

36. Congestion Revenue Rights

36.1 Overview Of CRRs And Procurement Of CRRs

The CAISO distributes CRRs through an allocation and auction process as described in this Section 36. CRR Holders and Market Participants eligible to become CRR Holders can also buy, sell, or trade CRRs bilaterally as described in Section 36.7.

36.2 Types Of CRR Instruments

CRRs can be CRR Obligations or CRR Options. Each CRR is fully specified by its type (CRR Obligation or CRR Option), its CRR Source(s), its CRR Sink(s), its MW quantity, and the Trading Hours for which it is valid. The CRR Source(s) and CRR Sink(s) determine the direction of the CRR, which is from CRR Source(s) to CRR Sink(s).

36.2.1 CRR Obligations

A CRR Obligation entitles its holder to receive a CRR Payment if the Congestion in a given Trading Hour is in the same direction as the CRR Obligation, and requires the CRR Holder to pay a CRR Obligation charge if the Congestion in a given Trading Hour is in the opposite direction of the CRR. The CRR Payment or CRR Obligation charge is equal to the per-MWh cost of Congestion (which equals the MCC at the CRR Sink minus the MCC at the CRR Source) multiplied by the MW quantity of the CRR.

36.2.2 CRR Options

A CRR Option entitles its CRR Holder to a CRR Payment if the Congestion is in the same direction as the CRR Option, but requires no CRR Obligation charge if the Congestion is in the opposite direction of the CRR. The CRR Payment is equal to the per-MWh cost of Congestion (which equals the MCC at the CRR Sink minus the MCC at the CRR Source, when this quantity is positive and zero otherwise) multiplied by the MW quantity of the CRR.

36.2.3 Point-To-Point CRRs

A Point-to-Point CRR is a CRR Option or CRR Obligation defined from a single CRR Source to a single CRR Sink.

36.2.4 [NOT USED]

36.2.5 Monthly CRRs

Monthly CRRs have a term of one month, are differentiated by time of use periods (on-peak and off-peak), and are available through the monthly CRR Allocation and CRR Auction processes in advance of each month.

36.2.6 Seasonal CRRs

Seasonal CRRs have a term of three months, and are differentiated by the different time of use periods (on-peak and off-peak) for each day within a season. Seasonal CRRs are made available through the annual CRR Allocation and CRR Auction processes conducted each year prior to the year in which the Seasonal CRR applies.

36.2.7 Long Term CRRs

Long Term CRRs have a term of ten years. Long Term CRRs are seasonal and are differentiated by the different time of use periods (on-peak and off-peak) for each day within a season. When Long Term CRRs are nominated and allocated they apply to the same season and time of use period for each year of the ten-year term and represent binding ten-year commitments by the CRR Holders that hold Long Term CRRs. Long Term CRRs are nominated and allocated to LSEs in Tier LT that is one tier in the sequence of tiers in the annual CRR Allocation process. Long Term CRRs are not available through the CRR Auction.

36.2.8 Full Funding Of CRRs

All CRRs will be fully funded; provided however, that full funding of CRRs will be suspended if a System Emergency as described in Section 7.7.4, an Uncontrollable Force as described in Section 14, or a Participating TO's withdrawal of facilities or Entitlements from the CAISO Controlled Grid as described in Section 36.8.7 leaves the CAISO with inadequate revenues.

36.3 CRR Specifications

36.3.1 Quantity

CRRs are distributed and settled in no less than one-thousandth of a MW denomination.

36.3.2 Term

CRRs are Monthly CRRs, Seasonal CRRs, Long Term CRRs or Merchant Transmission CRRs. For CRR purposes, the applicable seasons are conventional calendar quarters as defined in the Business Practice Manual.

36.3.3 On-Peak And Off-Peak Specifications

CRRs are defined either for on-peak or off-peak hours as specified by the CAISO in the applicable Business Practice Manuals consistent with the WECC standards at the time of the relevant CRR Allocation or CRR Auction.

36.4 FNM For CRR Allocation And CRR Auction

When the CAISO conducts its CRR Allocation and CRR Auction, the CAISO shall use the most up-to-date DC FNM which is based on the AC FNM used in the Day-Ahead Market. The Seasonal Available CRR Capacity shall be based on the DC FNM, taking into consideration the following, all of which are discussed in the applicable Business Practice Manual: (i) any long-term scheduled transmission Outages, (ii) TTC adjusted for any long-term scheduled derates, (iii) a downward adjustment due to TOR or ETC as determined by the CAISO, and (iv) the impact on transmission elements used in the annual CRR Allocation and Auction of (a) transmission Outages or derates that are not scheduled at the time the CAISO conducts the Seasonal CRR Allocation or Auction determined through a methodology that calculates the breakeven point for revenue adequacy based on historical Outages and derates, and (b) known system topology changes, both as further defined in the Business Practice Manuals. The Monthly Available CRR Capacity shall be based on the DC FNM, taking into consideration: (i) any scheduled transmission Outages known at least thirty (30) days in advance of the start of that month as submitted for approval consistent with the criteria specified in Section 36.4.3, (ii) adjustments to compensate for the expected impact of Outages that are not required to be scheduled thirty (30) days in advance, including unplanned transmission Outages, (iii) adjustments to restore Outages or derates that were applied for use in calculating Seasonal Available CRR Capacity but are not applicable for the current month, (iv) any new transmission facilities added to the CAISO Controlled Grid that were not part of the DC FNM used to determine the prior Seasonal Available CRR Capacity and that have already been placed in-service and energized at the time the CAISO starts the applicable monthly process, (v) TTC adjusted for any

California Independent System Operator Corporation
Fifth Replacement Tariff

scheduled derates or Outages for that month, and (vi) a downward adjustment due to TOR or ETC as determined by the CAISO. For the first monthly CRR Allocation and CRR Auction for CRR Year One, to account for any planned or unplanned Outages that may occur for the first month of CRR Year One, the CAISO will derate all flow limits, including Transmission Interface limits and normal thermal limits, based on statistical factors determined as provided in the Business Practice Manuals.

36.4.1 Transmission Capacity For CRR Allocation And CRR Auction

With the exception of the Tier LT, the CAISO makes available seventy-five percent (75%) of Seasonal Available CRR Capacity for the annual CRR Allocation and CRR Auction processes, and one hundred percent (100%) of Monthly Available CRR Capacity for the monthly CRR Allocation and CRR Auction processes. The CAISO makes available sixty percent (60%) of Seasonal Available CRR Capacity in the Tier LT. Available capacity at Scheduling Points shall be determined in accordance with Section 36.8.4.2 for the purposes of CRR Allocation and CRR Auction of CRRs that have a CRR Source identified at a Scheduling Point. Before commencing with the annual or monthly CRR Allocation and CRR Auction processes, the CAISO may distribute Merchant Transmission CRRs and will model those as fixed injections and withdrawals on the DC FNM to be used in the allocation and auction. These fixed injections and withdrawals are not modified by the Simultaneous Feasibility Test. Similarly, before commencing the annual or monthly CRR Allocation and CRR Auction processes, the CAISO will model any previously allocated Long Term CRRs as fixed injections and withdrawals on the DC FNM to be used in the CRR Allocation and CRR Auction. These fixed injections and withdrawals are not modified by the Simultaneous Feasibility Test, which will ensure no degradation of previously allocated and outstanding Long Term CRRs due to the CRR Allocation and CRR Auction processes. Maintaining the feasibility of allocated Long Term CRRs over the length of their terms also is accomplished through the transmission planning process in Section 24.1.3.

36.4.2 Simultaneous Feasibility

The annual and monthly CRR Allocation processes release CRRs to fulfill CRR nominations as fully as possible subject to a Simultaneous Feasibility Test. To the extent that nominations are not simultaneously feasible, the nominations are reduced in accordance with the CRR Allocation optimization formulation until simultaneous feasibility is achieved. The CRR Allocation optimization formulation,

California Independent System Operator Corporation
Fifth Replacement Tariff

detailed in the Business Practice Manuals, utilizes a weighted least squares objective function that applies pro-rated reductions in flows on a binding constraint based on squares of the Power Transfer Distribution Factor of each CRR nomination for the binding constraint. In addition to the adjustments in Section 36.4.1, the Simultaneous Feasibility Test for each CRR Allocation considers:

- (a) CRRs representing ETCs, Converted Rights and any TOR capacity that was not captured in the adjustments described in Section 36.4, which the CAISO deems necessary to prevent the Congestion Settlement of ETCs, Converted Rights, and TORs from causing revenue inadequacy of allocated and auctioned CRRs;
- (b) In the case of the monthly CRR Allocation, the CRRs already released for that month in the annual CRR Allocation and Auction; and,
- (c) The CRRs allocated in previous CRR Allocation tiers as described in Sections 36.8.3.1 through 36.8.3.6.

The CAISO will be responsible for submitting CRR nominations associated with ETC and Converted Rights Self-Schedules. These nominations will be Point-to-Point CRR nominations. The priority weights for these Point-to-Point CRR nominations will be given a higher value than the proxy bids associated with the nominations submitted by the CRR Allocation participants, if they are included in the same market run.

In the event that transmission Outages and derates modeled for the monthly CRR Allocation and CRR Auction render previously issued Seasonal CRRs infeasible, the CAISO will increase the transfer capacity on the overloaded facilities just enough to render all Seasonal CRRs issued for the month feasible without creating any additional capacity beyond what is needed for the feasibility of the Seasonal CRRs. The CAISO will announce these adjustments to the market prior to conducting the monthly CRR Allocation and CRR Auction so that Candidate CRR Holders can take these facts into consideration in preparing their nominations and bids.

36.4.3 Outages That May Affect CRR Revenue; Scheduling Requirements

As provided in Section 9.3.6.3.2, Outages that may have a significant effect upon CRR revenue adequacy must be submitted for approval no less than thirty (30) days in advance of the first day of the month in which the Outage is proposed to begin. Outages that may have a significant effect upon CRR revenue

California Independent System Operator Corporation
Fifth Replacement Tariff

adequacy are defined in terms of the type of facility and the planned duration of the Outage. Outages of the types of transmission facilities described below that extend beyond a twenty-four (24) hour period must be submitted for CAISO approval consistent with this 30-day advance submittal requirement. The types of transmission facilities on the CAISO Controlled Grid to which this 30-day advance submittal and approval requirement applies consist of transmission facilities that:

- (a) are rated above 200 kV; or
- (b) are part of any defined flow limit as described in a CAISO Operating Procedure;
or
- (c) were out of service in the last three (3) years and for which the CAISO
determined a special flow limit was needed for real-time operation.

A list of the transmission facilities that satisfy criteria (b) and (c) above is provided in the Operating Procedures. The list will be initially created in collaboration with the respective Participating TOs and will be reviewed by the CAISO in collaboration with the Participating TOs on an annual basis and revised as appropriate; provided, however, that the CAISO will ultimately determine the lines that are included in the list. The list will be reviewed by the CAISO on an annual basis and revised as appropriate. The following types of Outages need not be submitted for approval within this thirty-day time frame and will not be designated as Forced Outages if they otherwise comply with the requirements in Section 9.3.6: (1) Outages previously approved by CAISO that are moved within the same calendar month either by the CAISO or by request of the Participating TO; and (2) Outages associated with CAISO-approved allowable transmission maintenance activities during restricted maintenance operations as covered in CAISO Operating Procedures.

36.5 Candidate CRR Holder And CRR Holder Requirements

Any entity that holds or intends to hold CRRs must register and qualify with the CAISO and comply with the other terms of this Section, regardless of whether they acquire CRRs by CRR Allocation, CRR Auction, the Secondary Registration System, or are assigned CRRs for Load Migration.

36.5.1 Creditworthiness Requirements

All CRR Holders and Candidate CRR Holders must comply fully with all creditworthiness requirements as provided in Section 12 and Section 12.6 and as further developed in the applicable Business Practice

California Independent System Operator Corporation
Fifth Replacement Tariff

Manuals. The amount of available credit for participating in a CRR Auction cannot exceed the entity's Aggregate Credit Limit as provided in Section 12.

36.5.2 Required Training

CRR Holders and Candidate CRR Holders must attend a training class at least once prior to participating in the CRR Allocations or CRR Auctions. The CAISO may update training requirements annually or on an as-needed basis. Unless granted a waiver by the CAISO, Candidate CRR Holders and CRR Holders shall at all times have in their employment a person, or have obtained the services of a third party or consultant, that has attended the CAISO's CRR training class and shall notify the CAISO as soon as practicable of a change in such status.

36.6 [NOT USED]

36.7 Bilateral CRR Transactions

36.7.1 Transfer Of CRRs

36.7.1.1 General Provisions of CRR Transfers

A CRR Holder may sell or otherwise transfer CRRs in increments of at least one-thousandth of a MW. Sales or other such transfers must be for at least a full day term consistent with the on-peak or off-peak specification of the CRR. The transferee may be any entity that is a Candidate CRR Holder or a CRR Holder consistent with the CAISO Tariff and the applicable Business Practice Manuals. All CRRs that are so sold or otherwise transferred by the CRR Holder continue to be subject to the relevant terms and conditions set forth in the CAISO Tariff and the applicable Business Practice Manuals.

36.7.1.2 Specific Provisions for Transfer of Long Term CRRs

A CRR Holder that holds Long Term CRRs may sell or transfer through the Secondary Registration System MW portions and temporal segments of a Long Term CRR corresponding to the current calendar year as well as the calendar year covered by the most recently completed annual CRR Allocation. For such sales or transfers the Long Term CRR will be subject to the same limits on granularity that apply to Seasonal CRRs and Monthly CRRs, as specified in Section 36.7.1. A CRR Holder that holds Long Term CRRs may not transfer or sell through the Secondary Registration System any temporal segment of a Long Term CRR beyond the calendar year covered by the most recently completed annual CRR Allocation. For temporal segments beyond the year covered by the most recently completed annual CRR

California Independent System Operator Corporation
Fifth Replacement Tariff

Allocation, the CRR Holder to whom a Long Term CRR was originally allocated remains the holder of record of the entire Long Term CRR for CAISO Settlement purposes. Allocated Long Term CRRs represent binding ten-year commitments by a CRR Holder that holds Long Term CRRs and may not be terminated or otherwise modified by the CRR Holder prior to the end of the Long Term CRR's ten-year term.

36.7.2 Responsibility Of The CAISO

The CAISO provides Market Participants a Secondary Registration System to facilitate and track CRR bilateral transactions. The bulletin board of the Secondary Registration System enables any entity that wishes to purchase or sell CRRs to post that information.

36.7.3 CRR Holder Reporting Requirement

CRR Holders must report to the CAISO by way of the Secondary Registration System all bilateral CRR transactions consistent with the terms of this CAISO Tariff and the Business Practice Manuals. Both the transferor and the transferee of the CRRs must register the transfer of the CRR with the CAISO using the Secondary Registration System five (5) Business Days prior to the effective date of transfer of revenues associated with a CRR, or with sufficient time necessary for the CAISO to evaluate the creditworthiness of the transferor and transferee, whichever is shorter. The CAISO shall not transfer any Settlement related to any CRR until such time that the CRR transfer has been successfully recorded through the SRS and the transferee has met all the creditworthiness requirements as specified in Section 12 and Section 12.6. Both the transferor and transferee shall submit the following information to the Secondary Registration System: (i) the effective start and end dates of the transfer of the CRR; (ii) the identity of the transferor; (iii) the identity of the transferee; (iv) the quantity of CRRs being transferred; (v) the CRR Sources and CRR Sinks of the CRRs being transferred; and (vi) time of use period of the CRR. The transferee must meet all requirements of CRR Holders, including disclosure to the CAISO of all entities with which the transferee is affiliated that are CRR Holders or Market Participants as defined in Section 36.5.

36.8 CRR Allocation

The CAISO allocates CRRs to Load Serving Entities serving Load internal to CAISO Balancing Authority Area, including MSS Operators as described in Section 36.10, as well as Qualified OBAALSEs. All CRRs allocated under the terms of this Section 36.8 will be CRR Obligations.

36.8.1 Structure Of The CRR Allocation Process

The CAISO conducts an annual CRR Allocation: (i) once a year for the entire year for Seasonal CRRs; and (ii) once a year for the ten-year term of Long Term CRRs. The annual CRR Allocation releases Seasonal CRRs and Long Term CRRs for four seasonal periods. The CAISO also conducts monthly CRR Allocations twelve times a year in advance of each month. Within each annual and monthly CRR Allocation process the CAISO performs distinct allocation processes for each on-peak and off-peak time of use specification. The CRR Allocation process for CRR Year One is a distinct process that differs from subsequent CRR Allocations as described in Sections 36.8.3.1 and 36.8.3.2. Each CRR Allocation procedure is based on nominations to the CAISO by LSEs or Qualified OBAALSEs eligible to receive CRRs. The CAISO performs adjustments to the Seasonal CRRs and Long Term CRRs allocated to LSEs as necessary to reflect Load Migration between LSEs, as described in Section 36.8.5. A timeline of the CRR Allocation and CRR Auction processes is contained in the BPMs.

36.8.2 Load Eligible For CRRs And Eligible CRR Sinks

Any entity that wishes to participate in the CRR Allocation process must provide information that demonstrates that it has an obligation to serve load. An LSE's eligibility for allocation of CRRs is measured by the quantity of Load that it serves that is exposed to Congestion Charges for the use of the CAISO Controlled Grid as determined in Sections 36.8.2.1 and 36.8.2.2. An OBAALSE's eligibility for allocation of CRRs is also measured by the quantity of load that it serves that is exposed to Congestion Charges for the use of the CAISO Controlled Grid as determined in Section 36.9.3. For LSEs, the information necessary may include, but is not limited to, Settlement Quality Meter Data or relevant documents filed with the California Energy Commission. For OBAALSEs, the necessary information may include, but is not limited to, historical tagged Real-Time Interchange Export Schedules and historical load data reflecting the load they serve that is exposed to Congestion Charges for the use of the CAISO Controlled Grid. In addition, each such OBAALSE shall support its data submission with a written sworn affidavit by an executive authorized to represent the OBAALSE attesting to the accuracy of the data, and the CAISO will have the right to audit the raw data and calculations used to develop the submitted data set. An LSE serving internal Load is eligible for CRRs up to its Seasonal CRR Eligible Quantity or Monthly CRR Eligible Quantity, which is derived from its Seasonal CRR Load Metric or Monthly CRR

California Independent System Operator Corporation
Fifth Replacement Tariff

Load Metric as described in Sections 36.8.2.1 and 36.8.2.2, respectively. Seasonal CRR Eligible Quantities and Monthly CRR Eligible Quantities for Qualified OBAALSEs are determined as provided in Section 36.9.3. These quantities are calculated for each LSE or Qualified OBAALSE separately for each combination of season and time of use period for the annual CRR Allocation process, and for each time of use period for each monthly CRR Allocation process, and for each CRR Sink at which the eligible LSE serves Load or the Qualified OBAALSE exports Energy from the CAISO Balancing Authority Area. MSS eligibility for CRRs will account for net or gross MSS Settlement in accordance with Section 4.9.13.1. If the MSS Operator elects net Settlement, LSEs for such MSS Load shall submit CRR Sink nominations at the MSS LAP. If the MSS elects for gross Settlement, LSEs for such MSS Load shall submit CRRs Sink nominations at the applicable Default LAP. Load that is Pumped-Storage Hydro Units but is not Participating Load may be scheduled and settled at a PNode or Custom Load Aggregation Point and therefore LSEs for such Load shall submit CRR Sink nominations at the applicable PNode or Custom Load Aggregation Point. Load that is a Participating Load that is also aggregated is scheduled and settled at a Custom Load Aggregation Point that is customized specifically for such Load and, therefore, LSEs for such Participating Load shall submit CRR Sink nominations at the Custom Load Aggregation Point. Load that is Participating Load is scheduled and settled at an individual PNode, and therefore LSEs for such Load shall submit CRR Sink nominations at the applicable PNode. Load that is non-Participating Load, is not Pumped-Storage Hydro Units, and is not Load associated with ETCs, TORs, or MSS Operators that elects net Settlement, is scheduled and settled at the Default LAP. Therefore, LSEs for such Load shall submit CRR Sink nominations at their assigned Default LAP or Default LAPs if the Load they serve is located in more than one Default LAP. In tier 2 and tier 3 of the annual process and tier 1 and tier 2 of the monthly process, such LSEs may also submit CRR Sink nominations at a Sub-LAP of their assigned Default LAP. The CAISO will make available, prior to the beginning of the CRR Allocation process but no later than thirty (30) days before the date on which the Candidate CRR Holders or CRR Holders will be required to submit their nominations for the CRR Allocation, a list of allowable CRR Sinks to be used in the allocation. The allowable CRR Sinks will be consistent with the applicable CRR FNM. In the event that unforeseen changes to network conditions arise after the thirty-day release

of the list of allowable CRR Sinks and warrant revisions to that list, the CAISO will provide updates to the list prior to the closing of nominations for the CRR Allocation.

36.8.2.1 Seasonal CRR Eligible Quantity

The CAISO constructs Load duration curves by season and time of use periods for the annual CRR Allocation process for each LSE based on the LSE's submission to the CAISO of its historical hourly Load data for the prior year, for each LAP within which the LSE serves Load. For load that is subject to variable and difficult-to-predict hydrological conditions, the LSE has the option to submit the load's five-year rolling average historical hourly load data and the CAISO will use the submitted five-year average data for constructing the load duration curves. Once the LSE has exercised this option, the LSE must continue to submit five-year rolling average historical hourly load data for the annual CRR Allocation process in subsequent years. An LSE's Seasonal CRR Load Metric for each season and time of use period is the MW level of Load that is exceeded only in 0.5% of the hours based on the LSE's historical Load data. In the event that the LSE has lost or gained net Load through Load Migration during the course of the prior year, the Seasonal CRR Load Metric will be adjusted to reflect the loss or gain in accordance with the applicable BPM. The CAISO calculates an LSE's Seasonal CRR Eligible Quantity by first adjusting that LSE's Seasonal CRR Load Metric based on load migration and subtracting the quantity of Load served by its TORs, ETCs, and Converted Rights to form the LSE's Adjusted Load Metric, and then multiplying the result by 0.75.

36.8.2.2 Monthly CRR Eligible Quantity

36.8.2.2.1 Based on Load Forecast

Each month, LSEs whose Load forecasts are verifiable in accordance with Section 36.8.6 will submit hourly Load forecast data for the relevant month. Each month the CAISO will use the LSE's submitted hourly Load forecast data for the relevant month to calculate two Load duration curves (one on-peak and one off-peak Load duration curve for the applicable month) to form the basis for monthly allocations for each CRR Sink in which the LSE serves Load. Each LSE's submitted hourly forecast data should reflect any Load growth that is not due to Load Migration as well as the effect of net Load Migration for that LSE. The Monthly CRR Load Metric for such Load is the MW level of Load that is exceeded only in 0.5% of the hours based on the LSE's submitted Load forecast. The CAISO will calculate an LSE's Monthly CRR

California Independent System Operator Corporation
Fifth Replacement Tariff

Eligible Quantity by subtracting from that LSE's Monthly CRR Load Metric the quantity of Load served by its TORs, ETCs, and Converted Rights. In addition the CAISO will adjust the LSE's Monthly CRR Eligible Quantity, if such an adjustment is determined to be necessary pursuant to Section 36.8.6.

