

specific intertie of the import Resource Adequacy Capacity to provide Ancillary Services to the ISO either through the ISO's Ancillary Services market or through self-provision by a Scheduling Coordinator. The Available Generation of the System Resource shall never be less than zero.

40.6A.3 Reporting Requirements for Non-Participating Generators.

So that the ISO may determine the Available Generation of Resource Adequacy Resources, Resource Adequacy Resources, other than non-resource specific System Resources and Qualifying Facilities ("QFs") with effective contracts under the Public Utilities Regulatory Policies Act, that are not Participating Generators shall be required to file with the ISO: (i) the Generating Unit's minimum operating level; (ii) the Generating Unit's maximum operating level; and (iii) the Generating Unit's ramp rates at all operating levels; and (iv) such other information the ISO determines is necessary to determine available generation and to dispatch Resource Adequacy Resources. In addition, Resource Adequacy Resources that are not Participating Generators must, consistent with the notification obligations of Participating Generators and in order to comply with the intent of this Section 40.6A, notify the ISO, as soon as practicable, of any Planned Maintenance Outages, Forced Outages (per the requirements set forth in Section 9.3.10.2), Uncontrollable Force event Outages or any other reductions in their maximum operating levels or Resource Adequacy Capacity during the relevant month.

40.6A.4 Obligation to Offer Available Capacity.

Except as set forth in Sections 40.6A.5 and 40.6A.6, all Resource Adequacy Resources shall offer to sell in the ISO's Real Time Market for Imbalance Energy, in all hours, all their Available Generation as defined in Section 40.6A.2 and any other Available Generation beyond its Resource Adequacy Capacity shall be subject to the FERC must-offer obligation as set forth in Section 40.7. The Resource Adequacy Resource shall make available to the ISO Real Time Market all Resource Adequacy Capacity that is not subject to an outage or is otherwise participating in the ISO Market or included on a self-schedule. Notwithstanding the foregoing, a Resource Adequacy Resource that is a Participating Intermittent Resource satisfies its obligation to offer Available Generation under this Section by scheduling in accordance with Appendix Q of the ISO Tariff.

ATTACHMENT B

Outage Reporting Tariff Amendment Filing – Blacklines

* * *

9.3.10.1A Each Participating TO shall report any change or potential change in equipment status of the Participating TO's transmission assets turned over to the control of the ISO or in equipment that affects transmission assets turned over to the control of the ISO immediately upon discovery to the ISO (this will include line and station equipment, line protection, Remedial Action Schemes and communication problems, etc.). Each Participating TO shall also keep the ISO immediately informed upon discovery as to any change or potential change in the Participating TO's transmission system that could affect the reliability of the ISO Controlled Grid. This would include, but is not limited to, adverse weather conditions, fires, bomb threats, system failures, etc.

9.3.10.2 Any Operator, upon identification of a situation likely to result in a Forced Outage within the next twenty-four (24) hours unless immediate corrective action is taken, where such action requires the removing from service or reducing the maximum output capability of a restricting an operating Generating Unit by 10 MW or more from the value most recently recorded in SLIC, or removing a transmission facility from service, shall communicate directly with the ISO Control Center. All such notifications of Forced Outages shall be communicated to the ISO Control Center with as much notice as possible in order that the necessary security analysis and ISO Controlled Grid assessments may be performed. ~~If prior notice of a Forced Outage cannot be given, the Operator shall notify the ISO of the Forced Outage within thirty (30) minutes after it occurs.~~ Any Operator, upon identification of a situation likely to result in a Forced Outage but of a nature not requiring a removal from service until some time more than twenty-four (24) hours in the future will be subject to the provisions of Section 9 of this ISO Tariff with respect to any necessary Outage except the requirements imposing time limits for notification will be waived and the request will be expedited by the ISO provided notice is given as soon as possible.

9.3.10.2.1 If prior notice of a Forced Outage cannot be given, the Operator of a Generating Unit is required to notify the ISO within 30 minutes after discovering any change in the maximum output capability of at least 10 MW or 5% of the value registered in the Master File, whichever is greater, from the value registered in SLIC that lasts for 15 minutes or longer.

