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**California Independent System Operator Corporation**

**Fifth Replacement FERC Electric Tariff**

**NRS-RA Amendment**

**Blacklines**

**July 21, 2011**

**9.3.10.6** With respect to Forced Outages of Generating Units that result in a reduction in maximum output capability that lasts fifteen (15) minutes or longer of 40 MW or more below the value registered in the Master File and ten (10) percent of the value registered in the Master File, the Operator shall provide to the CAISO an explanation of the Forced Outage and the estimated return time, within two (2) Business Days after the Operator initially notifies the CAISO pursuant to Section 9.3.10.3.1 of the change in maximum output capability. The explanation shall include a description of the equipment failure or other cause and a description of all remedial actions taken by the Operator. Upon request of the CAISO, Operators, and where applicable, Eligible Customers, Scheduling Coordinators, UDCs and MSS Operators promptly shall provide information requested by the CAISO to enable the CAISO 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 CAISO determines that any Forced Outage may have been the result of gaming or other questionable behavior by the Operator, the CAISO shall submit a report describing the basis for its determination to the FERC. The CAISO 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 Exceptional Dispatches; 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 CAISO 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 CAISO 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 CAISO 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 CAISO within a reasonable time.

**9.3.10.6.1 Outage Reporting By NRS-RA Resources**

Non-Resource Specific System Resources that provide Resource Adequacy Capacity shall report to the CAISO through the outage management system any Forced Outage of a Generating Unit or Forced Outage or Constraint of transmission facilities external to the CAISO Balancing Authority Area that directly results in the inability of the resource to deliver all or a portion of the Resource Adequacy Capacity identified in the resource’s Supply Plan to the CAISO Balancing Authority Area. Non-Resource Specific System Resources that provide Resource Adequacy Capacity are required to provide to the CAISO notice of the Forced Outage or Constraint within sixty (60) minutes after becoming aware of the circumstance and an explanation of the Forced Outage or Constraint within two (2) Business Days after providing the notice. The explanation shall include the following: a description of the Forced Outage affecting the Generating Unit intended to be the source of the Resource Adequacy Capacity and the estimated return time of the unit; a description of the Forced Outage or Constraint of transmission facilities external to the CAISO Balancing Area Authority; and the impact of such circumstance on the resource’s ability to deliver Resource Adequacy Capacity to the CAISO Balancing Authority Area. Upon request of the CAISO, a non-Resource Specific System Resource that provides Resource Adequacy Capacity shall promptly provide additional information requested by the CAISO to enable the CAISO to review the Forced Outage or Constraint and its impact on the ability of the resource to deliver Resource Adequacy Capacity to the CAISO Balancing Authority Area. If the CAISO determines that any Forced Outage or Constraint may have been the result of gaming or other questionable behavior, the CAISO shall submit a report describing the basis for its determination to the FERC.

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### 40.6.8 Use Of Generated Bids

Prior to completion of the Day-Ahead Market, the CAISO will determine if Resource Adequacy Capacity subject to the requirements of Sections 40.5.1 or 40.6.1 and for which the CAISO has not received notification of an Outage has not been reflected in a Bid and will insert a Generated Bid for such capacity into the CAISO Day-Ahead Market. Prior to running the Real-Time Market, the CAISO will determine if Resource Adequacy Capacity subject to the requirements of Section 40.6.2 and for which the CAISO has not received notification of an Outage has not been reflected in a Bid and will insert a Generated Bid for such capacity into the Real-Time Market. If a Scheduling Coordinator for an RA Resource submits a partial bid for the resource’s RA Capacity, the CAISO will insert a Generated Bid only for the remaining RA Capacity. In addition, the CAISO will determine if all dispatchable Resource Adequacy Capacity from Short Start Units, not otherwise selected in the IFM or RUC, is reflected in a Bid into the Real-Time Market and will insert a Generated Bid for any remaining dispatchable Resource Adequacy Capacity for which the CAISO has not received notification of an Outage. A Generated Bid for Energy will be calculated as provided in the Business Practice Manuals. A Generated Bid for Ancillary Services will equal zero dollars ($0/MW-hour). Notwithstanding any of the provisions of Section 40.6.8 set forth above, the CAISO will not insert any Bid in the Real-Time Market required under this Section 40 for a Resource Adequacy Resource that is a Use-Limited Resource unless the resource submits an Energy Bid and fails to submit an Ancillary Service Bid.

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### 40.9.7 Assessment For NRS-RA Resources

Non-Resource-Specific System Resources that provide Resource Adequacy Capacity will comprise a distinct category for purposes of the CAISO’s Availability Standards program. This category will utilize the same Availability Standard determined for other Resource Adequacy Resources in accordance with Section 40.9.4.1, but will have its own availability calculations, as well as a separate account for settling Non-Availability Charges and Availability Incentive Payments.