36.8.2.2.2 Based on Historical Load Data

An LSE that serves Load that is eligible for CRRs but for which its Load forecast is not verifiable in accordance with Section 36.8.6 shall, each month, submit to the CAISO five (5) years of prior hourly historical Load data for that Load for the same applicable month. Such LSE may submit fewer years of historical data for that Load if granted a waiver by the CAISO because five (5) years of such Load data does not exist. Each month the CAISO will use the LSE's submitted hourly historical Load data for the relevant month to calculate two (2) Load duration curves for each year of historical Load data (one on-peak and one off-peak Load duration curve for the applicable month) for each CRR Sink in which such Load is located. For each Load duration curve, the CAISO will calculate the MW level of Load that is exceeded only in 0.5% of the hours. The CAISO will calculate an LSE's Monthly CRR Eligible Quantity for each on-peak and off-peak period for such Load by averaging the 0.5% exceeded values for all years of submitted historical data, and then subtracting the quantity of Load served by its TORs, ETCs, and Converted Rights.

36.8.3 CRR Allocation Process

36.8.3.1 Annual CRR Allocation for CRR Year One

The annual CRR Allocation process for CRR Year One consists of a sequence of four (4) tiers for each season and time of use period (on-peak and off-peak). Each tier will feature a SFT applied to the CRR nominations submitted by eligible LSEs or Qualified OBAALSEs, the results of which are provided by the CAISO to the respective LSEs or Qualified OBAALSEs prior to the LSEs or Qualified OBAALSEs submitting their nominations to the next tier. Allocations of CRRs in each tier are considered final once they are provided by the CAISO to the respective LSEs or Qualified OBAALSEs. After each tier, LSEs or Qualified OBAALSEs will have an amount of time as specified in the Business Practice Manual after their receipt of the results of each tier to submit their nominations for the next tier, if there is one. The annual CRR Allocation allows LSEs or Qualified OBAALSEs to submit nominations for Seasonal CRRs up to their Seasonal CRR Eligible Quantities for each season of the relevant year, each time of use CRR Sink as

California Independent System Operator Corporation
Fifth Replacement Tariff

provided in Sections 36.8.3.1.1, 36.8.3.1.2 and 36.8.3.1.4. The annual CRR Allocation also allows LSEs to submit nominations for Long Term CRRs up to twenty percent (20%) of their Adjusted Load Metric for each season, time of use period and each LAP; except that an LSE that demonstrates that more than twenty percent (20%) of its Adjusted Load Metric is covered by a combination of long-term procurement arrangements of ten (10) years or greater and ownership of Generation resources is able to submit nominations for a greater amount as specified in Section 36.8.3.1.3. As provided in Section 36.8.3.1.3.2, the annual CRR Allocation allows a Qualified OBAALSE to submit nominations for Long Term CRRs up to fifty percent (50%) of its Adjusted Load Metric for each season, time of use period and Scheduling Point provided that the Qualified OBAALSE demonstrates that all of its nominated Long Term CRR Sources are covered by a combination of long-term procurement arrangements of ten (10) years or greater and ownership of generation resources. The annual CRR Allocation for CRR Year One will be conducted in the following sequence of tiers:

36.8.3.1.1 Tier 1. In tier 1, an LSE or a Qualified OBAALSE may nominate and the CAISO will allocate to the LSE or a Qualified OBAALSE Seasonal CRRs up to fifty percent (50%) of its Seasonal CRR Eligible Quantity for each season, time of use period and CRR Sink. An LSE or a Qualified OBAALSE can nominate Seasonal CRRs sourced at Trading Hubs in accordance with the LSE's or Qualified OBAALSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1. All allocated CRRs that result from such disaggregation will be Point-to-Point CRRs each of whose CRR Source is a Generating Unit PNode that is an element of the Trading Hub.

36.8.3.1.2 Tier 2. In tier 2, an LSE or a Qualified OBAALSE may nominate and the CAISO will allocate to the LSE or Qualified OBAALSE Seasonal CRRs up to seventy-five percent (75%) of its Seasonal CRR Eligible Quantity for each season, time of use period and CRR Sink, minus the quantity of CRRs allocated to that LSE or Qualified OBAALSE in tier 1. An LSE or a Qualified OBAALSE can nominate Seasonal CRRs sourced at Trading Hubs in accordance with the LSE's or Qualified OBAALSE's verified CRR Sources. In tier 2 an LSE or a Qualified OBAALSE with a verified Trading Hub CRR Source may nominate up to seventy-five (75%) of the Adjusted Verified CRR Source Quantity for that Trading Hub, minus the total MW quantity of Point-to-Point CRRs the LSE or Qualified OBAALSE was allocated in tier 1

California Independent System Operator Corporation
Fifth Replacement Tariff

as a result of its tier 1 nomination of CRRs sourced at that Trading Hub. In running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1. All allocated CRRs that result from such disaggregation will be Point-to-Point CRRs each of whose CRR Source is a Generating Unit PNode that is an element of the Trading Hub.

36.8.3.1.3 Tier LT. Tier LT will follow tier 2 for CRR Year One. In Tier LT, an LSE or a Qualified OBAALSE may nominate Long Term CRRs from the Seasonal CRRs allocated in tiers 1 and 2 as provided in this Section 36.8.3.1. The cleared Point-to-Point CRRs awarded in tier 1 and tier 2 that resulted from disaggregated CRR nominations sourced at a Trading Hub may not be nominated in Tier LT in CRR Year One. Any Point-to-Point CRRs awarded as a result of disaggregated CRR nominations sourced at a Trading Hub, as described in Section 36.8.4.1, must be nominated as Trading Hub CRRs as described in this Section 36.8.3.1.3. In running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1. All allocated Long Term CRRs that result from such disaggregation will be Point-to-Point CRRs each of whose CRR Source is a Generating Unit PNode that is an element of the Trading Hub.

36.8.3.1.3.1 Tier LT for LSEs

The quantity of Seasonal CRRs that an LSE can nominate as Long Term CRRs is limited to twenty percent (20%) of the LSE's Adjusted Load Metric, except that an LSE that can demonstrate that more than twenty percent (20%) of its Adjusted Load Metric is covered by a combination of long-term procurement arrangements of ten (10) years or greater and ownership of Generation resources is able to submit nominations for a greater amount as provided in this section. Such demonstrations shall be provided by the requesting LSE to the CAISO through the submission of a written sworn declaration by an executive employee authorized to represent the LSE and attest to the accuracy of the data demonstration. As necessary, the CAISO may request, and such LSE must produce in a timely manner, documents in support of such declaration. If the LSE has demonstrated that more than twenty percent (20%) of its Adjusted Load Metric is covered by a combination of long-term procurement arrangements of ten (10) years or greater and ownership of Generation resources, the amount of Long Term CRRs that it may nominate is equal to the minimum of: (i) the sum of the owned resources and long-term procurement arrangements of ten (10) years or more and (ii) fifty percent (50%) of the LSE's Adjusted Load Metric.

California Independent System Operator Corporation
Fifth Replacement Tariff

If an LSE's combination of long-term procurement arrangements of ten (10) years or greater and ownership of generation resources is greater than twenty percent (20%) of its Adjusted Load Metric and the LSE nominates more than twenty percent (20%) of its Adjusted Load Metric as Long Term CRRs, then the CRR Sources for all of the LSE's Long Term CRR nominations must be sources associated with its demonstrated long-term procurement arrangements of ten (10) years or greater or its owned generation resources. Subject to the maximum quantities described above in this Section 36.8.3.1.3.1, an LSE can nominate CRRs sourced at a Trading Hub in Tier LT up to the total MW amount of the Point-to-Point CRRs the LSE was allocated in tiers 1 and 2 as a result of its disaggregated tier 1 and 2 nominations of CRRs sourced at that Trading Hub. Subject to the maximum quantities described above in this Section 36.8.3.1.3.1, an LSE can nominate CRRs sourced at a Trading Hub in Tier LT up to the total MW amount of the Point-to-Point CRRs the LSE was allocated in tiers 1 and 2 as a result of its disaggregated tier 1 and 2 nominations of CRRs sourced at that Trading Hub.

36.8.3.1.3.2 Tier LT for Qualified OBAALSEs

A Qualified OBAALSE may submit nominations for Long Term CRRs up to fifty percent (50%) of its Adjusted Load Metric for each season, time of use period and Scheduling Point. The Qualified OBAALSE must demonstrate that all of its nominated Long Term CRRs are supported by a combination of long-term procurement arrangements of ten (10) years or greater and ownership of generation resources. Such demonstrations shall be provided by the requesting Qualified OBAALSE to the CAISO through the submission of a written sworn declaration by an executive employee authorized to represent the Qualified OBAALSE attesting to the accuracy of the data demonstration. As necessary, the CAISO may request, and such Qualified OBAALSE must produce in a timely manner, documents in support of such declaration.

36.8.3.1.3.3 Tier LT SFT

After receiving nominations for Long Term CRRs from LSEs and Qualified OBAALSEs, the CAISO will run SFTs to ensure the feasibility of the nominated Long Term CRRs for the remaining nine years of the ten-year term of the Long Term CRR. The SFT runs in Tier LT will test the feasibility of only the Long Term CRR nominations and will not include in the analysis those Seasonal CRRs allocated in tiers 1 and

California Independent System Operator Corporation
Fifth Replacement Tariff

2 that are not nominated as Long Term CRRs. The quantity of Long Term CRRs that can be allocated for any season and time of use period must be feasible for the entire ten-year term of the Long Term CRR. As a result of the Tier LT SFT runs, Long Term CRR nominations may not be fully allocated; however, such a result will not affect the CRR Year One validity of the Seasonal CRR allocated in tiers 1 and 2. The CAISO will inform the nominating entity of the results of the Tier LT SFTs before the deadline for submission of the tier 3 nominations.

36.8.3.1.4 Tier 3. In tier 3, an LSE or a Qualified OBAALSE may nominate and the CAISO will allocate to the LSE or Qualified OBAALSE Seasonal CRRs up to one hundred percent (100%) of its Seasonal CRR Eligible Quantity for each season, minus the quantity of CRRs allocated to that LSE or Qualified OBAALSE in tiers 1 and 2. In tier 3, Sub-LAPs will be eligible CRR Sinks provided that the Sub-LAP is within the nominating LSE's Default LAP. An LSE or a Qualified OBAALSE can nominate Seasonal CRRs sourced at Trading Hubs. In running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1. All allocated CRRs that result from such disaggregation will be Point-to-Point CRRs each of whose CRR Source is a Generating Unit PNode that is an element of the Trading Hub. A Qualified OBAALSE can only nominate CRRs from its verified CRR Sources as provided in Section 36.8.3.4.

36.8.3.2 Monthly CRR Allocation for CRR Year One

The monthly CRR Allocation in CRR Year One shall consist of a sequence of two (2) tiers for each time of use period (on-peak and off-peak). The monthly CRR Allocation will distribute Monthly CRRs to each LSE or Qualified OBAALSE up to one hundred percent (100%) of its Monthly CRR Eligible Quantity, minus CRRs allocated to that LSE or Qualified OBAALSE in the annual CRR Allocation for the relevant month and time of use period. The monthly CRR Allocation for CRR Year One will be conducted as follows:

36.8.3.2.1 Tier 1. In tier 1 of the monthly CRR Allocations, an LSE or a Qualified OBAALSE may nominate and the CAISO will allocate to the LSE or Qualified OBAALSE Monthly CRRs up to fifty percent (50%) of the difference between its Monthly CRR Eligible Quantity and the quantity of Seasonal CRRs and previously allocated Long Term CRRs that apply to that month and time of use period. An LSE or a Qualified OBAALSE can nominate Monthly CRRs sourced at Trading Hubs in accordance with the LSE's

California Independent System Operator Corporation
Fifth Replacement Tariff

or Qualified OBAALSE's verified CRR Sources. In running the SFT the CAISO shall disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1. All allocated CRRs that result from such disaggregation will be Point-to-Point CRRs each of whose CRR Source is a Generating Unit PNode that is an element of the Trading Hub.

36.8.3.2.2 Tier 2. In tier 2 of the monthly CRR Allocations, an LSE or a Qualified OBAALSE may nominate and the CAISO will allocate to the LSE or Qualified OBAALSE Monthly CRRs up to one hundred percent (100%) of the difference between its CRR Eligible Quantity and the quantity of Seasonal CRRs and previously allocated Long Term CRRs that apply to that month and time of use period, minus the quantity of CRRs the entity was allocated in tier 1 of the CRR Year One monthly CRR Allocation. An LSE or a Qualified OBAALSE can nominate Monthly CRRs sourced at Trading Hubs. In running the SFT the CAISO shall disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1. In tier 2 of the monthly CRR Allocation, Sub-LAPs will be eligible CRR Sinks provided that the Sub-LAP is within the nominating LSE's Default LAP. A Qualified OBAALSE can only nominate CRRs from its verified CRR Sources as provided in Section 36.8.3.4.2.

36.8.3.3 [NOT USED]

36.8.3.4 Source Verification

Source verification is required for LSE CRR nominations in tiers 1 and 2 of the CRR Year One annual allocation process and in tier 1 of each CRR Year One monthly allocation process. Source verification is required for all Qualified OBAALSE CRR nominations in all tiers of all CRR Allocation processes.

36.8.3.4.1 CRR Year One Source Verification for LSEs

In CRR Year One, nominations for tier 1 and tier 2 of the annual CRR Allocation and tier 1 of the monthly CRR Allocations must be source verified for all LSEs. Prior to the beginning of the CRR Allocation process but no later than thirty (30) days before the date on which the Candidate CRR Holders or CRR Holders will be required to submit their nominations for the CRR Allocation, the CAISO will make available a list of allowable CRR Sources to be used in the CRR Allocation. The allowable CRR Sources will be consistent with the applicable CRR FNM. In the event that unforeseen changes to network conditions arise after the thirty-day release of the list of allowable CRR Sources and warrant revisions to that list, the CAISO will provide updates to the list prior to the closing of nominations for the CRR Allocation. An LSE

California Independent System Operator Corporation
Fifth Replacement Tariff

must demonstrate that it could actually submit Bids, including Self-Schedules and Inter-SC Trades, for Energy from the locations to be nominated as CRR Sources to serve its Load either through ownership of, or contractual rights to receive Energy from, the relevant Generating Units, or a contract to take ownership of power at the relevant source, such as a Trading Hub or a Scheduling Point. For the second, third and fourth quarters of calendar year 2008 for CRR Year One, in conducting its source verification the CAISO will use data for the period beginning April 1, 2006 and ending December 31, 2006. For the first quarter of calendar year 2009 for CRR Year One, the CAISO will use data for the period beginning January 1, 2007 and ending March 31, 2007 as the basis for verification. Such demonstrations shall be provided by the requesting LSE to the CAISO through the submission of a written sworn declaration by an executive employee authorized to represent the LSE and attest to the accuracy of the data demonstration. As necessary, the CAISO may request, and such LSE must produce in a timely manner, documents in support of such declaration.

36.8.3.4.2 Source Verification for Qualified OBAALSEs

All CRR nominations by Qualified OBAALSEs must be source verified. A Qualified OBAALSE's source verification will be based on its legitimate need showing as specified in Section 36.9.1.

36.8.3.4.3 Calculation of Verified CRR Source Quantity

The Verified CRR Source Quantity associated with each verified CRR Source for a particular LSE or Qualified OBAALSE will be: (i) for an owned generation resource the PMax of the unit multiplied by the LSE's or Qualified OBAALSE's ownership share; (ii) for a contract with a generation resource, the hourly MWh of Energy specified in the contract averaged over all hours of the relevant time of use period, but no greater than the PMax of the unit; or (iii) for a contract that delivers Energy to a Trading Hub or Scheduling Point, the hourly MWh of energy specified in the contract for delivery from the supplier to the LSE or Qualified OBAALSE at the Trading Hub or Scheduling Point, averaged over all hours of the relevant time of use period. Energy contracts submitted by an LSE to demonstrate that the LSE can submit Bids, including Self-Schedules and Inter-SC Trades, for Energy from the nominated CRR Sources to serve its Load must be at least one month in duration. Energy contracts submitted by a Qualified OBAALSE to demonstrate that the Qualified OBAALSE can submit Bids, including Self-Schedules and Inter-SC Trades, for Energy from the nominated CRR Sources to serve its Load must be at least one

California Independent System Operator Corporation
Fifth Replacement Tariff

month in duration to support nominations of Monthly and Seasonal CRRs, and at least ten (10) years in duration to support nominations of Long Term CRRs. Nominations of CRRs for which the CRR Source is a Scheduling Point must be source verified in accordance with Section 36.8.4.2.

36.8.3.4.4 Calculation of Adjusted Verified CRR Source Quantity

For nominations by an LSE and a Qualified OBAALSE, except for a Qualified OBAALSE's nomination of Long Term CRRs, the CAISO will consider a contract that covers a portion of a season (but not less than one month) to be acceptable verification, with the adjustment described below, for the entire season for which a CRR is nominated. The CAISO will also consider a contract not less than one month in duration that covers portions of two consecutive months to be acceptable verification, with the adjustment described below, for both of the months that are partially covered. In such cases, for a contract that covers only a portion of the season or month for which the LSE or Qualified OBAALSE wishes to nominate source-verified CRRs, the CAISO will calculate an Adjusted Verified CRR Source Quantity, which equals the Verified CRR Source Quantity times the ratio of the number of days covered by the contract for a particular month or season to the total number of days in that month or season, consistent with the time of use period of the CRRs being nominated. Contracts submitted by a Qualified OBAALSE to support nomination of Long Term CRRs must be at least ten (10) years in duration and cover the entire season of the Long Term CRR being nominated, and therefore the Adjusted Verified CRR Source Quantity calculation does not apply to such nominations.

36.8.3.5 Annual CRR Allocation Beyond CRR Year One

The annual CRR Allocation for years beyond CRR Year One consists of a sequence of four (4) tiers for each season and time of use period (on-peak and off-peak). Allocations of CRRs in each tier are considered final once they are provided by the CAISO to the respective LSEs or Qualified OBAALSEs. After each tier, LSEs or Qualified OBAALSEs will have an amount of time as specified in the Business Practice Manual after their receipt of the results of each tier to submit their nominations for the next tier, if there is one. The annual CRR Allocation will allow LSEs or Qualified OBAALSEs to submit nominations up to their Seasonal CRR Eligible Quantities minus the quantity of previously allocated Long Term CRRs for each season of the relevant year, each time of use period and each CRR Sink at which they serve

California Independent System Operator Corporation
Fifth Replacement Tariff

Load. Annual CRR Allocations for years beyond CRR Year One will be conducted in the following sequence of tiers:

36.8.3.5.1 Tier 1 – Priority Nomination Process

Tier 1 of the annual CRR Allocation in years beyond CRR Year One will be a Priority Nomination Process through which CRR Holders may nominate some of the same CRRs that they were allocated in the immediately previous annual CRR Allocation process. As provided in Section 36.8.3.4.2, nominations by a Qualified OBAALSE in the PNP are subject to source verification. In all annual CRR Allocations after CRR Year One, an LSE or a Qualified OBAALSE may make PNP nominations up to the lesser of: (1) its Seasonal CRR Eligible Quantity multiplied by two-thirds; minus the quantity of Long Term CRRs for each season, time of use period and CRR Sink for that year; and minus the net MW amount of load migration CRRs valid for each season, time of use period and CRR sink for that year; or, (2) the total quantity of Seasonal CRRs allocated to that LSE in the previous annual CRR Allocation; plus the net quantity of load migration CRRs associated with the immediately preceding Seasonal CRR Allocations for the corresponding season, time of use, and CRR sink location; minus the quantity of Long Term CRRs allocated in the immediately preceding Seasonal CRR Allocation for each season, time of use period and CRR Sink; and minus the net MW amount of load migration CRRs valid for each season, time of use period and CRR sink for that year. In addition, an LSE's or Qualified OBAALSE's nomination of any particular CRR Source-CRR Sink combination in the PNP may not exceed the MW quantity of CRRs having that CRR Source and CRR Sink that the LSE or Qualified OBAALSE was allocated in the previous annual CRR Allocation, reduced by the MW quantity of those Long-Term CRRs with the same CRR Source and CRR Sink that were awarded in the prior year's Long-Term CRR allocation, for the same season and time of use period, and in the case of an LSE, adjusted for net Load loss or gain resulting from Load Migration as described in Section 36.8.5.2.2. An LSE or a Qualified OBAALSE may nominate CRRs awarded with a CRR Source at the Trading Hubs in the PNP. CRRs whose CRR Sink is a Sub-LAP are not eligible for nomination in the PNP. A CRR whose CRR Sink is a Custom LAP or PNode is eligible for nomination in the PNP. PNP Eligible Quantities are not affected by secondary transfers of CRRs, except as performed by the CAISO to reflect Load Migration as described in Section 36.8.5. That is, with the exception of transfers to reflect Load Migration: (i) an LSE or a Qualified OBAALSE may

California Independent System Operator Corporation
Fifth Replacement Tariff

nominate in the PNP a CRR it was allocated in the prior annual CRR Allocation even though it transferred that CRR to another party during the year, and (ii) an LSE or a Qualified OBAALSE may not nominate in the PNP a CRR that it received through a secondary transfer from another party. CRRs received through a CRR Auction are not eligible for nomination in the PNP. CRRs received as Offsetting CRRs to reflect Load Migration are not eligible for nomination in the PNP. The CAISO does not guarantee that all CRR nominations in the PNP will be allocated. The CAISO will conduct an SFT to determine whether all CRR nominations in the PNP are simultaneously feasible. If the SFT determines that all priority nominations are not simultaneously feasible, the CAISO will reduce the allocated CRRs until simultaneous feasibility is achieved.

36.8.3.5.2 Tier LT

In years subsequent to CRR Year One, Long Term CRRs will be allocated as provided in this section.

36.8.3.5.2.1 Tier LT for LSEs

In Tier LT of CRR Year Two, an LSE may nominate Long Term CRRs from any of the Seasonal CRRs it was allocated in the PNP up to a maximum of thirty percent (30%) of the its Adjusted Load Metric, minus the quantity of previously allocated Long Term CRRs that are valid for that year; except that the LSE may nominate Long Term CRRs in amounts greater than thirty percent (30%) but no more than fifty percent (50%) of its Adjusted Load Metric if the LSE demonstrates that more than thirty percent (30%) of its Adjusted Load Metric is covered by a combination of long-term procurement arrangements of ten (10) years or greater and ownership of Generation resources. Such demonstrations shall be provided by the requesting LSE to the CAISO through the submission of a written sworn declaration by an executive employee authorized to represent the LSE and attest to the accuracy of the data demonstration. As necessary, the CAISO may request, and such LSE must produce in a timely manner, documents in support of such declaration. If the LSE has demonstrated that more than thirty percent (30%) of its Adjusted Load Metric is covered by a combination of long-term procurement arrangements of ten (10) years or greater and ownership of Generation resources, the amount of Long Term CRRs that it may nominate is equal to the minimum of: (i) the sum of the owned resources and long-term procurement arrangements of ten (10) years or more, minus the quantity of previously allocated Long Term CRRs that are valid for that CRR year, and (ii) fifty percent (50%) of the LSE's Adjusted Load Metric, minus the

California Independent System Operator Corporation
Fifth Replacement Tariff

quantity of previously allocated Long Term CRRs that are valid for that CRR year. In CRR Year Three, the limit on Long Term CRR nominations will increase by ten percent (10%) to forty percent (40%) of the eligible entity's Adjusted Load Metric but shall not exceed fifty percent (50%) of the Adjusted Load Metric. In CRR Year Three, an LSE may exceed the forty percent (40%) limit on Long Term CRR nominations if it demonstrates that its Adjusted Load Metric is covered by a combination of long-term procurement arrangements of ten (10) years or greater and ownership of Generation resources. The amount of Long Term CRRs that it may nominate is equal to the minimum of: (i) the sum of the owned resources and long-term procurement arrangements of ten (10) years or more, minus the quantity of previously allocated Long Term CRRs that are valid for that CRR year, and (ii) fifty percent (50%) of the LSE's Adjusted Load Metric, minus the quantity of previously allocated Long Term CRRs that are valid for that CRR year. In CRR Year Four and all subsequent years, an LSE may nominate Long Term CRRs from any of the Seasonal CRRs allocated in the PNP up to the maximum of fifty percent (50%) of its Adjusted Load Metric, minus the quantity of previously allocated Long Term CRRs that are valid for that year.