* * *

9.3.10.5 With Respect to ~~Within forty-eight (48) hours of the commencement of a Forced Outage~~Except for Forced Outages of Generating Units that result in a reduction in maximum output capability of less than 40 MW or more below the value registered in the Master File or 10% of the value registered in the Master File, or which result in the unit being separated from the ISO Controlled grid, the Operator shall provide to the ISO an explanation of the Forced Outage, including a description of the equipment failure or other cause and a description of all remedial actions taken by the Operator, and the estimated return time, within two (2) Business Days from discovery of the Forced Outage. Upon request of the ISO, Operators, and where applicable, Eligible Customers, Scheduling Coordinators, UDCs and MSSs promptly shall provide information requested by the ISO to enable the ISO to review the changes made to the maximum output capability or to provide further information relative to the explanation of the Forced Outages submitted by the Operator and to prepare reports on Forced Outages. If the ISO determines that any Forced Outage may have been the result of gaming or other questionable behavior by the Operator, the ISO shall submit a report describing the basis for its determination to the FERC. The ISO shall consider the following factors when evaluating the Forced Outage to determine if the Forced Outage was the result of gaming or other questionable behavior by the Operator: 1) if the Forced Outage coincided with certain market conditions such that the Forced Outage may have influenced market prices or the cost of payments associated with out-of-sequence dispatches, out-of-market dispatches, or Real Time Market dispatches above the Marginal Proxy Clearing Price or Non-Emergency Clearing Price Limit, as applicable; 2) if the Forced Outage coincided with a change in the bids submitted for any units or resources controlled by the Operator or the Operator's Scheduling Coordinator; 3) if the ISO had recently rejected a request for an eOutage for, or to shut down, the Generating Unit experiencing the Forced Outage; 4) if the timing or content of the notice of the Forced Outage provided to the ISO was

inconsistent with subsequent reports of or the actual cause of the ~~e~~Outage; 5) if the Forced Outage or the duration of the Forced Outage was inconsistent with the history or past performance of that Generating Unit or similar Generating Units; 6) if the Forced Outage created or exacerbated Congestion; 7) if the Forced Outage was extended with little or no notice; 8) if the Operator had other alternatives to resolve the problems leading to the Forced Outage; 9) if the Operator took reasonable action to minimize the duration of the Forced Outage; or 10) if the Operator failed to provide the ISO an explanation of the Forced Outage within ~~forty-eight (48) hours~~ two (2) Business Days or failed to provide any additional information or access to the generating facility requested by the ISO within a reasonable time.

* * *

37.4.1.1 Expected Conduct.

A Market Participant shall ~~report to~~ notify the ISO Control Center of any Outage reportable pursuant to Section 9.3.10.2.1 of the ISO Tariff of a Generating Unit subject to Section 4.6 of the ISO Tariff within thirty (30) minutes after the Outage is discovered, ~~in accordance with Section 9.3.10.2.2 of the ISO Tariff.~~

37.4.1.2 Sanctions.

The Sanctions for a violation of Section 37.4.1 shall be as follows: for the first violation in a rolling twelve (12) month period, a warning letter; for the second violation in a rolling twelve (12) month period, \$1,000; for the third violation in a rolling twelve (12) month period, \$2,000; for the fourth and subsequent violations in a rolling twelve (12) month period, \$5,000. A Market Participant shall not be subject to more than one Sanction per Generating Unit per calendar day for violating Section 37.4.1. A "violation" shall mean each failure to report an Outage for a specific Generating Unit as required by Section 9.3.10.2.1 of the ISO Tariff.

* * *

37.4.3.1 Expected Conduct.

A Market Participant must provide a detailed explanation of a Forced Outage, within two (2) ~~working Business Days~~ of after the commencement of a Forced Outage, ~~must provide an explanation of the Forced Outage to the ISO that includes a description of the equipment failure or other cause and a description of all remedial actions taken by the Operator, in accordance with~~ as specified in Section 9.3.10.5 of the ISO Tariff. An Operator must promptly provide information requested by the ISO to enable the ISO to review the explanation submitted by the Operator and to prepare a report on the Forced Outage.

* * *

40.6A.3 Reporting Requirements for Non-Participating Generators.