**40.9.7.1 Availability Standard for NRS-RA Resources**

Through Resource Adequacy Compliance Year 2015, the monthly Availability Standard forthe non-Resource-Specific System Resources that provide Resource Adequacy Capacity will be the Availability Standard determined in accordance with Section 40.9.4.1. Beginning with Resource Adequacy Compliance year 2016, the monthly Availability Standard for the non-Resource-Specific System Resources that provide Resource Adequacy Capacity will be based on historical availability for the Availability Assessment Hours over the previous three years. Each monthly Availability Standard will be calculated as the sum of the available Resource Adequacy Capacity of the included non-Resource-Specific System Resources across all Availability Assessment Hours of the month, divided by the sum of the designated Resource Adequacy Capacity for the same set of hours and resources, and multiplied by one hundred (100) to obtain a number between zero (0) and one hundred (100) percent. For non-Resource Specific System Resources that provide Resource Adequacy Capacity subject to a Subset-of-Hours Contract, the sum of the available Resource Adequacy Capacity will be based on the Availability Assessment Hours of the month that overlap the hours during which the resource is contractually obligated to make the Resource Adequacy Capacity available to the CAISO. The Availability Standard applicable to a non-Resource Specific System Resource shall not include any hours in which the resource was prohibited by Section 30.8 from bidding across an out-of-service transmission path at its designated Scheduling Point. A non-Resource Specific System Resource providing Resource Adequacy Capacity whose monthly availability calculation under Section 40.9.7.2 is more than two and a half (2.5) percent below the monthly Availability Standard will be subject to a Non-Availability Charge for the month. A non-Resource Specific System Resource providing Resource Adequacy Capacity whose monthly availability calculation under Section 40.9.7.2 is more than two and a half (2.5) percent above the monthly Availability Standard will be eligible for Availability Incentive Payments. Non-Resource-Specific System Resources will not be included in the calculation of the Availability Standards for other Resource Adequacy Resources as determined in Section 40.9.4.

**40.9.7.2 Availability Calculation for NRS-RA Resources**

The availability of Resource Adequacy Capacity provided by a non-Resource-Specific System Resource will be calculated as the sum of the MW-hours of the resource’s available Resource Adequacy Capacity over all Availability Assessment Hours of the month, divided by the sum of the resource’s designated non-exempt hourly Resource Adequacy Capacity for all Availability Assessment Hours, times one hundred (100) to obtain a number between zero (0) and one hundred (100) percent .. For non-Resource Specific System Resources that provide Resource Adequacy Capacity subject to a Subset-of-Hours Contract, the sum of the available Resource Adequacy Capacity will be based on the Availability Assessment Hours of the month that overlap the hours during which the resource is contractually obligated to make the Resource Adequacy Capacity available to the CAISO. The Scheduling Coordinator for Resource Adequacy Capacity provided by non-Resource-Specific System Resources is expected to secure sufficient transmission rights to deliver the Resource Adequacy Capacity to its designated CAISO Scheduling Point. In determining monthly availability of a non-Resource Specific System Resource under Section 40.9.7.2, any hours in which the resource was prohibited by Section 30.8 from bidding across an out-of-service transmission path at its designated Scheduling Point will be excluded from the calculation. Scheduling Coordinators for non-Resource Specific System Resources must submit a monthly report of such hours occurring under Section 30.8, in the format and manner described in the Business Practice Manual for Reliability Requirements.

**40.9.7.3 Determination of Non-Availability Charges and Availability Incentive Payments for NRS-RA Resources**

A Non-Resource-Specific System Resource that provides Resource Adequacy Capacity and whose actual availability calculated in accordance with Section 40.9.7.2 is less than the Availability Standard defined in Section 40.9.7.1 minus the tolerance band of two and one-half (2.5) percent for a given month shall be assessed a Non-Availability Charge. This charge for such a resource shall apply to that portion of the resource’s designated non-exempt Resource Adequacy Capacity equal to one hundred (100) percent minus the ratio of its actual availability calculated in accordance with Section 40.9.7.2 to the Availability Standard minus two and one-half (2.5) percent. The Non-Availability Charge will then equal the resource’s applicable capacity that is subject to Non-Availability Charges multiplied by the a Non-Availability Charge rate equal to the Monthly CPM Capacity Payment price as specified in Schedule 6 of Appendix F of this CAISO Tariff.

Funds collected for Non-Availability Charges pursuant to this Section 40.9.7.3 in a Trade Month will be used to provide Availability Incentive Payments to non-Resource-Specific System Resources providing Resource Adequacy Capacity that exceed the Availability Standard established in Section 40.9.7.1 plus the tolerance band of two and one-half (2.5) percent for that same Trade Month. The funds will be distributed to each such resource in proportion to the resource’s share of the total non-exempt Resource Adequacy Capacity provided by non-Resource-Specific System Resources that are eligible for Availability Incentive Payments or the month.

Any Availability Incentive Payment to a non-Resource-Specific System Resource providing Resource Adequacy Capacity under this Section 40.9.7 3 will be capped at three times the Non-Availability Charge rate multiplied by the amount of the resource’s non-exempt Resource Adequacy Capacity. Any remaining monthly surplus of Non-Availability Charges from non-Resource-Specific System Resources providing Resource Adequacy Capacity in a Trade Month will be credited against the Real-Time neutrality charge for that Trade Month in accordance with Section 11.5.2.3. Only revenues received from the assessment of Non-Availability Charges to non-Resource-Specific System Resources providing Resource Adequacy Capacity will be used to fund Availability Incentive Payments for non-Resource-Specific System Resources providing Resource Adequacy Capacity.

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**Appendix A**

**Master Definitions Supplement**

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**Subset-of-Hours Contract**

A contract between a Load Serving Entity and a non-Resource-Specific System Resource that requires the resource to make Resource Adequacy Capacity available to the CAISO on designated days and/or during a specified number of hours, less than seven (7) days a week, twenty-four (24) hours a day.