36.8.3.5.2.2 Tier LT for Qualified OBAALSEs

A Qualified OBAALSE may submit nominations for Long Term CRRs up to the portion of its Adjusted Load Metric for which it has demonstrated coverage by a combination of long-term procurement arrangements of ten (10) years or greater and ownership of generation resources, up to a maximum of fifty percent (50%) of its Adjusted Load Metric for each season, time of use period and Scheduling Point, minus the quantity of previously allocated Long Term CRRs that are valid for that CRR year. Such demonstrations shall be provided by the requesting Qualified OBAALSE to the CAISO through the submission of a written sworn declaration by an executive employee authorized to represent the Qualified OBAALSE and attest to the accuracy of the data demonstration. As necessary, the CAISO may request, and such Qualified OBAALSE must produce in a timely manner, documents in support of such declaration. Contracts submitted in support of OBAALSE nominations of Long Term CRRs must cover the entire season of the Long Term CRR being nominated.

36.8.3.5.2.3 Tier LT SFT

After receiving nominations for Long Term CRRs, the CAISO will run SFTs to ensure the feasibility of the nominated Long Term CRRs for the remaining nine years of the ten (10) year term of the Long Term

California Independent System Operator Corporation
Fifth Replacement Tariff

CRR. The SFT run in Tier LT will test the feasibility of only the Long Term CRR nominations and will not include in the analysis those Seasonal CRRs allocated in the PNP that were not nominated as Long Term CRRs. The quantity of Long Term CRRs that can be allocated for any season and time of use period must be feasible for the entire ten (10) year term of the Long Term CRR. As a result of the Tier LT SFT runs, Long Term CRR nominations may not be fully allocated; however, such a result will not affect the validity of: (i) the Long Term CRRs allocated in previous years, or (ii) the Seasonal CRRs allocated in the PNP. The CAISO will inform nominating eligible entities of the results of the Tier LT SFTs before the deadline for submission of the tier 2 nominations.

36.8.3.5.3 Tier 2 In tier 2 of the annual CRR Allocation, the CAISO will allocate Seasonal CRRs to each LSE and Qualified OBAALSE up to two-thirds of its Seasonal CRR Eligible Quantity for each season, time of use period and CRR Sink, minus the quantity of: (i) CRRs allocated to that LSE or Qualified OBAALSE in tier 1, (ii) Long Term CRRs previously allocated to it that are valid for the CRR term currently being allocated, and (iii) the net MW amount of long-term Load Migrations CRRs assigned to the LSE that are valid for the term currently being allocated. In tier 2 of the annual CRR Allocation, Sub-LAPs will be eligible CRR Sinks provided that the Sub-LAP is within the nominating LSE's Default LAP. An LSE or a Qualified OBAALSE can nominate Seasonal CRRs sourced at Trading Hubs. In running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1.

36.8.3.5.4 Tier 3. In tier 3 of the annual CRR Allocation, the CAISO will allocate Seasonal CRRs to each LSE or Qualified OBAALSE up to one hundred percent (100%) of its Seasonal CRR Eligible Quantity for each season, time of use period and CRR Sink, minus the quantity of: (i) CRRs allocated to that LSE or Qualified OBAALSE in tiers 1 and 2, (ii) Long Term CRRs previously allocated to that eligible entity that are valid for the CRR term currently being allocated, and (iii) the net MW amount of long-term Load Migrations CRRs assigned to the LSE that are valid for the term currently being allocated. In tier 3 of the annual CRR Allocation, Sub-LAPs will be eligible CRR Sinks provided that the Sub-LAP is within the nominating LSE's Default LAP. An LSE or a Qualified OBAALSE can nominate Seasonal CRRs where the CRR Source is a Trading Hub. In running the SFT the CAISO shall disaggregate the Seasonal CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1.

36.8.3.5.5 Alternatives for Renewal of Long Term CRRs and for the Transition of Expiring ETCs and Converted Rights to Long Term CRRs

Eligible entities may, in the final year of a Long Term CRR, nominate the identical CRR Source, CRR Sink, and MW terms of the expiring Long Term CRR in the PNP conducted that year, subject to any applicable quantity limitations specified in this Section 36. An eligible entity with an Existing Transmission Contract or Converted Rights that expire by the start of the year for which the CRR Allocation process is conducted may participate in the PNP as if its Existing Transmission Contract or Converted Rights sources and sinks were previously allocated Seasonal CRRs, subject to any applicable quantity limitations specified in this Section 36. In either case, if Seasonal CRRs are awarded to an LSE or a Qualified OBAALSE in the PNP based on its nomination of its expiring rights, such entity may then nominate those Seasonal CRRs in Tier LT of the same year's annual CRR Allocation process, subject to any applicable quantity limitations specified in this Section 36. Alternatively, CRR Holders of expiring LT CRRs, expiring Existing Transmission Contracts or expiring Converted Rights may bypass the tier 1 Priority Nomination Process and nominate their expiring rights as Long Term CRRs in Tier LT one year prior to the year of expiration, subject to any applicable quantity limitations specified in this Section 36. This alternative allows the holder of the expiring rights to nominate Long Term CRRs in the first Tier LT SFT in which the capacity corresponding to the expiring rights becomes available for the full nine (9) year period of the Tier LT SFT. For any entity who elects this alternative and obtains an allocated Long Term CRR, the length of the renewed Long Term CRR (or initial Long Term CRR in the case of expiring Existing Transmission Contracts or expiring Converted Rights) will be nine (9) years, corresponding to the years included in the Tier LT SFT.

36.8.3.6 Monthly CRR Allocation Beyond CRR Year One

The monthly CRR Allocation shall consist of a sequence of two (2) tiers of allocations for each time of use period (on-peak and off-peak). The monthly CRR Allocation will distribute Monthly CRRs and will allow an LSE and a Qualified OBAALSE to nominate CRRs up to one hundred percent (100%) of its Monthly CRR Eligible Quantity, minus the total of any Seasonal CRRs allocated in the annual CRR Allocation, and minus any holdings of Long Term CRRs that are valid for the month and time of use of the CRRs being nominated. All CRR nominations by Qualified OBAALSEs must be source verified.

California Independent System Operator Corporation
Fifth Replacement Tariff

36.8.3.6.1 Tier 1 In tier 1 of the monthly CRR Allocations, each LSE or Qualified OBAALSE may nominate Monthly CRRs up to one-hundred percent (100%) of the difference between its Monthly CRR Eligible Quantity and the total of any Seasonal CRRs allocated in the annual CRR Allocation and any holdings of Long Term CRRs that are valid for the month and time of use of the CRRs being nominated. An LSE or a Qualified OBAALSE can nominate Monthly CRRs where the CRR Source is a Trading Hub. In tier 1 of the monthly CRR Allocation, Sub-LAPs will be eligible CRR Sinks, provided that the Sub-LAP is within the nominating LSE's Default LAP. In running the SFT the CAISO shall disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1.

36.8.3.6.2 Tier 2. In tier 2 of the monthly CRR Allocations, each LSE or Qualified OBAALSE may nominate Monthly CRRs up to one hundred percent (100%) of the difference between its Monthly CRR Eligible Quantity and the total of any Seasonal CRRs allocated in the annual CRR Allocation and any holdings of Long Term CRRs that are valid for the month and time of use of the CRRs being nominated, minus the quantity of CRRs allocated to that LSE or Qualified OBAALSE in tier 1 of the current monthly CRR Allocation. In tier 2 of the monthly CRR Allocation, Sub-LAPs will be eligible CRR Sinks, provided that the Sub-LAP is within the nominating LSE's Default LAP. An LSE or a Qualified OBAALSE can nominate Monthly CRRs sourced at Trading Hubs. In running the SFT the CAISO shall disaggregate the Monthly CRR nominations sourced at Trading Hubs as described in Section 36.8.4.1.

36.8.4 Eligible Sources For CRR Allocation

In the CRR Allocation processes for Seasonal CRRs, Monthly CRRs, and Long Term CRRs, nominated CRR Sources can be either PNodes (including Scheduling Points) or Trading Hubs, except that a Proxy Demand Resource cannot be a nominated CRR Source in a CRR Allocation process. An LSE or a Qualified OBAALSE may nominate up to one hundred percent (100%) of its Adjusted Verified CRR Source Quantities for Seasonal or Monthly CRRs in the combined tiers of the annual and monthly CRR Allocation processes as provided in this Section. For tiers 1 and 2 of the annual CRR Allocation in CRR Year One, an LSE may nominate CRRs from each of its verified CRR Sources in a quantity no greater than seventy-five percent (75%) of the Adjusted Verified CRR Source Quantity corresponding to each verified CRR Source. The LSE may then use tier 1 of the monthly CRR Allocations in CRR Year One to nominate up to the full one hundred percent (100%) of the Adjusted Verified CRR Source Quantity

California Independent System Operator Corporation
Fifth Replacement Tariff

corresponding to each verified CRR Source. In tiers 1, 2 and 3 of the annual CRR Allocation in each year in which it participates, a Qualified OBAALSE may nominate CRRs from each of its verified CRR Sources in a quantity no greater than seventy-five percent (75%) of the Adjusted Verified CRR Source Quantity corresponding to each CRR Source. The Qualified OBAALSE may then use tiers 1 and 2 of the monthly CRR Allocations in the same year to nominate up to the full one hundred percent (100%) of the Adjusted Verified CRR Source Quantity corresponding to each verified CRR Source.

36.8.4.1 CRRs with Trading Hub Sources

For purposes of the CRR Allocation processes the CAISO shall disaggregate CRR nominations with Trading Hub CRR Sources into Point-to-Point CRR nominations each of whose CRR Source is a Generating Unit PNode that is an element of the Trading Hub. In performing this disaggregation the MW quantity of each Point-to-Point CRR nomination will equal the MW quantity of the CRR nomination multiplied by the weighting factor of the corresponding Generating Unit PNode in the defined Trading Hub. The disaggregated, individual Point-to-Point CRRs will be used by the CAISO in conducting the SFTs for the nominated CRRs. In CRR years other than CRR Year One, an LSE may nominate in the PNP any Point-to-Point CRRs it was allocated the previous year as a result of Seasonal CRR nominations with Trading Hubs as CRR Sources, and may then nominate those Seasonal CRRs awarded in the PNP as Long Term CRRs in Tier LT. In CRR Year One, an LSE that was allocated individual Point-to-Point CRRs in tiers 1 and 2 as a result of nominating CRRs sourced at a Trading Hub must nominate CRRs sourced at Trading Hubs in Tier LT in accordance with Section 36.8.3.1.3.1. For Qualified OBAALSEs, all nominated CRR Sources must be source verified as specified in Section 36.9.1. Any Long Term CRRs allocated by the CAISO as a result of nominations of CRRs sourced at Trading Hubs will be Point-to-Point CRRs each of whose CRR Sources is a Generating Unit PNode that is an element of the Trading Hub. After Trading Hub CRRs are allocated in each annual and monthly CRR Allocation process, the CAISO shall combine the allocated CRRs into a Trading Hub CRR and issue counterflow CRRs to the holders of Trading Hub CRRs as necessary to maintain simultaneous feasibility. CRR Holders of such combined Trading Hub CRRs will be eligible to renew these Trading Hub CRRs in the Priority Nomination Process of the subsequent seasonal CRR Allocation process as described in this Section 36.8.4.1 and Section 36.8.3.5.1.

36.8.4.2 Import CRRs

An LSE or a Qualified OBAALSE may nominate Seasonal, Monthly or Long Term CRRs whose CRR Source is a Scheduling Point in the annual and monthly CRR Allocation in accordance with this Section.

36.8.4.2.1 Scheduling Points as CRR Sources for LSEs in CRR Year One

In CRR Year One, in tiers 1 and 2 of the annual CRR Allocation process an LSE may nominate Seasonal CRRs whose CRR Source is a Scheduling Point to the extent that it can demonstrate to the CAISO that, for the verification period stated in Section 36.8.3.4, it owned or was a party to a contract with a System Resource, and that it or the counter-party to the contract had procured appropriate transmission from the applicable transmission provider outside the CAISO to the Scheduling Point. In addition, also in tiers 1 and 2 of the annual CRR Allocation in CRR Year One, all LSEs eligible to nominate CRRs under this Section 36.8 may nominate as CRR Sources, without any verification, shares of the residual import CRR capacity at each Scheduling Point that remains after the completion of the CRR Source verification process. Each LSE's share of the residual import CRR capacity will be calculated as follows. Starting with the total capacity at each Scheduling Point that is available in the DC FNM for the annual CRR Allocation and CRR Auction processes, the CAISO will calculate the residual amount of capacity that remains at each Scheduling Point after subtracting the capacity accounted for by those Scheduling Point CRR Sources submitted by LSEs for verification that have been verified. The CAISO will then set aside fifty percent (50%) of this residual amount at each Scheduling Point for the annual CRR Auction, and will allow LSEs to nominate pro rata shares of the other fifty percent (50%) in proportion to their Seasonal CRR Eligible Quantities. In each monthly CRR Allocation during CRR Year One, CRR Source verification will be required in tier 1 as in the annual CRR Allocation process. Following the verification process, the CAISO will calculate and set aside for the monthly CRR Auction fifty percent (50%) of the import capacity that remains at each Scheduling Point after accounting for the verified Scheduling Point CRR Source submissions to the monthly process and the annual CRR Allocation and CRR Auction results for that month, and will allow LSEs to nominate in tier 1 Monthly CRRs with CRR Sources at each Scheduling Point in quantities up to their pro rata shares of the other fifty percent (50%) in proportion to their Monthly CRR Eligible Quantities.

36.8.4.2.2 Scheduling Points as CRR Sources for LSEs Beyond CRR Year One

California Independent System Operator Corporation
Fifth Replacement Tariff

In the annual CRR Allocation processes subsequent to CRR Year One, there will be no special provisions regarding CRR Sources at Scheduling Points in tiers 1 and 2 for LSEs. For tier 3 the CAISO will calculate and set aside for the annual CRR Auction fifty percent (50%) of the import capacity at each Scheduling Point that remains after the tier 1 and tier 2 CRR Allocations and after considering any previously allocated Long Term CRRs that are valid for that month as described in Section 36.4.1. In the monthly CRR Allocation processes subsequent to CRR Year One there will be no special provisions regarding CRR Sources at Scheduling Points in tier 1 for LSEs. For tier 2 the CAISO will calculate and set aside for the monthly CRR Auction fifty percent (50%) of the import capacity that remains at each Scheduling Point after accounting for the annual CRR Allocation and CRR Auction results for that month, any previously allocated Long Term CRRs that are valid for that month, and the results of tier 1 of the monthly CRR Allocation.

36.8.4.2.3 Scheduling Points as CRR Sources for Qualified OBAALSEs

In the annual CRR Allocation process a Qualified OBAALSE may nominate CRRs whose CRR Source is a Scheduling Point to the extent it meets the requirements of Section 36.9.1.

36.8.5 Load Migration Between LSEs

The CAISO shall track Load Migration between LSEs through Load Migration data provided to the CAISO by each UDC, MSS Operator or other entity that provides distribution serve to customers. Load Migration will be reflected in the hourly Load data and Load forecasts used by the CAISO to calculate the CRR Load Metrics and Seasonal CRR Eligible Quantities and Monthly CRR Eligible Quantities for each LSE, in accordance with procedures set forth in the applicable Business Practice Manual. Load Migration will be reflected in appropriate adjustments to each affected LSE's Seasonal CRR Eligible Quantities and Monthly CRR Eligible Quantities in subsequent annual and monthly CRR Allocations, as well as its PNP Eligible Quantities in the next annual CRR Allocation. LSEs that hold Seasonal CRRs or Long Term CRRs and that lose or gain Load through Load Migration must comply with Section 36.8.5.3 regarding the transfers of current CRR holdings to reflect Load Migration.

36.8.5.1 Tracking of Load Migration by CAISO

The CAISO will implement all appropriate adjustments due to Load Migration on a monthly basis. In order to enable the CAISO to track Load Migration and determine the appropriate adjustments, each

California Independent System Operator Corporation
Fifth Replacement Tariff

UDC, MSS Operator, and other entity that provides distribution service to customers will provide to the CAISO the number of end-use customers that migrated in each of the customer classes in their service area. The end-use customer information provided to the CAISO by such parties shall be calculated based on the following details on each customer that migrates between LSEs: (i) customer identification information, (ii) information to establish the customer's retail customer class, (iii) the original and new LSEs serving the customer, (iv) the effective date of the Load Migration, and (v) the most recent twelve (12) months of billing data for the customer. Each UDC, MSS Operator and other entity that provides distribution service to customers will retain the details of the underlying calculations unless as requested by the CAISO pursuant to the dispute resolution process discussed in Section 36.8.5.7. The migration information provided to the CAISO by the parties shall consist of the number of customers served by each LSE in each retail customer class as of the start of each month, multiplied by the average consumption by customers in each retail customer class. Further details regarding the methodology used by the UDCs, MSSs, and other entities that provide distribution service to customers, to calculate this migration information to be supplied to the CAISO is set forth in the applicable Business Practice Manual. The CAISO will receive information from each UDC, MSS Operator, and other entity providing distribution service on an ongoing daily basis, and will perform the calculations for any appropriate adjustments due to Load Migration on a monthly basis. New CRRs allocated due to Load Migration in accordance with Section 36.8.5.3 will be made effective on the first day of the first month, following the CAISO's performance of the calculations, in which the Load Migration is effective by the first of the month.

36.8.5.2 Adjustments to CRR Eligible Quantities to Reflect Load Migration

An LSE who loses or gains net Load through Load Migration in a given year will have its Seasonal CRR Eligible Quantities in the next annual CRR Allocation reduced or increased, respectively, in proportion to the net Load lost or gained through Load Migration. In addition, an LSE that loses Load through Load Migration in a given year will have its PNP Eligible Quantities reduced in proportion to the gross amount of Load lost through Load Migration. An LSE that gains Load through Load Migration in a given year will have its PNP Eligible Quantities increased in proportion to the amount of Load gained through Load Migration.

36.8.5.3 Adjustments to Current CRR Holdings to Reflect Load Migration

California Independent System Operator Corporation
Fifth Replacement Tariff

Because in between CRR Allocations each LSE can both lose Load and gain Load between itself and multiple other LSEs, the CAISO will calculate and perform appropriate adjustments to current CRR holdings for each pair of LSEs affected by Load Migration to reflect the net amount of Load that migrated between those two LSEs during each Load Migration tracking period and for each LAP in which the LSEs serve Load. The CAISO will perform such calculations in accordance with the appropriate Business Practice Manual, and will perform the adjustments by creating and allocating equal and opposite sets of new CRRs for each pair of LSEs affected by Load Migration. The net Load gaining LSE of the pair will receive a set of new CRRs that match the CRR Sources and CRR Sinks of all the Seasonal CRRs and Long Term CRRs previously allocated to the net Load losing LSE of the pair, in MW quantities proportional to the net amount of the net Load losing LSE's Load that migrated to the net Load gaining LSE of the pair within each LAP in which the LSEs serve Load. The net Load losing LSE of the pair will receive a set of new Offsetting CRRs. After the assignment of Offsetting CRRs, the net Load losing LSE will still hold the CRRs it held before it was assigned the Offsetting CRRs. The Load gaining LSE may nominate its new Seasonal CRRs in the Priority Nomination Process of the next annual CRR Allocation process. The net Load losing LSE may not nominate in the Priority Nomination Process either: (i) the Seasonal CRRs corresponding to the new CRRs allocated to the Load gaining LSE, or (ii) the Offsetting CRRs allocated due to Load Migration. An LSE to which the CAISO allocates new CRRs to reflect Load Migration must be either a Candidate CRR Holder or a CRR Holder and meet all requirements applicable to such entities.

36.8.5.4 Load Migration and Compliance with CAISO Credit Requirements

To the extent that the credit requirements of an LSE as specified in Section 12 are updated by the allocation of new CRRs to reflect Load Migration, the LSE will have its respective credit requirements updated and any changes will be processed through the otherwise applicable credit and collateral processes delineated in Section 12 and the appropriate Business Practice Manuals. In the event that the Load gaining LSE is not a CRR Holder or Candidate CRR Holder at the time the Load Migration process takes place, then the Load Migration CRRs will not be transferred to that load gaining LSE and will not be financially settled. Instead, the unclaimed Load Migration CRRs will be absorbed within the CRR Balancing Account for the duration of the term of the Load Migration CRRs. In addition, the LSEs

California Independent System Operator Corporation
Fifth Replacement Tariff

affected by the Load Migration will not be eligible to nominate the transferred CRRs in subsequent Priority Nomination Tiers.

36.8.5.5 Load Migration Adjustment for CRR Year One

For the CRR Year One CRR Allocation process, the CAISO will account for the cumulative Load Migration that takes place between the beginning of the CRR Year One CRR Allocation process and the first date that the Day-Ahead Market is operational as a single adjustment as described in the Business Practice Manuals.

36.8.5.6 Load Migration Reflected in the Monthly CRR Allocation Process

An LSE who loses or gains net Load through Load Migration must reflect that loss or gain in the monthly Load forecasts it submits to the CAISO for determining its monthly CRR Eligible Quantities for future monthly CRR Allocations.