So that the ISO may determine the Available Generation of Resource Adequacy Resources, Resource Adequacy Resources, other than non-resource specific System Resources and Qualifying Facilities ("QFs") with effective contracts under the Public Utilities Regulatory Policies Act, that are not Participating Generators shall be required to file with the ISO: (i) the Generating Unit's minimum operating level; (ii) the Generating Unit's maximum operating level; and (iii) the Generating Unit's ramp rates at all operating levels; and (iv) such other information the ISO determines is necessary to determine available generation and to dispatch Resource Adequacy Resources. In addition, Resource Adequacy Resources that are not Participating Generators must, consistent with the notification obligations of Participating Generators and in order to comply with the intent of this Section 40.6A, notify the ISO, as soon as practicable, of any Planned Maintenance Outages, Forced Outages (per the requirements set forth in Section 9.3.10.2), Uncontrollable Force Majeure Event ~~Outages~~ or any other reductions in their maximum operating levels or Resource Adequacy Capacity during the relevant month.

* * *

ATTACHMENT C

Memorandum

To: ISO Board of Governors
From: Gregory Van Pelt, Manager of Outage Management
Jim Detmers, Vice President of Operations
Date: October 12, 2006
Re: *Generator Outage Reporting*

This memorandum requires Board action.

Management seeks Board approval to:

- **Modify generator outage reporting requirements to appropriate thresholds for resource availability and for Forced Outages as described herein, and**
- **File revised Tariff language with FERC incorporating these changes for implementation on or before March 31, 2007.**

EXECUTIVE SUMMARY

As noted in the September Board item on this subject, provisions of the ISO Tariff covering reporting of Outages are inconsistent with the requirements of the ISO Tariff Enforcement Protocol. Market Participants asserted that, literally applied, reporting requirements (combined with a cumbersome reporting process) may not offer a reasonable expectation of avoiding penalties. Accordingly, the ISO filed with FERC and was granted a temporary waiver of Outage Reporting penalties to engage in a stakeholder process on outage reporting requirements.

A balance needs to be obtained between:

- the reliability and market benefits of prompt, accurate, and detailed Outage reporting,
- the burden imposed on Market Participants to make such reports,
- the enforcement of reporting requirements and the associated exposure to related penalties, and
- the capabilities of reporting processes, systems, or applications.

A rich and robust Stakeholder process has resulted in a recommendation prepared by management for Board approval. The recommendation addresses the balance noted above, provides clear and achievable reporting thresholds, and describes a FERC filing to make needed changes to the ISO Tariff regarding Generator Outage Reporting and the Enforcement Protocol. Additionally included in the proposal are minor enhancements to the ISO SLIC application, which are needed to lessen the reporting burden placed on Participating Generators. The FERC filing will propose extending the waiver until the implementation of SLIC enhancements (including testing and Market Participant

familiarization) or March 31, 2007, whichever comes sooner, whereupon the revised reporting requirements and thresholds will become effective. It is anticipated that implementation will occur as soon as December 31, 2006.

Management recommends approval of the action plan and associated FERC filing.

PROBLEM/ISSUE STATEMENT

The CAISO Tariff sections 9.3.10.2 and 9.3.10.5, respectively, require that Market Participants report ALL Generating Unit Outages within 30 minutes and submit explanations of Forced Outages within 48 hours. Tariff Section 37.4 states that Market Participants that do not fulfill these requirements are to be assessed Sanctions, including financial penalties.

After a Market Notice from the ISO in April 2006 advising Market Participants of the intent to begin enforcement of the ISO Tariff requirements for Generator Outage Reporting, Market Participants expressed their concerns relative to their ability to comply with the requirements without excessive burden or incurring substantial costs. Market Participants asserted that having the threshold set at ALL Outages would require even very small derates to be reported, and is impractical at best because these reports must also include detailed information beyond the needs of the ISO for real-time reliability requirements. Further asserted is that the current reporting tool (i.e., the SLIC application) provides too cumbersome an interface for Market Participants to reasonably meet these reporting requirements. Market Participants protested that, in combination, these concerns represent a potential inability to avoid penalties.

The owners of smaller, unattended generating units, which are not required to have real-time telemetry, expressed similar concerns. They stated that without incurring substantial cost they may not be in a position to discover outages or derates of their units in a timely enough manner to meet reporting requirements, and therefore have no ability to avoid penalties.