36.8.5.7 Dispute Resolution Mechanism Regarding Load Migration Data Transfers

The CAISO shall provide the Load migration information referred to in Section 36.8.5.1 to the affected load-gaining or load-losing LSE. The data received by each affected LSE will be limited to the count of customers for which it is the load-gaining LSE, and the count of customers for which it is the load-losing LSE. The affected LSEs shall contact the CAISO and the UDC, MSS or other entities that provide distribution service to customers that calculate this migration information, of any dispute regarding the load migration data provided to the CAISO no later than four calendar days after the affected LSE has received the load migration data. In the event that the affected LSE and UDC, MSS or other entity that provide distribution service to customers, are unable to resolve the LSE's disagreement, the LSE and UDC, MSS, or other entity that provides distribution service to customers, will submit the dispute to the CAISO. During the consultations with the CAISO concerning the dispute, the CAISO may request the data specified in Section 36.8.5.1, on which the load migration data is based and may request explanations of the disputed data from the disputing parties. In the event that the CAISO needs to receive and review the relevant data, the CAISO will purge the data after the resolution of the dispute. In the event that the affected parties cannot agree to a resolution of the dispute prior to the expiration of the fourth calendar day after the data was provided to the load-gaining or load-losing LSE by the CAISO, the CAISO will decide either to: (1) recalculate, to the extent feasible, the aggregated count of transferring

California Independent System Operator Corporation
Fifth Replacement Tariff

customers and proceed with the subsequent steps based on that calculated amount; or (2) proceed with the amounts provided by the UDC, MSS or other entity that provides distribution service to customers. Nothing in this section should be construed to restrict the affected parties from seeking the dispute resolution mechanism available under Section 13; provided however, that in the interim the CAISO may proceed with the CRR processes defined in the CAISO Tariff based on the load migration amounts provided by the UDC, MSS or other entity that provides distribution service to customers. If the CAISO later determines that the resolution of the dispute requires a modification of the load-gaining or load-losing LSE's rights, the CAISO will make the appropriate adjustments in any of the upcoming CRR Allocations, but will not make any retroactive adjustments to the load-gaining or load-losing LSE's rights.

36.8.6 Load Forecasts Used To Calculate CRR MW Eligibility

The CAISO will work closely with appropriate state and Local Regulatory Authorities and agencies to ensure that historical Load data and Load forecasts used to establish Seasonal CRR Eligible Quantities and Monthly CRR Eligible Quantities as provided in Section 36.8.2 are consistent with the Load data and Load forecasts used to establish resource adequacy requirements. For the purpose of this consistency assessment, the CAISO will consider the most current available Load data and Load forecasts submitted by the LSE to the applicable state, Local Regulatory Authorities and agencies, subject to the CAISO's ability to perform the consistency assessment and any necessary adjustments pursuant to Sections 36.8.2.1 and 36.8.2.2 within the CRR production time line as specified in the applicable Business Practice Manual.

36.8.7 Reconfiguration of CRRs

36.8.7.1 Long Term CRRs And PTO Withdrawal From CAISO Controlled Grid

In the event a Participating TO gives the required notice and withdraws facilities or Entitlements from the CAISO Controlled Grid, the CAISO will reconfigure Long Term CRRs as necessary to reflect the CAISO Controlled Grid after the withdrawal. After reconfiguration, the CAISO will run SFTs on the reconfigured Long Term CRRs and, if necessary, reduce some of the reconfigured Long Term CRRs to ensure their feasibility. If the CRR Source and CRR Sink for an allocated Long Term CRR both are located within a departing Participating TO Service Territory, the Long Term CRR would expire on the effective date of the Participating TO's withdrawal.

36.8.7.2 Changes in Topology of the ISO Transmission Grid

In the event that the CAISO experiences changes to the CAISO Controlled Grid within the term of outstanding annual CRRs, the CAISO will reconfigure outstanding Seasonal CRRs, as necessary, to reflect the changes to the CAISO Controlled Grid. After reconfiguration, the CAISO will run SFTs on the reconfigured Seasonal CRRs and, if necessary, reduce some of the reconfigured Seasonal CRRs to ensure their feasibility. If the CRR Source and CRR Sink for an allocated Seasonal CRR both are located within a departing Participating TO Service Territory, the Seasonal CRRs would expire on the effective date of the Participating TO's withdrawal.

The Priority Nomination Tier eligibility for the affected CRR Holders will be based on the MW quantity of the reconfigured Seasonal CRRs after ensuring the CAISO has conducted the Simultaneous Feasibility Test.

36.9 CRR Allocation To OBAALSEs

OBAALSEs who wish to nominate and be allocated CRR Obligations in the same annual and monthly CRR Allocation processes described in Section 36.8 may do so subject to the provisions of this Section 36.9 and if such OBAALSEs are qualified and registered as Candidate CRR Holders or CRR Holders. An OBAALSE may participate in the CRR Allocation processes and be allocated CRRs to the extent that: (1) such OBAALSE makes a showing of legitimate need for the CRRs nominated as provided by Section 36.9.1; (2) such OBAALSE pre-pays or commits to pay the appropriate Wheeling Access Charge in the amount of MWs of CRRs nominated as provided in Section 36.9.2; (3) the external load for which CRRs are nominated will be exposed to CAISO Congestion charges because it is not served by Supply resources other than exports from the CAISO Balancing Authority Area; (4) the external load for which CRRs are nominated is not served through an ETC, TOR or Converted Rights by which it has been designated as eligible to receive the reversal of Congestion charges; (5) such OBAALSE complies with the verification requirements in Section 36.9.4; and (6) the nominated CRRs clear the relevant SFTs. An OBAALSE that participates in the CRR Allocation processes will be subject to the applicable rules governing the tiered structure of these processes. All CRRs allocated under the terms of this Section 36.9 will be CRR Obligations.

36.9.1 Showing Of Legitimate Need

California Independent System Operator Corporation
Fifth Replacement Tariff

An OBAALSE must make a showing to the CAISO of legitimate need to enable the CAISO to verify the CRR Sources it wants to nominate. All CRR nominations by OBAALSEs in all CRR years must be source verified based on the showing of legitimate need. The CAISO's verification of legitimate need will be based on demonstration by the OBAALSE of an executed Energy contract from a Generating Unit or System Resource that covers the time period of the CRRs nominated, or ownership of such Generating Unit or System Resource. For such CRR Sources the showing of legitimate need must be made for each CRR term for which the OBAALSE wants to nominate CRRs in a timely manner prior to the start of the relevant annual or monthly CRR Allocation process. For CRR Sources that will be verified based on generating resources located outside the CAISO Balancing Authority Area, a Scheduling Point must be nominated as the corresponding CRR Source. Generating resources located outside of the CAISO Balancing Authority Area to be used by the OBAALSE to verify a Scheduling Point as a CRR Source must not be located within the OBAALSE's own Balancing Authority Area. The Verified CRR Source Quantity and Adjusted Verified CRR Source Quantity corresponding to any CRR Source nominated by an OBAALSE will be calculated in accordance with Section 36.8.3.4, with the modification that for an OBAALSE these quantities will be calculated for each CRR Allocation process in which the Qualified OBAALSE wants to participate, consistent with the requirement for ongoing source verification based on a forward showing in conjunction with the OBAALSE's annual showing of legitimate need. For a CRR Source that is a Scheduling Point, pursuant to the legitimate need showing requirement, an OBAALSE must demonstrate that it has procured the appropriate transmission service from the transmission provider outside the CAISO Balancing Authority Area to the Scheduling Point that the OBAALSE intends to nominate as a CRR Source for the term of the CRR being nominated. Such demonstrations shall be provided by the OBAALSE to the CAISO through the submission of a written sworn declaration by an executive employee authorized to represent the OBAALSE and attest to the accuracy of the data demonstration. As necessary, the CAISO may request, and such OBAALSE must produce in a timely manner, documents in support of such declaration.

36.9.2 Prepayment Of Wheeling Access Charges

36.9.2.1 Prepayment of Wheeling Access Charges for Allocated CRRs

An OBAALSE will be required to prepay relevant Wheeling Access Charges, to be calculated as described in this section and further specified in the Business Practice Manual, for the full term of the

California Independent System Operator Corporation
Fifth Replacement Tariff

Monthly CRRs, Seasonal CRRs and Long Term CRRs it intends to nominate in order to participate in the CRR Allocation processes and be allocated CRRs. To be eligible for the allocation of Seasonal CRRs or Monthly CRRs the OBAALSE must submit the full required prepayment and have it accepted by the CAISO prior to the OBAALSE's submission of nominations for the relevant annual or monthly CRR Allocation, except as provided below in Section 36.9.2.2. To be eligible for nominations of Long Term CRRs, the OBAALSE must submit the full prepayment and have it accepted by the CAISO prior to the OBAALSE's submission of nominations of Long Term CRRs in Tier LT, except as provided below in Section 36.9.2.2. For each MW of Monthly CRR, Seasonal CRR or Long Term CRR to be nominated the nominating OBAALSE must prepay one MW of the relevant Wheeling Access Charge, which equals the per-MWh WAC that is associated with the Scheduling Point the OBAALSE intends to nominate as a CRR Sink and that is expected at the time the CRR Allocation process is conducted to be applicable for the period of the CRR nominated, times the number of hours comprising the period of the CRR nominated as further specified in the applicable Business Practice Manual.

36.9.2.2 Eligibility for Prepayment of WAC on an Annual or Monthly Basis

An OBAALSE deemed creditworthy pursuant to the requirements of Section 12 may elect to prepay the determined WAC responsibility on a monthly basis for the Seasonal CRRs or Long Term CRRs that it seeks to be allocated, provided that such OBAALSE has demonstrated a commitment to pay the required WAC for the entire term of the CRRs sought by submitting to the CAISO a written sworn statement by an executive that can bind the entity. In order to be eligible for this option, the OBAALSE must submit and the CAISO must accept this sworn statement prior to the applicable CRR Allocation process in which the OBAALSE intends to nominate a CRR. An OBAALSE choosing to pay on a monthly basis shall make its monthly payments on a schedule specified in the applicable Business Practice Manual. An OBAALSE deemed creditworthy pursuant to the requirements of Section 12 may also elect to prepay its determined WAC responsibility associated with an allocated Long Term CRR on an annual basis, provided that such OBAALSE has demonstrated a commitment to pay for the entire term of the Long Term CRRs sought by submitting to the CAISO and the CAISO accepting a written sworn statement by an executive that can bind the entity. An OBAALSE choosing to pay such WAC obligation on an annual basis shall make its payment each year on a schedule specified in the applicable Business Practice Manual.

36.9.2.3 Refund of Prepaid WAC for Unallocated CRRs

To the extent that an OBAALSE prepays a quantity of the WAC and is not allocated the full amount of CRRs nominated, WAC prepayment for CRRs not allocated will be refunded by the CAISO within thirty (30) days following the completion of the relevant CRR Allocation process.

36.9.3 CRR Eligible Quantities

The CAISO will calculate the Seasonal CRR Eligible Quantities and Monthly CRR Eligible Quantities for OBAALSEs as described in Section 36.8.2 with the following modifications. The OBAALSE must submit two (2) sets of hourly data from which the CAISO will construct Load duration curves for determining the Seasonal CRR Eligible Quantities and Monthly CRR Eligible Quantities. One set of hourly data must reflect the OBAALSE's historical hourly exports at the Scheduling Point that is the CRR Sink of the nominated CRRs. The historical hourly exports shall be based on the tagged Real-Time Interchange Export Schedules for the OBAALSE. An OBAALSE that wishes to nominate multiple Scheduling Points as CRR Sinks in the CRR Allocation process will have distinct CRR Eligible Quantities for each nominated Scheduling Point, and prior to each annual CRR Allocation process must submit historical hourly export data at each such Scheduling Point from which the CAISO will calculate the associated CRR Eligible Quantities. The second set of hourly data must reflect the prior year's hourly metered Load for the end-use customers the OBAALSE served outside the CAISO Balancing Authority Area and that were not served from sources other than exports from the CAISO Balancing Authority Area. The OBAALSE's Seasonal and Monthly CRR Eligible Quantities will be based on the lesser of (1) the total historical hourly export data for all Scheduling Points submitted as CRR Sinks, and (2) the hourly metered load for the external end-use customers served by the OBAALSE and that were not served from sources other than exports from the CAISO Balancing Authority Area. An OBAALSE also must demonstrate that it has firm transmission rights pursuant to the tariffs of intervening transmission providers from its Scheduling Point sink to the end-use customers in the OBAALSE's Balancing Authority Area. The OBAALSE shall support its data submission and the demonstration of transmission rights to its end-use customers with a sworn affidavit by an executive employee authorized to represent the OBAALSE and attest to the accuracy of the data and demonstration. As necessary, the CAISO may request, and such

California Independent System Operator Corporation
Fifth Replacement Tariff

OBAALSE must produce in a timely manner, the raw data and calculations used to develop the submitted data set and the demonstration of transmission rights to its end-use customers.

36.9.4 Eligible CRR Sources And Sinks

Eligible CRR Sources will be the PNodes of the Generating Units or Scheduling Points for which the OBAALSE has made a legitimate need showing as described above in Section 36.9.1. Eligible CRR Sinks will be the Scheduling Points for which the CAISO has established Seasonal and Monthly CRR Eligible Quantities as described in Section 36.9.3. An OBAALSE nominating CRRs having CRR Sources internal to the CAISO Balancing Authority Area will be limited to seventy-five percent (75%) of each of its corresponding Adjusted Verified CRR Source Quantities in all tiers of the annual CRR Allocation process in CRR Year One and in subsequent years. An OBAALSE nominating CRRs having CRR Sources external to the CAISO Balancing Authority Area will be limited to seventy-five percent (75%) of each of its corresponding Adjusted Verified CRR Source Quantities in all tiers of the annual CRR Allocation process in CRR Year One. In CRR years subsequent to CRR Year One, the OBAALSE may renew previously allocated CRRs having external CRR Sources, subject to the applicable quantity limitations and other requirements specified in this Section 36.

36.9.5 Priority Nomination Process

CRRs allocated pursuant to this Section 36.9 shall be eligible for nomination in the Priority Nomination Process to the extent that the requirements of this Section 36.9 are met at the time of the relevant CRR Allocation.

36.10 CRR Allocation To Metered Subsystems

An MSS Operator that elects gross Settlement may participate in the CRR Allocation processes and be allocated CRR Obligations. An MSS Operator that elects net Settlement may participate in the CRR Allocation processes and be allocated CRRs, except that its Seasonal CRR Eligible Quantities and Monthly CRR Eligible Quantities will reflect its net Load and its allocated CRRs will use MSS-LAPs as CRR Sinks. The MSS Operator will be required to submit to the CAISO the appropriate hourly historical net Load data and net Load forecast data from which the CAISO will construct net Load duration curves to determine the Seasonal CRR Eligible Quantities and Monthly CRR Eligible Quantities.

36.11 CRR Allocation To Merchant Transmission Facilities

Project Sponsors of Merchant Transmission Facilities who turn such facilities over to CAISO Operational Control and do not recover the cost of the transmission investment through the CAISO's Access Charge or WAC or other regulatory cost recovery mechanism may be allocated, at the Project Sponsor's election, either CRR Options or CRR Obligations that reflect the contribution of the facility to grid transfer capacity as determined below.

36.11.1 Eligibility For Merchant Transmission CRRs

The Project Sponsor of a Merchant Transmission Facility shall be entitled to receive Merchant Transmission CRRs as determined in accordance with this Section 36.11. A Merchant Transmission CRR allocated through this process is effective for thirty (30) years or for the pre-specified intended life of the Merchant Transmission Facility, whichever is less. Merchant Transmission CRRs represent binding commitments for thirty (30) years or for the pre-specified intended life of the Merchant Transmission Facility, whichever is less. The binding commitment by a CRR Holder that holds Merchant Transmission CRRs may not be terminated or otherwise modified by the CRR Holder prior to the end of the term of the Merchant Transmission CRR.

36.11.2 Procedure For Allocating Merchant Transmission CRRs

No less than forty-five (45) days prior to the in-service date of a Merchant Transmission Facility, the Project Sponsor of the facility will inform the CAISO of the In-Service Date of the facility and that the Project Sponsor will be requesting Merchant Transmission CRRs associated with the Merchant Transmission Facility. The CAISO will complete the Merchant CRR Allocation after the In-Service Date of the facility and will allocate Merchant Transmission CRRs whose payment stream will be retroactive back to the In-Service Date.

36.11.3 CRRs Allocated To A Transmission Facility Project Sponsor

36.11.3.1 Nominations of Merchant Transmission CRRs

The Project Sponsor of a Merchant Transmission Facility must submit nominations for Merchant Transmission CRRs at least twenty-one (21) days prior to the In-Service Date of the facility. The Project Sponsor may nominate up to five (5) individual, Point-to-Point CRRs for each of the two (2) on-peak and off-peak time of use periods. Each of the individual, point-to-point nominations must specify: (i) a single

CRR Source location; (ii) a single CRR Sink location, (iii) a MW quantity; (iv) a time of use period (on-peak or off-peak); and (v) a CRR type, either CRR Options or CRR Obligations.

36.11.3.2 Methodology to Determine Merchant Transmission CRRs

The CAISO shall determine the incremental Merchant Transmission CRRs associated with a Merchant Transmission Facility pursuant to this Section 36.11.3.2. The determination will include an assessment of the simultaneous feasibility of the incremental Merchant Transmission CRRs and all other outstanding CRRs. The CAISO will determine the feasible incremental Merchant Transmission CRRs using a three-step process.

36.11.3.2.1 Step One: the Capability of the Existing Transmission System

In step one the CAISO will determine the base CRR capability of the system using a Simultaneous Feasibility Test that incorporates as Fixed CRRs all existing Encumbrances through the end of the CRR year for which the annual CRR Allocation and CRR Auction processes have already been conducted, including Encumbrances for the month covered by the most recently conducted monthly CRR Allocation and CRR Auction processes. This analysis will determine the extent to which the nominated Merchant Transmission CRRs are feasible on the existing transmission system absent the Merchant Transmission Facility. As a result of this analysis, the CAISO will create temporary test CRR Options to reserve grid capacity that the Project Sponsor of the Merchant Transmission Facility is not eligible to receive. The temporary test CRR Options will have the same CRR Source and CRR Sink pairs as the Merchant Transmission CRR nominations submitted by the Project Sponsor.

36.11.3.2.2 Step Two: Mitigation of Impacts on Existing Encumbrances

In the second step, the CAISO will add the proposed Merchant Transmission Facility to the DC FNM and run a SFT using the Fixed CRRs. The second step will ensure that the addition of a Merchant Transmission Facility does not negatively impact any existing Encumbrances through the end of the CRR year for which the annual CRR Allocation and Auction process for Annual CRRs has already been conducted, including encumbrances for the month covered by the most recently conducted monthly CRR Allocation and CRR Auction processes. For any impacts identified in this step the Project Sponsor of the Merchant Transmission Facility will be required to mitigate the impacts for the same period. The

California Independent System Operator Corporation
Fifth Replacement Tariff

mitigation can include having the Project Sponsor of the Merchant Transmission Facility hold counterflow CRRs that maintain the feasibility of the existing encumbrances over the same period.

36.11.3.2.3 Step Three: the Incremental Merchant Transmission CRRs

In the third step, the CAISO will determine the Merchant Transmission CRRs to be allocated to the Project Sponsor of the Merchant Transmission Facility. The CAISO will determine the capability of the system to award incremental Merchant Transmission CRRs using a DC FNM that incorporates the proposed Merchant Transmission Facility. The CAISO will conduct separate SFTs for each time of use period and season, as needed. For each time of use period and season, as needed, the CAISO will perform a SFT. The SFT includes all existing Encumbrances for the month covered by the most recently conducted CRR Allocation and CRR Auction processes for Monthly CRRs including any temporary test CRRs from step one and any counterflow CRRs from step two. Each SFT will consider the entire set of Merchant Transmission CRR nominations for the time of use period and will solve to award Merchant Transmission CRRs to the Project Sponsor of the Merchant Transmission Facility, subject to simultaneous feasibility. The nominated Merchant Transmission CRRs that are feasible in the SFT for each time of use period will be allocated to the Project Sponsor of the Merchant Transmission Facility.

36.12 [NOT USED]

36.13 CRR Auction

The CAISO shall conduct CRR Auctions on an annual and monthly basis subsequent to each annual and monthly CRR Allocation process. Candidate CRR Holders may bid to purchase and may acquire CRR Obligations, and may sell CRRs, through the CAISO's annual and monthly CRR Auctions in accordance with the provisions of this Section 36.13. CRR Auction results shall be settled as provided in Section 11.2.4.3.

36.13.1 Scope Of The CRR Auctions

The CAISO will conduct a CRR Auction corresponding to and subsequent to the completion of each CRR Allocation process, and prior to the start of the period to which the auctioned CRRs will apply. Each CRR Auction will release CRRs having the same seasons, months and time of use specifications as the CRRs released in the corresponding CRR Allocation. Each CRR Auction will utilize the same DC FNM that was utilized in the corresponding CRR Allocation. For each CRR Auction, the CRRs allocated in the

California Independent System Operator Corporation
Fifth Replacement Tariff

corresponding CRR Allocation will be modeled as fixed injections and withdrawals on the DC FNM and will not be adjusted by the SFT in the CRR Auction process. Thus the CRR Auction will release only those CRRs that are feasible given the results of the corresponding CRR Allocation. CRRs released in a CRR Auction will be indistinguishable from CRRs released in the corresponding CRR Allocation for purposes of settlement and secondary trading. The following additional provisions apply. First, participants in the CRR Auctions will have more choices regarding CRR Sources and CRR Sinks than are eligible for nomination in the CRR Allocations, as described in Section 36.13.5. Second, to the extent a Market Participant receives CRRs in both a CRR Allocation and the corresponding CRR Auction, the CRRs obtained in the CRR Auction will not be eligible for nomination in the PNP. Third, in CRR Year One the CRR Auction cannot be used by CRR Holders to offer for sale CRRs they acquired in a prior CRR Allocation, CRR Auction or through the Secondary Registration System. In the annual and monthly CRR Auction processes for years following CRR Year One, CRR Holders may offer for sale any CRRs held by such holders, subject to the limitations on sale and transfer of Long Term CRRs specified in Section 36.7.1.2. Merchant Transmission CRRs that are CRR Options may be offered for sale in the annual and monthly CRR Auctions for years following CRR Year One, subject to the same temporal limitations that apply to Long Term CRRs as specified in Section 36.7.1.2. As further described in Section 36.13.4, sales of CRRs in the CRR Auctions are accomplished through the submission of a CRR bid to procure a counterflow CRR of the CRR to be liquidated.

36.13.2 Responsibilities Of The CAISO Prior To Each CRR Auction

The CAISO shall publish on the CAISO Website a notice of upcoming CRR Auctions at least seven (7) days prior to the CRR Auction. The CAISO will also provide additional information needed by CRR Auction participants in accordance with the provisions of Section 6.5.1.

36.13.3 CRR Holder Creditworthiness

All Market Participants are eligible to acquire CRRs by participating in the CRR Auction, provided that the Market Participant has met all the CRR Holder requirements described in Section 36.5, the creditworthiness provisions in Section 12 and Section 12.6 and the relevant Business Practice Manual.

36.13.4 Bids In The CRR Auctions

Bids to purchase CRRs shall be submitted in accordance with the requirements set out in this Section 36.13.4 and as further specified in the applicable Business Practice Manuals. Once submitted to the CAISO, CRR bids may not be cancelled or rescinded by the Market Participant after the CRR Auction is closed. Market Participants may bid for Point-to-Point CRRs. Each bid for a Point-to-Point CRR shall specify:

- (a) The associated month or season and time of use period;
- (b) The associated CRR Source and CRR Sink;
- (c) A monotonically non-increasing piecewise linear bid curve in quantities (denominated in thousandths of a MW) and prices (\$/MW).

Bid prices in all CRR bids may be negative. Sales of CRRs in the CRR Auctions are accomplished through the submission of a CRR bid to procure a counterflow CRR of the CRR to be liquidated. If such bids for sale of CRRs are cleared through the CRR Auction, the entitlements rights of the CRR Holder that sold the CRR in this manner are effectively liquidated.

36.13.5 Eligible Sources And Sinks For CRR Auction

Allowable CRR Sources for CRRs acquired/sold in the CRR Auction will be PNodes, Scheduling Points, Trading Hubs, LAPs, MSS-LAPs and Sub-LAPs. Allowable CRR Sinks for CRRs acquired/sold in the CRR Auction will be PNodes, Scheduling Points, Trading Hubs, LAPs, MSS-LAPs and Sub-LAPs.

36.13.6 Clearing Of The CRR Auction

The SFT used to clear the CRR Auction will utilize the same DC FNM and optimization algorithm as the corresponding CRR Allocation, except that nominations to the CRR Auction will have associated price-quantity bid curves. The CRR Auction SFT will use the bid prices in determining which CRRs to award when not all nominations are simultaneously feasible, will select the set of simultaneously feasible CRRs with the highest total auction value as determined by the CRR bids, and will calculate nodal prices at each PNode of the DC FNM. In the event that there are two (2) or more identical bids for a specific combination of CRR Source and CRR Sink that affect an overloaded constraint, the CRR Auction optimization cannot distinguish these bids based on either effectiveness or price and therefore the CRR Auction optimization will award each CRR bidder a pro rata share of the CRRs that can be awarded

California Independent System Operator Corporation
Fifth Replacement Tariff

based on the bid MW amounts. Based on the nodal prices calculated by the CRR Auction SFT, the CRR Market Clearing Price per MW for a specific CRR in most cases will equal the nodal price at the CRR Source minus the nodal price at the CRR Sink. In certain anomalous cases as further described in the Business Practice Manuals, the CRR Market Clearing Price will be based on the CRR MWs cleared and the shadow price for each binding constraint at the specified location.

36.13.7 Announcement Of CRR Auction Results

Within five (5) Business Days after the close of a CRR Auction, the CAISO shall post the results. The results shall include but are not limited to the MW quantity, the CRR Source and CRR Sink for each CRR awarded, the nodal prices calculated by the CRR Auction SFT, and the parties to whom the CRRs were awarded. The CAISO shall not disclose prices specified in any CRR bid.

36.14 CRR Implications Of New IBAA's Or Modifying Existing IBAA's

36.14.1 Coordination Of IBAA Changes With Release Of CRRs

To the extent practicable, the CAISO will coordinate future IBAA changes, including establishment of new IBAA's and modifications to existing IBAA's, with the annual CRR Allocation and CRR Auction processes. Where feasible, the CAISO will implement the FNM containing the IBAA changes for use in the CAISO Markets beginning with the markets for a Trading Day of January 1 of a new calendar year and, consistent with Section 6.5.1, will provide Market Participants all the IBAA modeling and pricing details as part of the FNM information package that is made available for CRR purposes prior to the CAISO conducting the annual CRR Allocation and CRR Auction process for that calendar year. As a result, all CRRs released in that process will be based upon the same FNM for IBAA's that will be used in the CAISO Markets when the released CRRs and the IBAA changes become effective. In the event that there is a need to implement an IBAA change other than on January 1, the CAISO will incorporate the IBAA change into the FNM for the monthly CRR Allocation and CRR Auction process for the first month in which the IBAA change will take effect. In all cases the CAISO will follow the provisions of this Section 36.14 for assessing and mitigating impacts on any Previously-Released CRRs.

36.14.2 Modifications To CRR Settlement To Reflect Ibaa Changes

To the extent an IBAA change, including the establishment of a new IBAA or a change to an existing IBAA, modifies the pricing for Settlement purposes of IFM scheduled transactions between the CAISO

California Independent System Operator Corporation
Fifth Replacement Tariff

Balancing Authority Area and the IBAA, the Settlement of certain Previously-Released CRRs may no longer be consistent with the modified IFM Settlement. A CRR Holder of a Previously-Released CRR whose CRR Source or CRR Sink is affected by an IBAA change may make a one-time election either to (a) modify the Settlement of the affected CRR Source or CRR Sink to conform to the revised IFM pricing associated with the IBAA change, or (b) retain the original CRR Source or CRR Sink specification of the Previously-Released CRR. The CRR Holder of such a CRR must make the one-time election prior to the first CRR Allocation and CRR Auction process that incorporates the IBAA change in the CRR FNM, in accordance with the process time line specified in the applicable Business Practice Manual. If the IBAA change is implemented to coincide with the beginning of a calendar year and is coordinated with the annual CRR Allocation and CRR Auction process for that year, as described in Section 36.14.1, the provisions discussed herein apply only to Previously-Released CRRs that are Long Term CRRs and Previously-Released CRRs that are Seasonal CRRs obtained through the CRR Allocation and are eligible for PNP nomination. In the event that the IBAA change is implemented in the CAISO Markets other than on January 1, then these provisions apply also to any Previously-Released CRRs that are Seasonal CRRs effective for the remainder of the year in which the IBAA change is implemented.

36.14.3 IBAA Change Impact On Adequacy Of Previously-Released CRRs

It is possible that, as a result of modifying the CRR Sources or CRR Sinks of Previously-Released CRRs as provided in Section 36.14.2, the entire set of Previously-Released CRRs may no longer be simultaneously feasible. Any such violation of simultaneous feasibility may or may not lead to a revenue shortfall, that is, a deficiency over the course of a month between the IFM Congestion Charge and the amount of funds needed to fully settle the CRRs that are in effect for that month. Consistent with Section 11.2.4.4.1, any revenue shortfall that may result from IBAA-related changes to CRR Sources and CRR Sinks would be funded through the relevant daily CRR Balancing Account.

California Independent System Operator Corporation
Fifth Replacement Tariff

36.15 [NOT USED]

37. Rules Of Conduct

37.1 Objectives, Definitions, And Scope

37.1.1 Purpose

Section 37 sets forth the guiding principles for participation in the markets administered by the CAISO. The specified Rules of Conduct are intended to provide fair notice to Market Participants of the conduct expected of them, to provide an environment in which all parties may participate on a fair and equal basis, to redress instances of gaming and other instances of anticompetitive behavior, and thereby to foster confidence of Market Participants, ratepayers and the general public in the proper functioning of the CAISO markets.

37.1.2 Objectives

The objectives of this CAISO Tariff are to:

- (a) Provide clear Rules of Conduct specifying the behavior expected of Market Participants; and
- (b) For those Rules of Conduct involving objectively identifiable behavior, establish in advance the Sanctions for violation of the specified Rules of Conduct.

37.1.3 Application Of Other Remedies

The activities and remedies authorized under this Section 37 are in addition to any other actions or relief that may be available to the CAISO elsewhere in the CAISO Tariff or under law, regulation or order. Nothing in this Section 37 limits or should be construed to limit the right of the CAISO to take action or seek relief otherwise available to it, and such action or relief may be pursued in addition to the action or relief specified in this Section 37.

37.1.4 [NOT USED]

37.1.5 Administration

The CAISO shall administer the following Rules of Conduct specified herein: Section 37.4.1, Section 37.4.2, Section 37.4.3, Section 37.5.2, Section 37.6.1, Section 37.6.2, and Section 37.6.3. FERC shall administer the following Rules of Conduct specified herein: Section 37.2.1, Section 37.2.3, Section 37.2.4, and Section 37.3.1.

California Independent System Operator Corporation
Fifth Replacement Tariff

37.2 Comply With Operating Orders

37.2.1 Compliance With Orders Generally

37.2.1.1 Expected Conduct

Market Participants must comply with operating orders issued by the CAISO as authorized under the CAISO Tariff. For purposes of enforcement under this Section 37.2, an operating order shall be an order(s) from the CAISO directing a Market Participant to undertake, a single, clearly specified action (e.g., the operation of a specific device, or change in status of a particular Generating Unit) that is intended by the ISO to resolve a specific operating condition. Deviation from an ADS Dispatch Instruction shall not constitute a violation of this Section 37.2.1.1. A Market Participant's failure to obey an operating order containing multiple instructions to address a specific operating condition will result in a single violation of Section 37.2. If some limitation prevents the Market Participant from fulfilling the action requested by the CAISO then the Market Participant must promptly and directly communicate the nature of any such limitation to the CAISO.

37.2.1.2 [NOT USED]

37.2.2 [NOT USED]

37.2.2.1 [NOT USED]

37.2.2.2 [NOT USED]

37.2.3 Operations & Maintenance Practices

37.2.3.1 Expected Conduct

Market Participants shall undertake such operating and maintenance practices as necessary to avoid contributing to a major Outage or prolonging response time to a major Outage. For the purposes of this Section 37.2.3.1, a major Outage is an Outage that affects at least ten (10) percent of the Load served by the Distribution System of a UDC or any Outage that results in major damage to the CAISO Controlled Grid or to the health and safety of personnel.

37.2.3.2 [NOT USED]

37.2.4 Resource Adequacy Availability

37.2.4.1 Expected Conduct

California Independent System Operator Corporation
Fifth Replacement Tariff

Subject to Section 40, a Market Participant shall start a Generating Unit listed as a Resource Adequacy Resource and bring it on-line and/or available consistent with a DAM or RUC commitment or Real-Time Dispatch Instructions and once started up, shall not shut down a Generating Unit listed as a Resource Adequacy Resource in a manner that is inconsistent with a DAM or RUC commitment or Real-Time Dispatch Instructions, unless the CAISO releases the Generating Unit after the RUC process is completed, or a derate or Outage prevents the Generating Unit from being on-line and available.

37.2.4.2 [NOT USED]

37.2.5 [NOT USED]

37.2.6 [NOT USED]

37.3 Submit Feasible Bids And Submissions To Self-Provide

37.3.1 Bidding Generally

37.3.1.1 Expected Conduct

Market Participants must submit Bids for Energy, RUC Capacity and Ancillary Services and Submissions to Self-Provide an Ancillary Service from resources that are reasonably expected to be available and capable of performing at the levels specified in the Bid, and to remain available and capable of so performing based on all information that is known to the Market Participant or should have been known to the Market Participant at the time of submission. HASP Intertie Schedules for import or export Energy are not subject to the foregoing requirement, but failure to deliver on such HASP Intertie Schedules can be subject to referral by DMM under Section 11.1, Appendix P where the failure to deliver is suspected to be a Market Violation.

37.3.1.2 [NOT USED]

37.3.2 Exceptions

The submission of a Bid or of a Submission to Self-Provide Ancillary Services that causes, or that the CAISO expects to cause Congestion shall not, by itself, constitute a violation of Section 37.3.1.

37.4 Comply With Availability Reporting Requirements

37.4.1 Reporting Availability

37.4.1.1 Expected Conduct

California Independent System Operator Corporation
Fifth Replacement Tariff

A Market Participant shall notify the CAISO Control Center of any Outage reportable pursuant to Section 9.3.10.3.1 of a Generating Unit subject to Section 4.6 within sixty (60) minutes after the Outage is discovered.

37.4.1.2 Sanctions

A "violation" for purposes of this Section shall mean each failure to notify the CAISO Control Center about an Outage of a Generating Unit within sixty (60) minutes after the Outage is discovered, as required by Section 37.4.1, except that (a) for each Generating Unit, the first such failure in a calendar month shall not constitute a violation, and (b) for each Generating Unit, multiple failures in the same calendar day shall constitute a single violation. The Sanctions for a violation of Section 37.4.1 shall be as follows:

- (a) for each Generating Unit that is the subject of a violation, the Sanction for the first violation in a calendar month shall be a warning letter;
- (b) for each Generating Unit that is the subject of a violation, the Sanction for the second and subsequent violations in a calendar month will be a financial penalty, as follows:
 - (i) if the Generating Unit has not been the subject of a financial penalty for a previous violation within twelve (12) months of the instant violation, the Sanction will be \$1,000;
 - (ii) if the Generating Unit has been the subject of one financial penalty for a previous violation within twelve (12) months of the instant violation, the Sanction will be \$2,000;
 - (iii) if the Generating Unit has been the subject of two or more financial penalties for previous violations within twelve (12) months of the instant violation, the Sanction will be \$5,000.

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 CAISO Outage Coordination Office in accordance with Section 9.3.2, Section 9.3.9, and Section 9.3.6.6. A Market

California Independent System Operator Corporation
Fifth Replacement Tariff

Participant shall not commence any Outage without obtaining final approval from the CAISO Control Center in accordance with Sections 9.3.9 and 9.3.10.

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

As required by Section 9.3.10.6, a Market Participant must provide a detailed explanation of a Forced Outage 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. To enable the CAISO to review the explanation submitted by the Operator and to prepare a report on the Forced Outage, the CAISO may request that the Market Participant submit additional information regarding the Forced Outage. An Operator must provide information requested by the CAISO within four (4) Business Days of the CAISO's request for the submission of additional information regarding the Forced Outage.

37.4.3.2 Sanctions

The Sanction for failing to provide an explanation of Forced Outage within the deadline established in Section 37.4.3.1 and Section 9.3.10.6 shall be \$500 per day for each day the explanation is late. The Sanction for failing to provide a response to a request for additional information regarding the Forced Outage within the deadline established in the request for additional information shall be as specified in Section 37.6.1.

37.4.4 Enhancements And Exceptions

Except as otherwise specifically provided, penalty amounts shall be tripled for any violation of Section 37.4.1 through Section 37.4.3 that occurs during a CAISO System Emergency. Violations of the above rules that result in circumstances in which an Uninstructed Deviation Penalty under Section 11.23 is assessed shall not be subject to Sanction under this Section. 37.4.

California Independent System Operator Corporation
Fifth Replacement Tariff

37.5 Provide Factually Accurate Information

37.5.1 [NOT USED]

37.5.1.2 [NOT USED]

37.5.2 Inaccurate or Late Actual SQMD

37.5.2.1 Expected Conduct

Market Participants shall provide complete and accurate Settlement Quality Meter Data for each Trading Hour and shall correct any errors in such data no later than forty-eight (48) Business Days after the Trading Day (T+48B). Failure either to submit complete and accurate Actual Settlement Quality Meter Data or to replace Estimated Settlement Quality Meter Data with complete and accurate Actual Settlement Quality Meter Data by T+48B is late Actual Settlement Quality Meter Data and shall be a violation of this rule. The failure to provide complete and accurate Actual Settlement Quality Meter Data, as required by Section 10.3.6 that causes an error to exist in such Settlement Quality Meter Data after forty-eight (48) Business Days after the Trading Day (T+48B) shall be a violation of this rule. Scheduling Coordinators that fail to submit Scheduling Coordinator Estimated Settlement Quality Meter Data that is complete and based on a good faith estimate that reasonably represents Demand and/or Generation quantities for each Settlement Period as required by Section 10 shall be a violation of this rule and may be referred to DMM for investigation.

37.5.2.2 Sanctions

Violations under this Section 37.5.2 shall be subject to Sanction described in Section 37.11.

37.5.2.3 Disposition of Sanction Proceeds

For purposes of redistributing collected market adjustments, any amounts collected under this provision shall be applied first to those parties affected by the conduct. Any excess amounts shall be disposed of as set forth in Section 37.9.4.

37.6 Provide Information Required By CAISO Tariff

37.6.1 Required Information Generally

37.6.1.1 Expected Conduct

Except as provided below in Section 37.6.4 (Review by FERC), all information that is required to be submitted to the CAISO under the CAISO Tariff must be submitted by the specified deadline. For the

California Independent System Operator Corporation
Fifth Replacement Tariff

purposes of this Section 37.6.1.1, the specified deadline is either the deadline established directly in the CAISO Tariff or, where the CAISO Tariff does not establish a specific deadline, by the deadline that the CAISO has authority to establish under the CAISO Tariff.

37.6.1.2 Sanctions

Except as otherwise provided below, in Section 37.6.2 and Section 37.6.3, the Sanction for a violation of Section 37.6.1.1 shall be \$500 for each day that the required information is late.

37.6.2 Investigation Information

37.6.2.1 Expected Conduct

Except as provided below in Section 37.6.4 (Review by FERC), Market Participants must submit information in response to a written request by the CAISO for information requested in the course of an investigation authorized by the CAISO by the deadline established in the request by the CAISO.

37.6.2.2 Sanctions

The Sanction for a violation of Section 37.6.2 shall be as follows: for the first violation in a rolling twelve (12) month period, \$1000/day; for the second violation in a rolling twelve (12) month period, \$2000/day; for the third and subsequent violations in a rolling twelve (12) month period, \$5000/day. For purposes of this subsection, a violation shall be each failure to provide a full response to a written request and the Sanction shall be determined from the date that the response was due until a full response to the request is received.

37.6.3 Audit Materials

37.6.3.1 Expected Conduct

Except as provided below in Section 37.6.4 (Review by FERC), Market Participants shall comply with the CAISO's audit and/or test procedures authorized pursuant to Section 10.3.10, and further shall perform and submit an annual self-audit as required by the procedures the ISO establishes pursuant to Section 10.3.10, including procedures established relating to the deadline for submitting the required audit.

37.6.3.2 Sanctions

For failure to submit an audit report as required by Section 10.3.10.1, the Sanction shall be \$1000/day until such report is received by the CAISO. For all other violations of this rule the Sanctions shall be as follows: for the first violation in a rolling twelve (12) month period, \$1000/day; for the second violation in a

California Independent System Operator Corporation
Fifth Replacement Tariff

rolling twelve (12) month period, \$2000/day; for the third and subsequent violations in a rolling twelve (12) month period, \$5000/day. For purposes of this subsection, a "violation" shall be each failure to provide all information required under the audit or test, from the date that the information was due until all required information is received by the CAISO.

37.6.4 Review By FERC

A Market Participant who objects to an information, audit or test obligation that is enforceable under Section 37.6.1, Section 37.6.2 or Section 37.6.3 above shall have the right immediately (and in all events, no later than the due date for the information) to seek review of the obligation with FERC. In the event that such review is sought, the time for submitting the response or other information to the CAISO shall be tolled until FERC resolves the issue.

37.7 [NOT USED]

37.8 Process For Investigation And Enforcement

37.8.1 Purpose; Scope

The provisions of this Section 37.8 set forth the procedures by which the CAISO will independently investigate potential violations of the Rules of Conduct and administer enforcement activities. Except as hereinafter provided the provisions of this section apply to the Rules of Conduct set forth in Sections 37.2 through 37.6.

37.8.2 Referrals To FERC

Section 37.2.1, Section 37.2.3, Section 37.2.4, and Section 37.3.1 shall be enforced by FERC, in accordance with FERC's rules and procedures. Pursuant to Section 11 of Appendix P, DMM shall refer suspected violations of Section 37.2.1, Section 37.2.3, Section 37.2.4, and Section 37.3.1 to FERC. For violations of this Section 37 that are enforced by FERC, Section 37.8.3, Section 37.8.4, Section 37.8.5, Section 37.8.6, Section 37.8.7, Section 37.8.8, Section 37.8.9, and Section 37.8.10 shall not apply to any investigation DMM may conduct of a suspected Market Violation to FERC.

37.8.3 Investigation

The CAISO shall conduct a reasonable investigation seeking available facts, data, and other information relevant to the potential Rules of Conduct violation.

California Independent System Operator Corporation
Fifth Replacement Tariff

37.8.4 Notice

The CAISO shall provide notice of the investigation in sufficient detail to allow for a meaningful response to the Scheduling Coordinator and, as limited below, to all Market Participants the Scheduling Coordinator represents that are the subject(s) of the investigation. The CAISO shall contact the Market Participant(s) that may be involved, so long as the CAISO has sufficient objective information to identify and verify the role of the Market Participant(s) in the potential Rules of Conduct violation. Such Market Participant(s) will likely have an existing contractual relationship with the CAISO (e.g., UDC, MSS, CAISO Metered Entity, Participating Transmission Owner, Participating Generator, Participating Load, or Demand Response Provider).

37.8.5 Opportunity To Present Evidence

The CAISO shall provide an opportunity to the Market Participant(s) that are the subject(s) of the investigation to present any issues of fact or other information relevant to the potential Rules of Conduct violation being investigated. The CAISO shall consider all such information or data presented.

37.8.6 Results Of Investigation

The CAISO shall notify the Market Participant(s) that are the subject(s) of the investigation of the results of the investigation. The Market Participant(s) shall have thirty (30) days to respond to the findings of the CAISO before the CAISO makes a determination of whether a Sanction is required by this CAISO Tariff.

37.8.7 Statement Of Findings And Conclusions

Where the investigation results in a Sanction, the CAISO shall state its findings and conclusions in writing, and will make such writing available to the Scheduling Coordinator and, as provided in Section 37.8.4, to the Market Participant(s) that are the subject(s) of the investigation.

37.8.8 Officer Representative

Where an investigation results in a Sanction by the CAISO, the CAISO shall direct its notice of such result to a responsible representative of the Scheduling Coordinator and, as provided in Section 37.8.4, to the Market Participant(s) that are the subject(s) of the investigation at the officer level.

37.8.9 Record Of Investigation

Where an investigation results in a Sanction, the CAISO will maintain a record of the investigation until its decision has been finally reviewed, if review is sought, or until the period for seeking review has expired.

California Independent System Operator Corporation
Fifth Replacement Tariff

37.8.10 Review Of Determination

A Market Participant that receives a Sanction may obtain immediate review of the CAISO's determination by directly appealing to FERC, in accordance with FERC's rules and procedures. In such case, the applicable Scheduling Coordinator shall also dispute the Recalculation Settlement Statement containing the financial penalty, in accordance with Section 11. The Recalculation Settlement Statement dispute and appeal to FERC must be made in accordance with the timeline for raising disputes specified in Section 11.29.8. The penalty will be tolled until FERC renders its decision on the appeal. The disposition by FERC of such appeal shall be final, and no separate dispute of such Sanction may be initiated under Section 13, except as provided in Section 37.9.3.4. For the purpose of applying the time limitations set forth in Section 37.10.1, a Sanction will be considered assessed when it is included on a Recalculation Settlement Statement, whether or not the CAISO accepts a Scheduling Coordinator's dispute of such Recalculation Settlement Statement pending resolution of an appeal to FERC in accordance with this section or Section 37.9.3.3.

37.9 Administration Of Sanctions

37.9.1 Assessment; Waivers And Adjustments

Penalty amounts for violation of these Rules of Conduct shall be calculated as specified in Section 37.4.1.2, Section 37.4.2.2, Section 37.4.3.2, Section 37.4.4, Section 37.5.2.2, Section 37.6.1.2, Section 37.6.2.2, and Section 37.6.3.2.

37.9.2 [NOT USED]

37.9.2.1 [NOT USED]

37.9.2.2 [NOT USED]

37.9.2.3 [NOT USED]

37.9.2.4 [NOT USED]

37.9.2.5 [NOT USED]

37.9.2.6 [NOT USED]

37.9.3 Settlement

37.9.3.1 Settlement Statements

California Independent System Operator Corporation
Fifth Replacement Tariff

The CAISO will administer any penalties issued under this Section 37 through Recalculation Settlement Statements, as relevant, issued to the responsible Scheduling Coordinator by the CAISO. Before invoicing a financial penalty through the Settlement process, the CAISO will provide a description of the penalty to the responsible Scheduling Coordinator and all Market Participants the Scheduling Coordinator represents that are liable for the penalty, when the CAISO has sufficient objective information to identify and verify responsibility of such Market Participants. The description shall include the identity of the Market Participant that committed the violation and the amount of the penalty.