Given that, in addition to the ISO, other entities (i.e., FERC, CPUC) may have enforcement authority in this regard, it was recognized that merely providing exemptions from ISO penalties would not provide adequate relief from the concerns expressed by Market Participants. A change in the ISO Tariff regarding Outage Reporting Requirements, in concert with a reasonable reporting process would be required. Accordingly, the CAISO submitted a July 11, 2006 filing to FERC to temporarily waive these penalties and to seek, through a Stakeholder Process, additional clarity in the ISO Tariff on the specific minimum MW threshold for the Outage reporting requirement.

Discussion about outage reporting thresholds has reinforced the need to maintain accurate accounting of generating unit availability, not only for real-time purposes, but also for use in establishing reasonable dependable capacity values for future Resource Adequacy commitments (or other potential capacity market mechanisms), as well as for use in performance monitoring.

OPTIONS TO SOLVE PROBLEM OR DEAL WITH THE ISSUE

Given the unquestioned requirements for reliability, the available options devolve to a recommendation that includes:

- a minimum threshold for reporting resource maximum output capability that meets the needs of reliable system operations and market requirements (including longer term availability concerns that may be associated with Resource Adequacy and performance monitoring),
- a threshold for reporting more significant forced outages, which includes greater detail of information than may be required in supporting real-time reliability needs,
- a reporting tool (i.e., SLIC) that enables required reporting,
- a process that does not place an undue or unmanageable burden on generators.

Accordingly, and with substantial input from Stakeholders, Management has developed a recommended option, which addresses these needs.

ATTRIBUTES FOR COMPARING OPTIONS

The final recommendation considers the need for maintaining appropriate outage reporting as necessary for reliable system operations. It also considers the need for prompt implementation of a robust reporting process, and provides assurance that Market Participants are enabled to meet reporting requirements. At the same time, the proposed action will minimize costs and resource entanglements for its implementation.

POSITIONS OF THE PARTIES

An active and well-participated Stakeholder process was conducted to maximize a shared understanding of issues and concerns, as well as suggested alternative solutions. Specifically, a teleconference was held on June 6, a Stakeholder meeting and teleconference was held on August 16, and another Stakeholder meeting and teleconference was held on September 11. Attached for review are listings of participants in Stakeholder meetings, many of which provided subsequent written comment.

Throughout that process, the need for outage reporting was not questioned. It was agreed that ISO real-time knowledge of generator availability was fundamental to reliable operations, and specifically necessary toward meeting the requirements of system control and mitigating potential impacts to operating reserve. What initially was not clear was the specific threshold of reporting that was required for reliability.

The existing ISO Tariff language, literally applied, requires reporting ALL outages of any magnitude or duration. Reporting all outages or derates not only was recognized as superfluous to reliability requirements, but also was seen as a significant and arguably unwarranted reporting burden to generators. It was also generally agreed that the SLIC reporting tool was inadequate to meet such a demanding and time-sensitive reporting requirement. This argued for a more relaxed threshold.

In addition to real-time reliability requirements, the ISO asserted that detailed reporting of generator availability was appropriate to overall performance monitoring and data gathering relative to Resource Adequacy and other potential capacity market mechanisms. These aspects argue for the lowest reasonable threshold.

Stakeholders suggested outage reporting thresholds that ranged from 10 MW or 2 percent of P-Max (i.e., unrestricted maximum power output capability on file with the ISO), through 25 MW or 25 percent of P-Max, to a fixed 50 MW minimum threshold. Comments were solicited from Stakeholders and posted on the ISO Website for review. Management drafted a proposal for discussion and further development by Stakeholders, and subsequently summarized it on the ISO Website for yet further comment. Management then considered comments received and drafted Tariff language, which was posted on the ISO website for comment. The comments received from Stakeholders were accepted and included in the final proposal.

Throughout the Stakeholder process it was made clear that the reporting tool (i.e., SLIC) had to be enhanced so as to be equal to the demand of reporting requirements. Currently, the SLIC reporting tool does not meet that requirement, but with minor enhancements, it will. The proposed enhancements, which include intuitive and user-friendly interfaces and minimal input requirements, were discussed at Stakeholder meetings and met with favorable acceptance.

MANAGEMENT RECOMMENDATION

It is the recommendation of Management to revise generator outage reporting thresholds in a manner that addresses reliability concerns while at the same time reflects reasonable reporting obligations for generators. Also recommended is an enhancement of the reporting tool in a way that meets the needs of the reporting requirements.