37.9.3.2 Payment

Except as provided in Section 37.8.10 or Section 37.9.3.3 below, the Scheduling Coordinator shall be obligated to pay all penalty amounts reflected on Settlement Statements to the CAISO pursuant to the CAISO's Settlement process, as set forth in Section 11.

37.9.3.3 Other Responsible Party

Where a party or parties other than the Scheduling Coordinator is responsible for the conduct giving rise to a penalty reflected on a Settlement Statement, and where the Scheduling Coordinator bears no responsibility for the conduct, such other party or parties ultimately shall be liable for the penalty. Under such circumstances, the Scheduling Coordinator shall use reasonable efforts to obtain payment of the penalty from the responsible party(ies) and to remit such payment to the CAISO in the ordinary course of the Settlement process. In the event that the responsible party(ies) wish to dispute the penalty, or the Scheduling Coordinator otherwise is unable to obtain payment from the responsible parties, the Scheduling Coordinator shall notify the CAISO and dispute the Settlement Statement. The CAISO promptly shall notify FERC. If the CAISO finds that a Market Participant separate from the Scheduling Coordinator that is unable to obtain payment from the responsible party(ies) is solely responsible for a violation, the Scheduling Coordinator that is unable to obtain payment may net its payment of its Invoice amount by the amount of the penalty in question. The CAISO may refuse to offer further service to any responsible party that fails to pay a penalty, unless excused under the terms of the CAISO Tariff, by providing notice of such refusal to the Scheduling Coordinator. Following such notice, the Scheduling Coordinator shall be liable for any subsequent penalties assessed on account of such responsible party.

37.9.3.4 [NOT USED]

California Independent System Operator Corporation
Fifth Replacement Tariff

37.9.4 Disposition Of Proceeds

The CAISO shall collect penalties assessed pursuant to this Section 37.9 and deposit such amounts in an interest bearing trust account. After the end of each calendar year, the CAISO shall distribute the penalty amounts together with interest earned through payments to Scheduling Coordinators as provided herein.

For the purpose of this Section 37.9.4, "eligible Market Participants" shall be those Market Participants that were not assessed a financial penalty pursuant to this Section 37 during the calendar year.

Each Scheduling Coordinator that paid GMC during the calendar year will identify, in a manner to be specified by the CAISO, the amount of GMC paid by each Market Participant for whom that Scheduling Coordinator provided service during that calendar year. The total amount assigned to all Market Participants served by that Scheduling Coordinator in such calendar year (including the Scheduling Coordinator itself for services provided on its own behalf), shall equal the total GMC paid by that Scheduling Coordinator.

The CAISO will calculate the payment due each Scheduling Coordinator based on the lesser of the GMC actually paid by all eligible Market Participants represented by that Scheduling Coordinator, or the product of a) the amount in the trust account, including interest, and b) the ratio of the GMC paid by each Scheduling Coordinator for eligible Market Participants, to the total of such amounts paid by all Scheduling Coordinators. Each Scheduling Coordinator is responsible for distributing payments to the eligible Market Participants it represented in proportion to GMC collected from each eligible Market Participant.

Prior to allocating the penalty proceeds, the CAISO will obtain FERC's approval of its determination of eligible Market Participants and their respective shares of the trust account proceeds. If the total amount in the trust account to be so allocated exceeds the total GMC obligation of all eligible Market Participants, then such excess shall be treated in accordance with Section 11.29.9.6.3.

37.10 Miscellaneous

37.10.1 Time Limitation

An investigation of events potentially subject to Sanction by the CAISO under this Section 37 must be commenced within ninety (90) days of discovery of the events. Sanctions may be assessed under this Section 37 up to one year after discovery of the events constituting the violation, but no later than three

California Independent System Operator Corporation
Fifth Replacement Tariff

years after the date of the violation. Nothing in this section shall limit the rights or liabilities of any party under any other provision of applicable laws, regulations or tariff provisions.

37.10.2 No Limitation On Other Rights

Nothing contained in this Section 37 shall limit the ability of the CAISO to collect information from Market Participants or to establish new provisions pursuant to Section 15.

37.11 Method For Calculating Penalties

37.11.1 Inaccurate or Late Actual SQMD Penalty

There is no Sanction for the submission of inaccurate or late Actual Settlement Quality Meter Data used for a Recalculation Settlement Statement T+ 12B. However, failure by a Scheduling Coordinator, under a specific SCID, to submit Actual Settlement Quality Meter Data or to replace Estimated Settlement Quality Meter Data with Actual Settlement Quality Meter Data by forty-eight (48) Business Days after the Trading Day (T+48B) for one or more scheduled Resource IDs for a given Trading Day is late Actual Settlement Quality Meter Data and constitutes a Rule of Conduct violation. The Sanction is \$1,000 and the Scheduling Coordinator is required to submit Actual Settlement Quality Meter Data during the period specified in Section 10.3.6.4 for Recalculation Settlement Statement T+9M. Where a Scheduling Coordinator fails to submit Actual Settlement Quality Meter Data or to replace Estimated Settlement Quality Meter Data with Actual Settlement Quality Meter Data by T+48B for one or more scheduled Resource IDs for a given Trading Day and that Scheduling Coordinator also fails to submit Actual Settlement Quality Meter Data during the period specified in Section 10.3.6.3 for Recalculation Settlement Statement T+9M, then the Scheduling Coordinator shall also be levied a Sanction of \$3,000. The submission by a Scheduling Coordinator of Actual Settlement Quality Meter Data that causes an error to exist in such Actual Settlement Quality Meter Data after T+48B shall constitute inaccurate Actual Settlement Quality Meter Data and is a Rule of Conduct violation. The Sanction is \$1,000. All violations of this Section 37.11.1 shall be found per SCID per Trading Day and all Sanctions assessed under this Section 37.11.1 shall be levied per SCID per Trading Day. Accordingly, for any given trade date, one Scheduling Coordinator may be found to have committed multiple violations of, and may be assessed multiple Sanctions under, this Section 37.11.1

37.11.2 Inaccurate Actual SQMD Penalty Without Recal. Settl Stmt.

California Independent System Operator Corporation
Fifth Replacement Tariff

If the CAISO does not perform a Recalculation Settlement Statement or re-run, for cases of inaccurate Actual Settlement Quality Meter Data, the penalty will be a market adjustment and a Sanction. The Sanction shall be \$1,000. The market adjustment approximates the financial impact on the market; however, it does not completely reflect all the Settlement consequences of inaccurately submitted Meter Data. The approximated value of the inaccurate Meter Data in question will be calculated and returned to the market based on the average of the pro rata share of Unaccounted for Energy (UFE) charged in the utility Service Area during the period of the inaccurate Meter Data event. If the error is to the detriment of the responsible Scheduling Coordinator (e.g., under-reported Generation or over-reported Demand), and the CAISO does not produce a Recalculation Settlement Statement or perform a re-run, then no market adjustment will be made but the Sanction of \$1,000 still shall be levied.

For the market adjustment, the applicable price will be the greater of: (1) the simple average of the relevant twelve (12) five-minute LMPs for each hour in which inaccurate Meter Data occurred; or (2) \$10/MWh. The LMP used will be the value posted on OASIS for each Trading Hour of the applicable Trading Day.

38. Market Monitoring

To comply with Commission Order No. 719, P 392, Section 38 has been consolidated with, and moved to, Appendix O (for the MSC) and Appendix P (for DMM). Where a provision in Appendix O or Appendix P is cross-referenced in another section or appendix of this Tariff, the language in Appendix O or Appendix P shall govern in the event of any conflict.

39. Market Power Mitigation Procedures

39.1 Intent Of CAISO Mitigation Measures; Additional FERC Filings

These CAISO market power mitigation measures ("Mitigation Measures") are intended to provide the means for the CAISO to mitigate the market effects of any conduct that would substantially distort competitive outcomes in the CAISO Markets while avoiding unnecessary interference with competitive price signals. These Mitigation Measures are intended to minimize interference with an open and competitive market, and thus to permit, to the maximum extent practicable, price levels to be determined by competitive forces under the prevailing market conditions. To that end, the Mitigation Measures

California Independent System Operator Corporation
Fifth Replacement Tariff

authorize the mitigation only of specific conduct identified through explicit procedures specified below. In addition, the CAISO shall monitor the markets it administers for conduct that it determines constitutes an abuse of market power but is not addressed by the market power mitigation procedures specified below. If the CAISO identifies any such conduct, it shall make a filing under Section 205 of the Federal Power Act, 16 U.S.C. § 824d, with FERC requesting authorization to apply appropriate mitigation measures. Any such filing shall identify the particular conduct the CAISO believes warrants mitigation, shall propose a specific mitigation measure for the conduct, and shall set forth the CAISO's justification for imposing that mitigation measure.

39.2 Conditions For The Imposition Of Mitigation Measures

39.2.1 Conduct Inconsistent With Competitive Conduct

In general, the CAISO shall consider a Market Participant's conduct to be inconsistent with competitive conduct if the conduct would not be in the economic interest of the Market Participant in the absence of market power. The categories of conduct that are inconsistent with competitive conduct include, but may not be limited to, the four categories of conduct specified in Section 39.3 below.

39.3 Categories Of Conduct That May Warrant Mitigation

39.3.1 Conduct Regarding Bidding, Scheduling Or Facility Operation

Mitigation Measures may be applied to bidding, scheduling or operation of an Electric Facility or as specified in Section 39.3.1. The following categories of conduct, whether by a single firm or by multiple firms acting in concert, may cause a material effect on prices or generally the outcome of the CAISO Markets if exercised from a position of market power. Accordingly, the CAISO shall monitor the CAISO Markets for the following categories of conduct, and shall impose appropriate Mitigation Measures if such conduct is detected and the other applicable conditions for the imposition of Mitigation Measures are met:

- (1) Physical withholding of an Electric Facility, in whole or in part, that is, not offering to sell or schedule the output of or services provided by an Electric Facility capable of serving a CAISO Market. Such withholding may include, but not be limited to: (i) falsely declaring that an Electric Facility has been forced out of service or otherwise become totally or partially unavailable, (ii) refusing to offer Bids for an Electric Facility when it would be in the economic interest, absent

California Independent System Operator Corporation
Fifth Replacement Tariff

market power, of the withholding entity to do so, (iii) declining Bids called upon by the CAISO (unless the CAISO is informed in accordance with established procedures that the relevant resource for which the Bid is submitted has undergone a forced outage or derate), or (iv) operating a Generating Unit in Real-Time to produce an output level that is less than the Dispatch Instruction.

- (2) Economic withholding of an Electric Facility, that is, submitting Bids for an Electric Facility that are unjustifiably high (relative to known operational characteristics and/or the known operating cost of the resource) so that: (i) the Electric Facility is not or will not be dispatched or scheduled, or (ii) the Bids will set LMPs.
- (3) Uneconomic production from an Electric Facility, that is, increasing the output of an Electric Facility to levels that would otherwise be uneconomic in order to cause, and obtain benefits from, a Transmission Constraint.
- (4) Bidding practices that distort prices or uplift charges away from those expected in a competitive market, such as registering Start-Up Cost and Minimum Load Cost data or submitting Bid Costs on behalf of an Electric Facility that are unjustifiably high (relative to known operational characteristics and/or the known operating cost of the resource) or misrepresenting the physical operating capabilities of an Electric Facility resulting in uplift payments or prices significantly in excess of actual costs.

39.3.2 Market Effects Of Rules, Standards, Procedures, Other Items

Mitigation Measures may also be imposed to mitigate the market effects of a rule, standard, procedure, design feature, or known software imperfection of a CAISO Market that allows a Market Participant to manipulate market prices or otherwise impair the efficient operation of that market, pending the revision of such rule, standard, procedure design feature, or software defect to preclude such manipulation of prices or impairment of efficiency.

39.3.3 Using Different Prices In Other Markets Not Uncompetitive

Taking advantage of opportunities to sell at a higher price or buy at a lower price in a market other than a CAISO Market shall not be deemed a form of withholding or otherwise inconsistent with competitive conduct.

39.3.4 Foregoing Category List Subject To Amendment As Appropriate

The CAISO shall monitor CAISO Markets for other categories of conduct, whether by a single firm or by multiple firms acting in concert, that have material effects on prices in a CAISO Market or other payments. The CAISO shall seek to amend the foregoing list as may be appropriate to include any such conduct that would substantially distort or impair the competitiveness of any of the CAISO Markets.

39.4 Sanctions For Physical Withholding

The CAISO may report a Market Participant the CAISO determines to have engaged in physical withholding, including providing the CAISO false information regarding derating or outage of an Electric Facility, to the Federal Energy Regulatory Commission in accordance with Section 9.3.10.5. In addition, a Market Participant that fails to operate a Generating Unit in conformance with CAISO Dispatch Instructions shall be subject to the penalties set forth in Section 11.23.

39.5 FERC-Ordered Measures

In addition to any mitigation measures specified above, the CAISO shall administer, and apply when appropriate in accordance with their terms, such other mitigation measures as it may be directed to implement by order of the FERC.

39.6 Rules Limiting Certain Energy, AS, And RUC Bids

39.6.1 Maximum Bid Prices

Notwithstanding any other provision of this CAISO Tariff, maximum Bid price provisions of Section 39 shall apply to limit, Energy Bids, RUC Availability Bids, and Ancillary Service Bids as specified below.

39.6.1.1 Maximum Price for Energy Bids

For the twelve (12) months following the effective date of this Section, the maximum Energy Bid prices shall be \$500/MWh. After the twelfth month following the effective date of this Section, the maximum Energy Bid price shall be \$750/MWh. After the twenty-fourth month following the effective date of this Section, the maximum Energy Bid price shall be \$1,000/MWh.

California Independent System Operator Corporation
Fifth Replacement Tariff

39.6.1.2 Maximum RUC Availability Bid Prices

The maximum RUC Availability Bid price shall be \$250/MW/h.

39.6.1.3 Maximum Ancillary Services Bid Prices

The maximum level for Ancillary Services Bid prices shall be \$250/MWh.

39.6.1.3.1 Maximum Regulation Mileage Bid Price

The maximum Mileage Bid price shall be \$50.

39.6.1.4 Minimum Bid Price for Energy Bids

Energy Bids into the CAISO Markets less than -\$30/MWh are not eligible to set any LMP. If the CAISO dispatches a resource with an Energy Bid less than -\$30/MWh, the Scheduling Coordinator on behalf of the resource will be eligible to be paid the Bid price upon the submission of detailed information justifying the cost components of the Bid to the CAISO and FERC no later than seven (7) days after the end of the month in which the Bid was submitted. The CAISO will treat such information as confidential and will apply the procedure in Section 20.4 with regard to requests for disclosure of such information. The CAISO shall pay Scheduling Coordinators for amounts in excess of -\$30/MWh minimum Bid price upon FERC acceptance of the information justifying the cost components. Virtual Bids may not be less than -\$30/MWh.

39.6.1.5 Minimum Bid Price for Ancillary and RUC Bids

Ancillary Service Bids and RUC Availability Bids submitted into CAISO markets must have Bid prices not less than \$0/MW/h.

39.6.1.5.1 Minimum Regulation Mileage Bid Prices

Regulation Mileage Bids submitted into CAISO markets must have Bid prices not less than \$0.

39.6.1.6 Maximum Start-Up Cost and Minimum Load Cost Registered Cost Values

The maximum Start-Up Cost and Minimum Load Cost values registered in the Master File by Scheduling Coordinators for resources that elect the Registered Cost option in accordance with Section 30.4 will be limited to 200% of the Projected Proxy Cost. The Projected Proxy Cost will include a gas price component and, if eligible, a projected Greenhouse Gas Allowance Price component calculated as set forth in this Section 36.6.1.6.

39.6.1.6.1 Gas Price Component of Projected Proxy Cost

California Independent System Operator Corporation
Fifth Replacement Tariff

For natural gas-fired resources, the CAISO will calculate a gas price to be used in establishing maximum Start-Up Costs and Minimum Load Costs after the twenty-first day of each month and post it on the CAISO Website by the end of each calendar month. The price will be applicable for Scheduling Coordinators electing the Registered Cost option until a new gas price is calculated and posted on the CAISO Website. The gas price will be calculated as follows:

- (1) Daily closing prices for monthly natural gas futures contracts at Henry Hub for the next calendar month are averaged over the first twenty-one (21) days of the month, resulting in a single average for the next calendar month.
- (2) Daily prices for futures contracts for basis swaps at identified California delivery points, are averaged over the first twenty-one (21) days of the month for the identified California delivery points as set forth in the Business Practice Manual.
- (3) For each of the California delivery point, the average Henry Hub and basis swap prices are combined and will be used as the baseline gas price applicable for calculating the caps for Start-Up and Minimum Load costs for resources electing the Registered Cost option. The most geographically appropriate will apply to a particular resource.
- (4) The applicable intra-state gas transportation charge as set forth in the Business Practice Manual will be added to the baseline gas price for each resource that elects the Registered Cost option to create a final gas price for calculating the caps for Start-Up and Minimum Load Costs for each such resource.

For non-natural gas-fired resources, the Projected Proxy Costs for Start-Up Costs and Minimum Load Costs will be calculated using the information contained in the Master File used for calculating the Proxy Cost, as set forth in the Business Practice Manual.

39.6.1.6.2 Projected Greenhouse Gas Allowance Price

For resources that are registered with the California Air Resources Board as having a greenhouse gas compliance obligation, the CAISO will calculate a projected Greenhouse Gas Allowance Price component to be used in establishing maximum Start-Up Costs and Minimum Load Costs after the twenty-first day of each month and will post it on the CAISO Website by the end of that month. The projected Greenhouse Gas Allowance Price component will be applicable for Scheduling Coordinators electing the Registered

California Independent System Operator Corporation
Fifth Replacement Tariff

Cost option until a new projected Greenhouse Gas Allowance Price component is calculated and posted on the CAISO Website. The projected Greenhouse Gas Allowance Price component will be calculated by averaging the applicable daily Greenhouse Gas Allowance Prices calculated over the first twenty (20) days of the month using the methodology set forth in Section 39.7.1.1.1.4.

39.7 Local Market Power Mitigation For Energy Bids

Local Market Power Mitigation is based on the assessment and designation of Transmission Constraints as competitive or non-competitive pursuant to Section 39.7.2. The local market power mitigation processes are described in Section 31.2 for the DAM, Section 33.4 for the HASP, and Section 34.2.3 for the RTM utilizing Default Energy Bids calculated pursuant to one of the options set forth in Section 39.7.1.

39.7.1 Calculation Of Default Energy Bids

Default Energy Bids shall be calculated by the CAISO, for the on-peak hours and off-peak hours for both the DAM and RTMs, pursuant to one of the methodologies described in this Section. The Scheduling Coordinator for each Generating Unit owner or Participating Load must rank order the following options of calculating the Default Energy Bid starting with its preferred method. The Scheduling Coordinator must provide the data necessary for determining the Variable Costs unless the Negotiated Rate Option precedes the Variable Cost Option in the rank order, in which case the Scheduling Coordinator must have a negotiated rate established with the Independent Entity charged with calculating the Default Energy Bid. If no rank order is specified for a Generating Unit or Participating Load, then the default rank order of (1) Variable Cost Option, (2) Negotiated Rate Option, (3) LMP Option will be applied. For the first ninety (90) days after changes to resource status and MSG Configurations as specified in Section 27.8.3, including the first ninety (90) days after the effective date of Section 27.8.3, the Default Energy Bid option for the resource is limited to the Negotiated Rate Option or the Variable Cost Option.

39.7.1.1 Variable Cost Option

For natural gas-fueled units, the Variable Cost Option will calculate the Default Energy Bid by adding incremental cost (comprised of incremental fuel cost plus a greenhouse gas cost adder if applicable) with variable operation and maintenance cost, adding ten percent (10%) to the sum, and adding a Bid Adder if applicable. For non-natural gas-fueled units, the Variable Cost Option will calculate the Default Energy

California Independent System Operator Corporation
Fifth Replacement Tariff

Bid by summing incremental fuel cost plus ten percent (10%) of fuel cost plus a Bid Adder if applicable.

39.7.1.1.1 Incremental Cost Calculations Under the Variable Cost Option

39.7.1.1.1.1 Natural Gas-Fired Resources

- (a) Calculation of incremental fuel cost - For natural gas-fueled units, incremental fuel cost is calculated based on an incremental heat rate curve multiplied by the natural gas price calculated as described below.

Resource owners shall submit to the CAISO average heat rates (Btu/kWh) measured for at least two (2) and up to eleven (11) generating operating points (MW), where the first and last operating points refer to the minimum and maximum operating levels (i.e., PMin and PMax), respectively. The average heat rate curve formed by the (Btu/kWh, MW) pairs is a piece-wise linear curve between operating points, and two (2) average heat rate pairs yield one (1) incremental heat rate segment that spans two (2) consecutive operating points. The incremental heat rates (Btu/kWh) in the incremental heat rate curve are calculated by converting the average heat rates submitted by resource owners to the CAISO to requirements of heat input (Btu/h) for each of the operating points and dividing the changes in requirements of heat input from one (1) operating point to the next by the changes in MW between two (2) consecutive operating points as specified in the Business Practice Manual. For each segment representing operating levels below eighty (80) percent of the unit's PMax, the incremental heat rate is limited to the maximum of the average heat rates for the two (2) operating points used to calculate the incremental heat rate segment.

The unit's final incremental fuel cost curve is calculated by multiplying this incremental heat rate curve by the applicable natural gas price, and then, if necessary, applying a left-to-right adjustment to ensure that the final incremental cost curve is monotonically non-decreasing. Heat rate and cost curves shall be stored, updated, and validated in the Master File.

- (b) Calculation of greenhouse gas cost adder - For each natural gas-fired resource registered with the California Air Resources Board as having a greenhouse gas

California Independent System Operator Corporation
Fifth Replacement Tariff

compliance obligation, the CAISO will calculate a greenhouse gas cost adder as the product of the resource's incremental heat rate, the greenhouse gas emissions rate authorized by the California Air Resources Board, and the applicable Greenhouse Gas Allowance Price.

39.7.1.1.1.2 Non-Natural Gas-Fired Resources

For non-natural gas-fueled units, incremental fuel cost is calculated based on an average cost curve as described below.

Resource owners for non-natural gas-fueled units shall submit to the CAISO average fuel costs (\$/MW) measured for at least two (2) and up to eleven (11) generating operating points (MW), where the first and last operating points refer to the minimum and maximum operating levels (i.e., PMin and PMax), respectively. The average cost curve formed by the (\$/MWh, MW) pairs is a piece-wise linear curve between operating points, and two (2) average cost pairs yield one (1) incremental cost segment that spans two (2) consecutive operating points. For each segment representing operating levels below eighty (80) percent of the unit's PMax, the incremental cost rate is limited to the maximum of the average cost rates for the two (2) operating points used to calculate the incremental cost segment. The unit's final incremental fuel cost curve is then adjusted, if necessary, applying a left-to-right adjustment to ensure that the final incremental cost curve is monotonically non-decreasing. Cost curves will include greenhouse gas allowance costs for each non-natural gas-fired resource registered with the California Air Resources Board as having a greenhouse gas compliance obligation, as provided to the CAISO by the Scheduling Coordinator for the resource. Cost curves shall be stored, updated, and validated in the Master File.

39.7.1.1.1.3 Calculation of Natural Gas Price

To calculate the natural gas price, the CAISO will use different gas price indices for the Day-Ahead Market and the Real-Time Market and each gas price index will be calculated using at least two prices from two or more of the following publications: Natural Gas Intelligence, SNL Energy/BTU's Daily Gas Wire, Platt's Gas Daily, and the Intercontinental Exchange. If a gas price index is unavailable for any reason, the CAISO will use the most recent available gas price index. For the Day-Ahead Market, the CAISO will update the gas price index between 19:00 and 22:00 Pacific Time using natural gas prices

California Independent System Operator Corporation
Fifth Replacement Tariff

published on the day that is two (2) days prior to the applicable Trading Day, unless gas prices are not published on that day, in which case the CAISO will use the most recently published prices that are available. For the Real-Time Market, the CAISO will update gas price indices between the hours of 19:00 and 22:00 Pacific Time using natural gas prices published one (1) day prior to the applicable Trading Day, unless gas prices are not published on that day, in which case the CAISO will use the most recently published prices that are available.

39.7.1.1.1.4 Calculation of Greenhouse Gas Allowance Price

To calculate the Greenhouse Gas Allowance Price, the CAISO will use different greenhouse gas price indices for the Day-Ahead Market and the Real-Time Market and each greenhouse gas price index will be calculated on a daily basis using at least two prices from two or more of the following publications: the Intercontinental Exchange, Platt's Daily, and ARGUS. If a greenhouse gas price index is unavailable for any reason, the CAISO will use the most recent available greenhouse gas price index. For the Day-Ahead Market, the CAISO will update the greenhouse gas price index between 19:00 and 22:00 Pacific Time using prices for greenhouse gas allowances published on the day that is two (2) days prior to the applicable Trading Day, unless prices for greenhouse gas allowances are not published on that day, in which case the CAISO will use the most recently published prices for greenhouse gas allowances that are available. For the Real-Time Market, the CAISO will update greenhouse gas price indices between the hours of 19:00 and 22:00 Pacific Time using prices for greenhouse gas allowances published one (1) day prior to the applicable Trading Day, unless prices for greenhouse gas allowances are not published on that day, in which case the CAISO will use the most recently published prices for greenhouse gas allowances that are available. The CAISO will calculate each Greenhouse Gas Allowance Price during a year using prices for greenhouse gas allowances from that same year.

39.7.1.1.2 Variable Operation and Maintenance Cost Under the Variable Cost Option

The default value for the variable operation and maintenance cost portion will vary by fuel source or technology as follows: (1) solar \$0.00/MWh; (2) nuclear \$1.00/MWh; (3) coal \$2.00/MWh; (4) wind \$2.00/MWh; (5) hydro \$2.50/MWh; (6) natural gas-fired combined cycle and steam units \$2.80/MWh; (7) geothermal \$3.00 WMh; (8) landfill gas \$4.00/MWh; (9) combustion turbines and reciprocating engines \$4.80/MWh; and (10) biomass \$5.00/MWh. Resource specific values may be negotiated with the CAISO

California Independent System Operator Corporation
Fifth Replacement Tariff

or the Independent Entity charged with calculating the Default Energy Bid. Default operation and maintenance values as well as any negotiated values will also be used to calculate Minimum Load Costs pursuant to Section 30.4.

39.7.1.2 LMP Option

The CAISO will calculate the LMP Option for the Default Energy Bid as a weighted average of the lowest quartile of LMPs at the Generating Unit PNode in periods when the unit was Dispatched during the preceding ninety (90) day period for which LMPs that have passed the price validation and correction process set forth in Section 35 are available. The weighted average will be calculated based on the quantities Dispatched within each segment of the Default Energy Bid curve. Each Bid segment created under the LMP Option for Default Energy Bids will be subject to a feasibility test, as set forth in a Business Practice Manual, to determine whether there are a sufficient number of data points to allow for the calculation of an LMP based Default Energy Bid. The feasibility test is designed to avoid excessive volatility of the Default Energy Bid under the LMP Option that could result when calculated based on a relatively small number of prices.

39.7.1.3 Negotiated Rate Option

39.7.1.3.1 Submission Process

Scheduling Coordinators that elect the Negotiated Rate Option for the Default Energy Bid shall submit a proposed Default Energy Bid along with supporting information and documentation as described in a BPM. Within ten (10) Business Days of receipt, the CAISO or an Independent Entity selected by the CAISO will provide a written response. If the CAISO or Independent Entity accepts the proposed Default Energy Bid, it will become effective within three (3) Business Days from the date of acceptance by the CAISO and remain in effect until: (1) the Default Energy Bid is modified by FERC; (2) the Default Energy Bid is modified by mutual agreement of the CAISO and the Scheduling Coordinator; or (3) the Default Energy Bid expires, is terminated or is modified pursuant to any agreed upon term or condition or pertinent FERC order.

If the CAISO or Independent Entity selected by the CAISO does not accept the proposed Default Energy Bid, the CAISO or Independent Entity selected by the CAISO and the Scheduling Coordinator shall enter a period of good faith negotiations that terminates sixty (60) days following the date of submission of a

California Independent System Operator Corporation
Fifth Replacement Tariff

proposed Default Energy Bid by a Scheduling Coordinator. If at any time during this period, the CAISO or Independent Entity selected by the CAISO and the Scheduling Coordinator agree upon the Default Energy Bid, it will become effective within three (3) Business Days of the date of agreement and remain in effect until: (1) the Default Energy Bid is modified by FERC; (2) the Default Energy Bid is modified by mutual agreement of the CAISO and the Scheduling Coordinator; or (3) the Default Energy Bid expires, is terminated or is modified pursuant to any agreed upon term or condition or pertinent FERC order.

If by the end of the sixty (60)-day period the CAISO or Independent Entity selected by the CAISO and the Scheduling Coordinator fail to agree on the Default Energy Bid to be used under the Negotiated Rate Option, the Scheduling Coordinator has the right to file a proposed Default Energy Bid with FERC pursuant to Section 205 of the Federal Power Act.

During the sixty (60)-day period following the submission of a proposed negotiated Default Energy Bid by a Scheduling Coordinator, and pending FERC's acceptance in cases where the CAISO or Independent Entity selected by the CAISO fail to agree on the Default Energy Bid for use under the Negotiated Rate Option and the Scheduling Coordinator filed a proposed Default Energy Bid with FERC pursuant to Section 205 of the Federal Power Act, the Scheduling Coordinator has the option of electing to use any of the other options available pursuant to Section 39.7. If the Scheduling Coordinator does not elect to use any of the other options available pursuant to Section 39.7, or if sufficient data do not exist to calculate a Default Energy Bid using any of these options, the CAISO may establish a temporary Default Energy Bid as specified in Section 39.7.1.5.

39.7.1.3.2 Informational Filings With FERC

The CAISO shall make an informational filing with FERC of any Default Energy Bids negotiated pursuant to this section, any temporary Default Energy Bids established pursuant to Section 39.7.1.5, or any custom operations and maintenance adders negotiated pursuant to Section 39.7.1.1.2, no later than seven (7) days after the end of the month in which the Default Energy or operations and maintenance values were established.

39.7.1.4 Frequently Mitigated Unit Option

California Independent System Operator Corporation
Fifth Replacement Tariff

A Frequently Mitigated Unit that is eligible for a Bid Adder may select a fourth Default Energy Bid option, which is equal to the Variable Cost Option plus the Bid Adder as described in Section 39.7.

39.7.1.5 Temporary Default Energy Bid

If the Scheduling Coordinator does not elect to use any of the other options available pursuant to Section 39.7.1, or if sufficient data do not exist to calculate a Default Energy Bid using any of the available options, the CAISO will first seek to obtain from the Scheduling Coordinator any additional data required for calculating the Default Energy Bid options available pursuant to 39.7.1. If the provision of additional data by a Scheduling Coordinator results in additional or modified Default Energy Bid options pursuant to 39.7.1, the Scheduling Coordinator will have another opportunity to elect one of these options as its temporary Default Energy Bid. If the Scheduling Coordinator does not elect to use any of the options available pursuant to Section 39.7.1, or if sufficient data still do not exist to calculate a Default Energy Bid using any of the available options, the CAISO may establish a temporary Default Energy Bid based on one or more of the following: (1) operating cost data, opportunity cost, and other appropriate input from the Market Participant; (2) the CAISO's estimated operating costs of the Electric Facility, taking the best information available to the CAISO; (3) an appropriate average of competitive Bids of one or more similar Electric Facilities; or (4) any of the other options for determining a Default Energy Bid for which data are available.

39.7.1.6 Default Energy Bids for RMR Units

The available capacity in excess of the Maximum Net Dependable Capacity (MNDC) specified in the RMR Contract up to the maximum generation capacity (PMax) is subject to Local Market Power Mitigation. The Scheduling Coordinator for the RMR Unit must rank order its preferences between the Variable Cost Option, the LMP Option, and the Negotiated Rate Option, which shall be the default rank order if no rank order is specified by the Scheduling Coordinator. These preferences will be used to determine the Default Energy Bids for the capacity between the MNDC and PMax. RMR Proxy Bids for RMR Units based on contractually specified costs are used in lieu of Default Energy Bids for the contractual RMR Unit capacity between the minimum generating capacity (PMin) and the MNDC. The CAISO or Independent Entity will concatenate these two calculation methodologies (for calculating RMR Proxy Bids and Default Energy Bids for RMR Units) and will adjust them for monotonicity without lowering

California Independent System Operator Corporation
Fifth Replacement Tariff

any price on either curve to create a single Energy Bid Curve to be used in the MPM processes as described in Sections 31 and 33 for the DAM and RTM, respectively. RMR Units are not eligible to receive a Bid Adder pursuant to Section 39.8 for contractual RMR Unit capacity between PMin and MNDC.

39.7.2 Competitive Path Designation

39.7.2.1 Timing of Assessments

For the DAM, HASP, and RTM, the CAISO will make assessments and designations of whether Transmission Constraints are competitive or non-competitive as part of the MPM runs associated with the DAM, HASP, and RTM, respectively. Only binding Transmission Constraints determined by the MPM process will be assessed in the applicable market.

39.7.2.2 Criteria

Subject to Section 39.7.3, for the DAM, HASP, and RTM, a Transmission Constraint will be non-competitive only if the Transmission Constraint fails the dynamic competitive path assessment pursuant to this Section 39.7.2.2.

- (a) Transmission Constraints for the DAM – As part of the MPM process associated with the DAM, the CAISO will designate a Transmission Constraint for the DAM as non-competitive when the fringe supply of counter-flow to the Transmission Constraint from all portfolios of suppliers that are not identified as potentially pivotal is less than the demand for counter-flow to the Transmission Constraint. For purposes of determining whether to designate a Transmission Constraint as non-competitive pursuant to this Section 39.7.2.2(a):

- (i) Counter-flow to the Transmission Constraint means the delivery of Power from a resource to the system load distributed reference bus. If counter-flow to the Transmission Constraint is in the direction opposite to the market flow of Power to the Transmission Constraint, the counter-flow to the Transmission Constraint is calculated as the shift factor multiplied by the resource's scheduled Power. Otherwise, counter-flow to the Transmission Constraint is zero.

California Independent System Operator Corporation
Fifth Replacement Tariff

- (ii) Fringe supply of counter-flow to the Transmission Constraint means all available capacity from internal resources not controlled by the identified potentially pivotal suppliers and all internal Virtual Supply Awards not controlled by the identified potentially pivotal suppliers that provide counter-flow to the Transmission Constraint. Available capacity reflects the highest capacity of a resource's Energy Bid adjusted for Self-Provided Ancillary Services and derates.
- (iii) Demand for counter-flow to the Transmission Constraint means all internal dispatched Supply and Virtual Supply Awards that provide counter-flow to the Transmission Constraint.
- (iv) Potentially pivotal suppliers mean the three (3) portfolios of net sellers that control the largest quantity of counter-flow supply to the Transmission Constraint.
- (v) Portfolio means the effective available internal generation capacity under the control of the Scheduling Coordinator and/or Affiliate determined pursuant to Section 4.5.1.1.12 and all effective internal Virtual Supply Awards of the Scheduling Coordinator and/or Affiliate. Effectiveness in supplying counter-flow is determined by scaling generation capacity and/or Virtual Supply Awards by the shift factor from that location to the Transmission Constraint being tested.
- (vi) A portfolio of a net seller means any portfolio that is not a portfolio of a net buyer. A portfolio of a net buyer means a portfolio for which the average daily net value of Measured Demand minus Supply over a twelve (12) month period is positive. The average daily net value is determined for each portfolio by subtracting, for each Trading Day, Supply from Measured Demand and then averaging the daily value for all Trading Days over the twelve (12) month period. The CAISO will calculate whether portfolios are portfolios of net buyers in the third month of each calendar quarter and the calculations will go into effect at the start of the next calendar quarter. The twelve (12) month period used in this calculation will be the most recent twelve (12) month period for which data is available. The specific mathematical formula used to perform this calculation will be set forth in

California Independent System Operator Corporation
Fifth Replacement Tariff

a Business Practice Manual. Market Participants without physical resources will be deemed to be net sellers for purposes of this Section 39.7.2.2(a)(vi).

- (vii) In determining which Scheduling Coordinators and/or Affiliates control the resources in the three (3) identified portfolios, the CAISO will include resources and Virtual Supply Awards directly associated with all Scheduling Coordinator ID Codes associated with the Scheduling Coordinators and/or Affiliates, as well as all resources that the Scheduling Coordinators and/or Affiliates control pursuant to Resource Control Agreements registered with the CAISO as set forth Section 4.5.1.1.13. Resources identified pursuant to Resource Control Agreements will only be assigned to the portfolio of the Scheduling Coordinator that has control of the resource or whose Affiliate has control of the resource pursuant to the Resource Control Agreements.

- (b) Transmission Constraints for the HASP and RTM – As part of the MPM processes associated with the HASP and RTM, the CAISO will designate a Transmission Constraint for the HASP or RTM as non-competitive when the sum of the supply of counter-flow from all portfolios of potentially pivotal suppliers to the Transmission Constraint and the fringe supply of counter-flow to the Transmission Constraint from all portfolios of suppliers that are not identified as potentially pivotal is less than the demand for counter-flow to the Transmission Constraint. For purposes of determining whether to designate a Transmission Constraint as non-competitive pursuant to this Section 39.7.2.2(b):

- (i) Counter-flow to the Transmission Constraint has the meaning set forth in Section 39.7.2.2(a)(i).
- (ii) Supply of counter-flow from all portfolios of potentially pivotal suppliers to the Transmission Constraint means the minimum available capacity from internal resources controlled by the identified potentially pivotal suppliers that provide counter-flow to the Transmission Constraint. The minimum available capacity for the current market interval will reflect the greatest amount of capacity that can be physically withheld. The minimum available capacity is the lowest output level

California Independent System Operator Corporation
Fifth Replacement Tariff

the resource could achieve in the current market interval given its dispatch in the last market interval and limiting factors including Minimum Load, Ramp Rate, Self-Provided Ancillary Services, Ancillary Service Awards (in the Real-Time Market only), and derates.

- (iii) Potentially pivotal suppliers mean the three (3) portfolios of net sellers that control the largest quantity of counter-flow supply to the Transmission Constraint that can be withheld. Counter-flow supply to the Transmission Constraint that can be withheld reflects the difference between the highest capacity and the lowest capacity of a resource's Energy Bid (not taking into account the Ramp Rate of the resource), measured from the Dispatch Operating Point for the resource in the immediately preceding fifteen (15) minute interval of the HASP (taking into account the Ramp Rate of the resource), adjusted for Self-Provided Ancillary Services and derates in determining whether to designate a Transmission Constraint as non-competitive for the HASP, or adjusted for Ancillary Service Awards and derates in determining whether to designate a Transmission Constraint as non-competitive for the RTM. In determining whether to designate a Transmission Constraint as non-competitive for the HASP, counter-flow supply to the Transmission Constraint that can be withheld also reflects the PMin of each Short Start Unit with a Start-Up Time of sixty (60) minutes or less that was off-line in the immediately preceding fifteen (15) minute interval of the HASP. In determining whether to designate a Transmission Constraint as non-competitive for the RTM, counter-flow supply to the Transmission Constraint that can be withheld also reflects the PMin of each Short Start Unit with a Start-Up Time of fifteen (15) minutes or less that was off-line in the immediately preceding fifteen (15) minute interval.
- (iv) Portfolio means the effective available internal generation capacity under the control of the Scheduling Coordinator and/or Affiliate determined pursuant to Sections 4.5.1.1.12 and 39.7.2.2(a)(vii). Effectiveness in supplying counter-flow

California Independent System Operator Corporation
Fifth Replacement Tariff

is determined by scaling generation capacity by the shift factor from that location to the Transmission Constraint being tested.

- (v) A portfolio of a net seller has the meaning set forth in Section 39.7.2.2(a)(vi).
- (vi) Fringe supply of counter-flow to the Transmission Constraint means all available capacity from internal resources not controlled by the identified potentially pivotal suppliers that provide counter-flow to the Transmission Constraint. Available capacity reflects the highest capacity of a resource's Energy Bid (not taking into account the Ramp Rate of the resource), measured from the Dispatch Operating Point for the resource in the immediately preceding fifteen (15) minute interval of the HASP (taking into account the Ramp Rate of the resource), adjusted for Self-Provided Ancillary Services and derates in determining whether to designate a Transmission Constraint as non-competitive for the HASP, or adjusted for Ancillary Service Awards and derates in determining whether to designate a Transmission Constraint as non-competitive for the RTM.
- (vii) Demand for counter-flow to the Transmission Constraint means all internal dispatched Supply that provides counter-flow to the Transmission Constraint.

39.7.3 Default Competitive Path Designations

The CAISO will maintain default competitive path designation sets for the Day-Ahead Market and for the HASP/Real-Time Market, which the CAISO will use in order to determine the competitiveness or non-competitiveness of Transmission Constraints under two circumstances: (1) in the event of a failure of the CAISO Markets software to perform an assessment of whether Transmission Constraints are competitive or non-competitive pursuant to Section 39.7.2; and (2) in order to determine whether Exceptional Dispatches are related to a non-competitive Transmission Constraint for purposes of mitigation of Exceptional Dispatches of resources under Section 39.10(1). Default competitive path designations will be determined pursuant to the methodology set forth in this Section 39.7.3 and will be updated no less frequently than once every seven (7) days. Until the CAISO has developed sufficient information to develop default competitive path designations, the CAISO will continue to utilize the most recent list of competitive path designations determined prior to the effective date of this tariff provision.

39.7.3.1 Methodology for Determining Day-Ahead Default Competitive Path Designations for Transmission Constraints Other Than Path 15 and Path 26 Transmission Constraints

The CAISO will designate a Transmission Constraint other than the Path 15 Transmission Constraint or the Path 26 Transmission Constraint as competitive for purposes of determining default competitive path designations for the Day-Ahead Market only if both of the following conditions are met:

- (1) Congestion occurred on the Transmission Constraint in ten (10) or more hours of the days for which the Transmission Constraint was tested for competitiveness pursuant to Section 39.7.2; and
- (2) the Transmission Constraint was deemed competitive pursuant to Section 39.7.2 in seventy-five (75) percent or more of the instances in which the Transmission Constraint was binding when tested. These calculations will be made utilizing data from the Day-Ahead Market for the most recent sixty (60) Trading Days for which data is available.

The CAISO will designate a Transmission Constraint other than the Path 15 Transmission Constraint or the Path 26 Transmission Constraint as non-competitive if the CAISO lacks sufficient data to determine whether the occurrences set forth in Sections 39.7.3.1(1) and 39.7.3.1(2) took place on the Transmission Constraint over the sixty (60) Trading Day period.

39.7.3.2 Methodology for Determining HASP/RTM Default Competitive Path Designations for Transmission Constraints Other Than Path 15 and Path 26 Transmission Constraints

The CAISO will designate a Transmission Constraint other than the Path 15 Transmission Constraint or the Path 26 Transmission Constraint as competitive for purposes of determining default competitive path designations for the HASP/RTM only if both of the following conditions are met:

- (1) Congestion occurred on the Transmission Constraint in ten (10) or more of the hours for which the Transmission Constraint was tested for competitiveness pursuant to Section 39.7.2; and

California Independent System Operator Corporation
Fifth Replacement Tariff

- (2) the Transmission Constraint was deemed competitive pursuant to Section 39.7.2 in seventy-five (75) percent or more of the instances in which the Transmission Constraint was binding when tested.

These calculations will be made utilizing data from the Real-Time Market for the most recent sixty (60) Trading Days for which data is available. If the Transmission Constraint was binding during any 15-minute interval during an hour, then the Transmission Constraint will be deemed to be binding for the entire hour. If the Transmission Constraint was determined to be non-competitive during any 15-minute interval during an hour, then the Transmission Constraint will be deemed to be non-competitive for the entire hour. The CAISO will designate a Transmission Constraint other than the Path 15 Transmission Constraint or the Path 26 Transmission Constraint as non-competitive if the CAISO lacks sufficient data to determine whether the occurrences set forth in Sections 39.7.3.2(1) and 39.7.3.2(2) took place on the Transmission Constraint over the sixty (60) Trading Day period.

39.7.3.3 Methodology for Determining Day-Ahead Default Competitive Path Designations for Path 15 and Path 26 Transmission Constraints

The CAISO will designate the Path 15 Transmission Constraint or the Path 26 Transmission Constraint as competitive for purposes of determining default competitive path designations for the Day-Ahead Market unless both of the following conditions are met:

- (1) Congestion occurred on the Transmission Constraint in ten (10) or more hours of the days for which the Transmission Constraint was tested for competitiveness pursuant to Section 39.7.2; and
- (2) the Transmission Constraint was deemed competitive pursuant to Section 39.7.2 in fewer than seventy-five (75) percent of the instances in which the Transmission Constraint was binding when tested.

These calculations will be made utilizing data from the MPM for the Day-Ahead Market for the most recent sixty (60) Trading Days for which data is available. The CAISO will designate the Path 15 Transmission Constraint or the Path 26 Transmission Constraint as competitive if the CAISO lacks sufficient data to determine whether the occurrences set forth in Sections 39.7.3.3(1) and 39.7.3.3(2) took place on the Transmission Constraint over the sixty (60) Trading Day period.

39.7.3.4 Methodology for Determining HASP/RTM Default Competitive Path Designations for Path 15 and Path 26 Transmission Constraints

The CAISO will designate the Path 15 Transmission Constraint or the Path 26 Transmission Constraint as competitive for purposes of determining default competitive path designations for the HASP/RTM unless both of the following conditions are met:

- (1) Congestion occurred on the Transmission Constraint in ten (10) or more of the hours for which the Transmission Constraint was tested for competitiveness pursuant to Section 39.7.2; and
- (2) the Transmission Constraint was deemed competitive pursuant to Section 39.7.2 in fewer than seventy-five (75) percent of the instances in which the Transmission Constraint was binding when tested.