Specifically proposed is Tariff language to require that generator owners report changes from any previous report of the maximum output capability (i.e., the availability) of any resource, if that availability changes by more than the greater of 10 MW or five percent of the resource maximum (aka. "Pmax"), and lasting 15 minutes or longer. These reports shall be made within 30 minutes of discovering the change in availability and require reporting only the change in availability

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of the resource and the effective time. As such, these availability reports will meet the reliability needs of the ISO Real-time Dispatch Personnel. Updates to the availability will be provided until the resource availability is returned to Pmax or a more complete outage report (including estimated return time, known cause, etc.) is submitted to the ISO.

Additionally, if on an unplanned basis, any resource is derated from Pmax by more than 40 MW or 10 percent of Pmax (whichever is greater) for a period of 15 minutes or longer, or if a resource is taken offline (i.e., disconnected from the electric system) on an unplanned basis, then upon discovery a detailed Forced Outage Report will be submitted to the ISO. This report must be received by the ISO within two business days of discovery and will include detailed information about the outage (as is currently required for Forced Outage Reports). Such Forced Outage Reports will enable the ISO to meet its responsibility to report questionable outages, as appropriate.

Summary of reporting requirements:

- Changes in availability of 10 MW or 5% of Pmax (whichever is greater) lasting 15 minutes or longer must be reported to the ISO. These reports are due to the ISO within 30 minutes of discovery, and are required only to include effective time and MW availability.
- Additionally, a more detailed Forced Outage Report is required for derates of 40 MW or 10% of Pmax (whichever is greater) lasting 15 minutes or longer, or if any resource is disconnected on an unplanned basis. These reports are due to the ISO within two business days of discovery.

Availability reports and Forced Outage Reports will be enabled through SLIC. So as not to place an undue burden on generators, the ISO SLIC application will be enhanced to facilitate reporting which is user-friendly, intuitive, and readily meets reporting requirements, even for Participating Generators with multiple resources.

The cost for the needed enhancement to SLIC is estimated at less than \$50,000, and will be provided from existing resources budgeted for administration of ISO applications. Given that the resources to be used are not critical path to MRTU, nor are there any new MRTU interfaces proposed, the SLIC enhancement is expected to have no impact to MRTU scope, schedule, nor cost.

Pending Board approval, Management will prepare an appropriate filing for submittal to FERC, which incorporates the needed revisions to the ISO tariff, describes the enhancements to the SLIC application, and details the proposed schedule of implementation.

MOTION

Moved,

That the Board of Governors hereby authorizes Management to make all necessary and appropriate filings with the FERC in support of tariff language with respect to outage reporting as detailed in the ISO Board of Governors Memorandum dated October 12, 2006.

Attachments: Conference Participant Lists

To:	JULIA PAYTON
E-mail Address:	jpayton@caiso.com
Conference ID #:	838597
Company Name:	CALIFORNIA ISO
Host's Name:	GREGORY VANPELT
Name of Conference:	OUTAGE COORDINATION
Date of Conference:	WEDNESDAY, AUGUST 16, 2006 10:00 AM PACIFIC

	NAME	COMPANY
1.	VANPELT, GREG - HOST	
2.	AMIRALI, ALI	LS POWER
3.	ARNBERGER, BRIAN	MERANT
4.	ASH, DAVE	SAN DIEGO GAS & ELECTRIC
5.	BOCKHOLT, GREG	RELIANT ENERGY
6.	BOWEN, GRAHAM	CITY OF ANAHEIM
7.	BROWN, ROSLYN	PHOENIX CONSULTING
8.	BYROM, CHARLES	CITY OF ANAHEIM
9.	CARLSON, TRENT	BP ENERGY
10.	DEAL, MATTHEW	CPUC
11.	DEROSA, JACKIE	CALIFORNIA ISO
12.	DILL, MATT	CONOCO PHILLIPS
13.	ELLING, NATE	NRG
14.	EVANS, MIKE	CORAL POWER
15.	FICKEN, RICH	WILLIAMS POWER
16.	GHIGLIA, MICHELLE	CDWR
17.	GILBERT, SCOTT	PPM ENERGY
18.	HAHN, ERNEST	METROPOLITAN
19.	HAMILTON, ANDY	MIRANT
20.	HINDMAN, CINDY	CALIFORNIA ISO
21.	HINNERS, GARY	RELIANT ENERGY
22.	HSU, MING	CALIFORNIA ISO
23.	KAPLAN, KATIE	INTEGRATED ENERGY SOLUTIONS
24.	LEE, VITALY	AES
25.	MARTIN, JULIE	BP ENERGY
26.	MCCANN, DAN	CITY OF RIVERSIDE
27.	MCDANIEL, GRANT	WELLHEAD ELECTRIC
28.	MICHAELS, STEVE	FERC
29.	MOON, C	SEMPRA GENERATION
30.	NIROULA, MOHAN	CDWR
31.	PAYTON, JULIA	CALIFORNIA ISO
32.	REICHMANN, WILLIAM	CITY OF SANTA CLARA
33.	SAGE, JENNY	CALIFORNIA ISO
34.	SANDOVAL, EPHRAIM	CITY OF VERNON
35.	SCHNEIDER, SUSAN	PHOENIX CONSULTING

October 12, 2006

36. SEYBERT, GREG	BP
37. SHARIS, SEAN	CITY OF VERNON
38. SHERIF, LINDA	CALPINE
39. SOLBERG, GLEN	CALIFORNIA DEPARTMENT OF RESOURCES
40. TORRES, RICHARD	CITY OF AZUSA
41. TRAN, LENA	CPUC
42. WESCOTT, JEFF	BP
43. WOOTEN, MARK	LA PALOMA GENERATING PLANT
44. WRIGHT, KATHLEEN	CDWR

August 16 Meeting Attendees at ISO offices at Folsom:

SCE John Pespisa,
PGE Kevin Ballard,
NCPA Dave Wilke, Fred Young,
FERC Saeed Farrokhpay,

To:	JULIA PAYTON
E-mail Address:	jpayton@caiso.com
Conference ID #:	840392
Company Name:	CALIFORNIA ISO
Host's Name:	GREGORY VANPELT
Name of Conference:	SANCTIONS RELATED TO OUTAGE REPORTING
Date of Conference:	MONDAY, SEPTEMBER 11, 2006 10:00 AM PACIFIC

	NAME	COMPANY
1.	VANPELT, GREG - HOST	
2.	AMIRALI, ALI	LS POWER
3.	BILLIOT, SCOTT	ACES POWER MARKETING
4.	CARACRISTI, BOB	NCPA
5.	CARLSON, TRENT	BP ENERGY
6.	COMNES, ALAN	NRG
7.	CONNELLY, JOE	SEMPRA ENERGY TRADING
8.	CRAFT, ROY	NRG ENERGY
9.	DILL, MATT	CONOCOPHILLIPS
10.	ELLING, NATE	NRG ENERGY
11.	EVANS, MIKE	CORAL POWER
12.	FICKEN, RICH	WILLIAMS POWER
13.	HAHN, ERNEST	METROPOLITAN
14.	HANA, TIM	SEMPRA ENERGY TRADING
15.	KAPLAN, KATIE	INTEGRATED ENERGY
16.	LLOYD, DAVID	NRG
17.	MARTIN, JULIE	BP ENERGY
18.	MORTIMEYER, BARRY	BUREAU OF RECLAMATION

October 12, 2006

19. NELSON, TIFF	SDG & E
20. NILSSON, DAVID	PCI
21. PAYTON, JULIA	CALIFORNIA ISO
22. PESPISA, JOHN	SCE
23. RICHARDS, KEITH	NRG ENERGY
24. SCHNEIDER, SUSAN	PHOENIX CONSULTING
25. SEYBERT, GREG	BP
26. SHARIF, SHAWN	CITY OF VERNON
27. SHERIF, LINDA	CALPINE
28. SHULTS, EMILY	SEMPRA GENERATION
29. SOLBERG, GLENN	CALIFORNIA DEPARTMENT OF WATER RESOURCES
30. TANG, BOB	AZUSA
31. THEAKER, BRIAN	WILLIAMS POWER COMPANY
32. WOODBURY, ROBIN	RCS
33. WRIGHT, KATHLEEN	CDWR

September 9, 2006 Meeting attendees at ISO offices in Folsom:

NCPA Dave Wilke