These calculations will be made utilizing data from the MPM for the Real-Time Market for the most recent sixty (60) Trading Days for which data is available. If the Transmission Constraint was binding during any 15-minute interval during an hour, then the Transmission Constraint will be deemed to be binding for the entire hour. If the Transmission Constraint was determined to be non-competitive during any 15-minute interval during an hour, then the Transmission Constraint will be deemed to be non-competitive for the entire hour. The CAISO will designate the Path 15 Transmission Constraint or the Path 26 Transmission Constraint as competitive if the CAISO lacks sufficient data to determine whether the occurrences set forth in Sections 39.7.3.4(1) and 39.7.3.4(2) took place on the Transmission Constraint over the sixty (60) Trading Day period.

39.8 Eligibility For Bid Adder

A Scheduling Coordinator submitting Bids for Generating Units is eligible to have a Bid Adder applied to a Generating Unit for the next operating month if the criteria in Section 39.8.1 are met as determined on a monthly basis in the preceding month.

39.8.1 Bid Adder Eligibility Criteria

To receive a Bid Adder, a Generating Unit must: (i) have a Mitigation Frequency that is greater than eighty (80) percent in the previous twelve (12) months; and (ii) must not have a contract to be a Resource Adequacy Resource for its entire Net Qualifying Capacity, or be designated under the CPM for its entire

California Independent System Operator Corporation
Fifth Replacement Tariff

Eligible Capacity, or be subject to an obligation to make capacity available under this CAISO Tariff. If a Generating Unit is designated under the CPM for a portion of its Eligible Capacity, the provisions of this section apply only to the portion of the capacity not designated. Scheduling Coordinators for Generating Units seeking to receive Bid Adders must further agree to be subject to the Frequently Mitigated Unit option for a Default Energy Bid. Run hours are those hours during which a Generating Unit has positive metered output. Generating Units that received RMR Dispatches and/or incremental Bids dispatched out of economic merit order to manage local Congestion in an hour prior to the effective date of this Section will have that hour counted as a mitigated hour in their Mitigation Frequency. After the first twelve (12) months from the effective date of this Section, the Mitigation Frequency will be based entirely on a Generating Unit being mitigated under the MPM procedures in Sections 31 and 33.

39.8.2 New Generating Units

For new Generating Units, with less than twelve (12) months of operation, determination of eligibility for the Bid Adder will be based on data beginning with the first date the Generating Unit participated in the CAISO Markets through the end date of the period for which the Mitigation Frequency is being calculated. The 200 run hour criteria will be pro-rated for the proportion of a twelve (12)-month period that the new Generating Unit submitted effective Bids in the CAISO markets.

39.8.3 Bid Adder Values

The value of the Bid Adder will be either: (i) a unit-specific value determined in consultation with the CAISO or an independent entity selected by the CAISO, or (ii) a default Bid Adder of \$24/MWh. For Generating Units with a portion of their capacity identified as meeting an LSE's Resource Adequacy Requirements, that Generating Unit's Bid Adder value will be reduced by the percent of the Generating Unit's capacity that is identified as meeting an LSE's Resource Adequacy Requirements. The reduced Bid Adder will be applied to that Generating Unit's entire Default Energy Bid Curve.

39.9 CRR Monitoring And Affiliate Disclosure Requirements

The CAISO will monitor the CRR holdings and CAISO Markets activity for anomalous market behavior, gaming, or exercise of market power resulting from CRR ownership concentrations that are not aligned with actual transmission usage as a result of secondary market auction outcomes. If the CAISO identifies such behavior it may seek FERC approval to impose position limits on the total number or MW quantity of

California Independent System Operator Corporation
Fifth Replacement Tariff

CRRs that may be held by any single entity and its Affiliates. Each CRR Holder or Candidate CRR Holder must notify the CAISO of any Affiliate that is a CRR Holder, Candidate CRR Holder, or Market Participant, any Affiliate that participates in an organized electricity market in North America, and any guarantor of any such Affiliate.

39.10 Mitigation Of Exceptional Dispatches Of Resources

The CAISO shall apply Mitigation Measures to Exceptional Dispatches of resources when such resources are committed or dispatched under Exceptional Dispatch for purposes of: (1) addressing reliability requirements related to non-competitive Transmission Constraints; (2) ramping resources with Ancillary Services Awards or RUC Capacity to a dispatch level that ensures their availability in Real-Time; (3) ramping resources to their Minimum Dispatchable Level in Real-Time; and (4) addressing unit-specific environmental constraints not incorporated into the Full Network Model or the CAISO's market software that affect the dispatch of Generating Units in the Sacramento Delta and are commonly known as "Delta Dispatch".

39.10.1 Measures For Resources Eligible For Supplemental Revenues

In all cases where a resource is subject to Mitigation Measures under Section 39.10, and the resource is eligible for supplemental revenues pursuant to Section 39.10.3, Exceptional Dispatch Energy delivered by the resource shall be settled as set forth in either Section 11.5.6.7.1 or Section 11.5.6.7.3, whichever is applicable.

39.10.2 Resources Not Eligible For Supplemental Revenues

In all cases where a resource is subject to Mitigation Measures under Section 39.10, and the resource is not eligible for supplemental revenues pursuant to Section 39.10.3, Exceptional Dispatch Energy delivered by the resource shall be settled as set forth in either Section 11.5.6.7.2 or Section 11.5.6.7.3, whichever is applicable.

39.10.3 Eligibility For Supplemental Revenues

Except as provided in Section 39.10.4, a resource that is committed or dispatched under Exceptional Dispatch shall be eligible for supplemental revenues only during such times that the resource meets all of the following criteria:

California Independent System Operator Corporation
Fifth Replacement Tariff

- (i) the resource has notified the CAISO, at least seven days prior to the calendar month in which the Exceptional Dispatch occurs, that the resource has chosen to receive supplemental revenues in lieu of an Exceptional Dispatch CPM designation under Section 43.1.5;
- (ii) the resource has been mitigated under Section 39.10;
- (iii) the resource is not under an RMR Contract, is not designated as CPM Capacity, and is not a Resource Adequacy Resource, unless the resource is a Partial Resource Adequacy Resource or a partial CPM resource, and the Exceptional Dispatch requires non-RA Capacity or non-CPM Capacity, in which case only the capacity not committed as Resource Adequacy Capacity or CPM Capacity is eligible for supplemental revenues; and
- (iv) the resource has a Bid in the IFM, HASP, and RTM for the applicable Operating Day or Operating Hour in which the resource is committed or dispatched under Exceptional Dispatch.

39.10.4 Limitation On Supplemental Revenues

Supplemental revenues authorized under this Section 39.10 shall not exceed within a 30-day period (this 30-day period begins on the day of the first Exceptional Dispatch of the resource and re-starts on the day of the first Exceptional Dispatch of the resource following the end of any prior 30-day period) the difference between any monthly CPM Capacity Payments due the resource for the 30-day period (calculated according to the ratio of the actual number of days that the resource had capacity designated as CPM Capacity during the 30-day period to the total number of days in the month) and the monthly CPM Capacity Payment, without any CPM Availability Factor adjustment, for which the resource would be eligible pursuant to Section 43.6 had its entire capacity less any Resource Adequacy Capacity been designated as an CPM resource.

39.10.5 Calculation Of Exceptional Dispatch Supplemental Revenues

The amount of Exceptional Dispatch supplemental revenues accrued by a resource within any 30-day period as defined in Section 39.10.4 shall be a running total of the sum of supplemental revenues received during that 30-day period. The calculation of supplemental revenues accrued by a resource

California Independent System Operator Corporation
Fifth Replacement Tariff

within a 30-day period is based on the higher of (a) the Energy Bid price for the resource minus the Default Energy Bid price for the resource or (b) the Resource-Specific Settlement Interval LMP minus the Default Energy Bid price for the resource. The greater of (a) or (b) is multiplied by the amount of Energy provided by the resource under Exceptional Dispatch, and the results of that multiplication are summed across the successive hours of the 30-day period. Once the resource has reached the limit on supplemental revenues described in Section 39.10.4 based on the calculation above, then the Settlement for the resource will be as provided in Section 11.5.6.7.2 and the resource will not be eligible for additional supplemental revenues for the rest of the 30-day period.

39.11 Market Power Mitigation Applicable to Virtual Bidding

39.11.1 Affiliate Disclosure Requirements

Each Convergence Bidding Entity must satisfy the Affiliate disclosure requirements set forth in Section 4.14.2.1.

39.11.2 Monitoring of Virtual Bidding Activity

The CAISO and DMM will monitor virtual bidding activity for anomalous market behavior, gaming, or the exercise of market power.

40. Resource Adequacy Demonstration For All SCs In The CAISO BAA

40.1 Applicability

A Load Serving Entity, and its Scheduling Coordinator, shall be exempt from this Section 40 during the next Resource Adequacy Compliance Year, if the metered peak Demand of the Load Serving Entity did not exceed one (1) MW during the twelve months preceding the last date on which the Load Serving Entity can make the election in Section 40.1.1 for the next Resource Adequacy Compliance Year. This Section 40 shall apply to all other Load Serving Entities and their respective Scheduling Coordinators. For purposes of Section 40, a Load Serving Entity shall not include any entity satisfying the terms of California Public Utilities Code Section 380(j)(3).

40.1.1 Election Of Load Serving Entity Status

On an annual basis, in the manner and schedule set forth in the Business Practice Manual, the Scheduling Coordinator for a Load Serving Entity, not exempt under Section 40.1, shall inform the CAISO whether each such LSE elects to be either: (i) a Reserve Sharing LSE or (ii) a Modified Reserve Sharing

California Independent System Operator Corporation
Fifth Replacement Tariff

LSE. A Scheduling Coordinator for a Load following MSS is not required to make an election under this Section. Scheduling Coordinators for Load following MSSs are subject solely to Sections 40.2.4, 40.3, and with respect to their Local Capacity Area Resources identified in accordance with Section 40.2.4, Section 40.9.

The CAISO may confirm with the CPUC, Local Regulatory Authority, or federal agency, as applicable, the accuracy of the election by the Scheduling Coordinator for any LSE under its respective jurisdiction, or, in the absence of any election by the Scheduling Coordinator, the desired election for any LSE under its jurisdiction. The determination of the CPUC, Local Regulatory Authority, or federal agency will be deemed binding by the CAISO on the Scheduling Coordinator and the LSE. If the Scheduling Coordinator and CPUC, Local Regulatory Authority, or federal agency, as appropriate, fail to make the election on behalf of an LSE in accordance with the Business Practice Manual, the LSE shall be deemed a Reserve Sharing LSE.

40.2 Information Requirements For Resource Adequacy Programs

40.2.1 Reserve Sharing LSEs

40.2.1.1 Requirements for CPUC Load Serving Entities Electing Reserve Sharing LSE Status

- (a) The Scheduling Coordinator for a CPUC Load Serving Entity electing Reserve Sharing LSE status must provide the CAISO with all information or data to be provided to the CAISO as required by the CPUC and pursuant to the schedule adopted by the CPUC, except that the monthly Resource Adequacy Plans or the same information as required to be included in the monthly Resource Adequacy Plans, plus any other information the CAISO requires as identified in the Business Practice Manual, shall be submitted to the CAISO no less than 45 days in advance of the first day of the month covered by the plan, as provided in Section 40.2.1.1(e).
- (b) Where the information or data provided to the CAISO under Section 40.2.1.1(a) does not include Reserve Margin(s), then the provisions of Section 40.2.2.1(b) shall apply.
- (c) Where the information or data provided to the CAISO under Section 40.2.1.1(a)

California Independent System Operator Corporation
Fifth Replacement Tariff

does not include criteria for determining qualifying resource types and their Qualifying Capacity, then the provisions of Section 40.8 shall apply.

- (d) Where the information or data provided to the CAISO under Section 40.2.1.1(a) does not include annual and monthly Demand Forecast requirements, then the provisions of Section 40.2.2.3 shall apply.
- (e) Where the information or data provided to the CAISO under Section 40.2.1.1(a) does not include annual and monthly Resource Adequacy Plan requirements, or where there is a requirement to submit monthly Resource Adequacy Plans but the submission date is less than 45 days in advance of the first day of the month covered by the plan, then Section 40.2.2.4 shall apply.
- (f) Notwithstanding Section 40.2.1.1(a) and (e), for the resource adequacy month of January 2013, the monthly Resource Adequacy Plans or the same information as required to be included in the monthly Resource Adequacy Plans, plus any other information the CAISO requires as identified in the Business Practice Manual, shall be submitted to the CAISO no later than November 20, 2012, which is 42 days in advance of the first day of the month.

40.2.2 Non-CPUC LSEs Electing Reserve Sharing LSE Status

40.2.2.1 Reserve Margin

- (a) The Scheduling Coordinator for a Non-CPUC Load Serving Entity electing Reserve Sharing LSE status must provide the CAISO with the Reserve Margin(s) adopted by the appropriate Local Regulatory Authority or federal agency for use in the annual Resource Adequacy Plan and monthly Resource Adequacy Plans listed as a percentage of the Demand Forecasts developed in accordance with Section 40.2.2.3.
- (b) For the Scheduling Coordinator for a Non-CPUC Load Serving Entity for which the appropriate Local Regulatory Authority or federal agency has not established a Reserve Margin(s) or a CPUC Load Serving Entity subject to Section 40.2.1.1(b) that has elected Reserve Sharing LSE status, the Reserve Margin for

California Independent System Operator Corporation
Fifth Replacement Tariff

each month shall be no less than fifteen percent (15%) of the LSE's peak hourly Demand for the applicable month, as determined by the Demand Forecasts developed in accordance with Section 40.2.2.3.

40.2.2.2 Qualifying Capacity Criteria

The Scheduling Coordinator for a Non-CPUC Load Serving Entity electing Reserve Sharing LSE status must provide the CAISO with a description of the criteria adopted by the Local Regulatory Authority or federal agency for determining qualifying resource types and the Qualifying Capacity from such resources and any modifications thereto as they are implemented from time to time. The Reserve Sharing LSE may elect to utilize the criteria set forth in Section 40.8.

40.2.2.3 Demand Forecasts

The Scheduling Coordinator for a Non-CPUC Load Serving Entity or CPUC Load Serving Entity subject to Section 40.2.1.1(b) electing Reserve Sharing LSE status must provide annual and monthly Demand Forecasts on the schedule and in the reporting format(s) set forth in the Business Practice Manual. The annual and monthly Demand Forecasts shall utilize the annual and monthly coincident peak Demand determinations provided by the California Energy Commission for such Load Serving Entity, which will be calculated from the Demand Forecast information submitted to the California Energy Commission by each Reserve Sharing LSE; or (ii) if the California Energy Commission does not produce coincident peak Demand Forecasts for the Load Serving Entity, the annual and monthly coincident peak Demand Forecasts produced by the CAISO for such Load Serving Entity in accordance with its Business Practice Manual. Scheduling Coordinators must provide data and information, as may be requested by the CAISO, necessary to develop or support the Demand Forecasts required by this Section.

40.2.2.4 Annual and Monthly Resource Adequacy Plans

The Scheduling Coordinator for a Non-CPUC Load Serving Entity or a CPUC Load Serving Entity subject to Section 40.2.1.1(b) electing Reserve Sharing LSE status must provide annual and monthly Resource Adequacy Plans for such Load Serving Entity, as follows:

- (a) Each annual Resource Adequacy Plan must be submitted to the CAISO on a schedule and in the reporting format(s) set forth in the Business Practice Manual. The annual Resource Adequacy Plan must, at a minimum, set forth the Local Capacity Area

California Independent System Operator Corporation
Fifth Replacement Tariff

Resources, if any, procured by the Load Serving Entity as described in Section 40.3.

- (b) Each monthly Resource Adequacy Plan or the same information as required to be included in the monthly Resource Adequacy Plan, plus any other information the CAISO requires as identified in the Business Practice Manual, must be submitted to the CAISO at least 45 days in advance of the first day of the month covered by the plan, and in accordance with the schedule and in the reporting format(s) set forth in the Business Practice Manual. The monthly Resource Adequacy Plan must identify all resources, including Local Capacity Area Resources, the Load Serving Entity will rely upon to satisfy the applicable month's peak hour Demand of the Load Serving Entity as determined by the Demand Forecasts developed in accordance with Section 40.2.2.3 and applicable Reserve Margin. Resource Adequacy Plans must utilize the Net Qualifying Capacity requirements of Section 40.4.
- (c) The Scheduling Coordinator for the Load Serving Entity may submit at any time from 45 days through 11 days in advance of the relevant month, a revision to its monthly Resource Adequacy Plan to correct an error in the plan. The CAISO will not accept any revisions to a monthly Resource Adequacy Plan from 10 days in advance of the relevant month through the end of the month, unless the Scheduling Coordinator for the Load Serving Entity demonstrates good cause for the change and explains why it was not possible to submit the change earlier.
- (d) In order to ensure that the CAISO's outage replacement determination remains accurate, the Scheduling Coordinator for the Load Serving Entity that submits a revision to its monthly Resource Adequacy Plan to correct an error must include in the revision a MW amount of Resource Adequacy Capacity for each day of month that is no less than the MW amount of Resource Adequacy Capacity included in its original plan for each day of the month.
- (e) In order to ensure that the amount of Resource Adequacy Capacity required to be included in the Load Serving Entity's Resource Adequacy Plan is operationally available to the CAISO throughout the resource adequacy month, the Load Serving Entity that

California Independent System Operator Corporation
Fifth Replacement Tariff

submits the monthly Resource Adequacy Plan is subject to the replacement requirement in Section 9.3.1.3.1.

- (f) Notwithstanding Section 40.2.2.4(b), for the resource adequacy month of January 2013, the monthly Resource Adequacy Plans or the same information as required to be included in the monthly Resource Adequacy Plans, plus any other information the CAISO requires as identified in the Business Practice Manual, shall be submitted to the CAISO no later than November 20, 2012, which is 42 days in advance of the first day of the month. Notwithstanding Section 40.2.2.4(c), for the resource adequacy month of January 2013, the Scheduling Coordinator for the Load Serving Entity may submit at any time from 42 days through 11 days in advance of the relevant month, a revision to its monthly Resource Adequacy Plan to correct an error in the plan.

40.2.3 Modified Reserve Sharing LSEs

40.2.3.1 Reserve Margin

- (a) The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide the CAISO with the Reserve Margin(s) adopted by the CPUC, Local Regulatory Authority, or federal agency, as appropriate, for use in the annual Resource Adequacy Plan and monthly Resource Adequacy Plans listed as a percentage of the Demand Forecasts developed in accordance with Section 40.2.3.3.
- (b) For the Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status for which the CPUC, Local Regulatory Authority, or federal agency, as appropriate, has not established a Reserve Margin, the Reserve Margin shall be no less than fifteen percent (15%) of the applicable month's peak hour Demand of the Load Serving Entity, as determined by the Demand Forecasts developed in accordance with Section 40.2.3.3.

40.2.3.2 Qualifying Capacity

The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide the CAISO with a description of the criteria for determining qualifying resource types and the

California Independent System Operator Corporation
Fifth Replacement Tariff

Qualifying Capacity from such resources and any modifications thereto as they are implemented from time to time. The Modified Reserve Sharing LSE may elect to utilize the criteria set forth in Section 40.8.

40.2.3.3 Demand Forecasts

- (a) The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide annual and monthly Demand Forecasts on the schedule and in the reporting format(s) set forth in the Business Practice Manual. The annual and monthly Demand Forecasts shall utilize the annual and monthly coincident peak Demand determinations provided by the California Energy Commission for such Load Serving Entity, which will be calculated from Demand Forecast data submitted to the California Energy Commission by each Modified Reserve Sharing LSE; or (ii) if the California Energy Commission does not produce coincident peak Demand Forecasts for the Load Serving Entity, the annual and monthly coincident peak Demand Forecasts produced by the CAISO for such Load Serving Entity in accordance with its Business Practice Manual. Scheduling Coordinators must provide data and information, as may be requested by the CAISO, to develop or support the Demand Forecast required by this Section 40.2.3.3(b).
- (b) The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must submit, on the schedule and in the reporting format set forth in the Business Practice Manual, hourly Demand Forecasts for each Trading Hour of the next Trading Day for each Modified Reserve Sharing LSE represented. The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide data or supporting information, as requested by the CAISO, for the Demand Forecasts required by this Section 40.2.3.3(b) for each Modified Reserve Sharing LSE served by the Scheduling Coordinator and a description of the criteria upon which the Demand Forecast was developed, and any modifications thereto as they are implemented from time to time.

40.2.3.4 Annual and Monthly Resource Adequacy Plans

The Scheduling Coordinator for a Load Serving Entity electing Modified Reserve Sharing LSE status must provide annual and monthly Resource Adequacy Plans, for each Modified Reserve Sharing LSE served by the Scheduling Coordinator, as follows:

- (a) Each annual Resource Adequacy Plan must be submitted to the CAISO on a schedule and in the reporting format(s) set forth in the Business Practice Manual. The annual Resource Adequacy Plan must, at a minimum, set forth the Local Capacity Area Resources, if any, procured by the Modified Reserve Sharing LSE as described in Section 40.3.
- (b) Each monthly Resource Adequacy Plan or the same information as required to be included in the monthly Resource Adequacy Plan, plus any other information the CAISO requires as identified in the Business Practice Manual, must be submitted to the CAISO at least 45 days in advance of the first day of the month covered by the plan, and in accordance with the schedule and in the reporting format(s) set forth in the Business Practice Manual. The monthly Resource Adequacy Plan must identify the resources the Modified Reserve Sharing LSE will rely upon to satisfy its forecasted monthly Demand and Reserve Margin as set forth in Section 40.2.3.1, for the relevant reporting period and must utilize the Net Qualifying Capacity requirements of Section 40.4.
- (c) The Scheduling Coordinator for the Load Serving Entity may submit, at any time from 45 days through 11 days in advance of the relevant month, a revision to its monthly Resource Adequacy Plan to correct an error in the plan. The CAISO will not accept any revisions to a monthly Resource Adequacy Plan from 10 days in advance of the relevant month through the end of the month, unless the Scheduling Coordinator for the Load Serving Entity demonstrates good cause for the change and explains why it was not possible to submit the change earlier.
- (d) In order to ensure that the CAISO's outage replacement determination remains accurate, the Scheduling Coordinator for the Load Serving Entity that submits a revision to its monthly Resource Adequacy Plan to correct an error must include in the revision a MW

California Independent System Operator Corporation
Fifth Replacement Tariff

amount of Resource Adequacy Capacity for each day of month that is no less than the MW amount of Resource Adequacy Capacity included in its original plan for each day of the month.

- (e) In order to ensure that the Resource Adequacy Capacity required to be included in the Load Serving Entity's monthly Resource Adequacy Plan is operationally available to the CAISO throughout the resource adequacy month, the Load Serving Entity that submits the monthly Resource Adequacy Plan is subject to the replacement requirement in Section 9.3.1.3.1.
- (f) Notwithstanding Section 40.2.3.4(b), for the resource adequacy month of January 2013, the monthly Resource Adequacy Plans or the same information as required to be included in the monthly Resource Adequacy Plans, plus any other information the CAISO requires as identified in the Business Practice Manual, shall be submitted to the CAISO no later than November 20, 2012, which is 42 days in advance of the first day of the month. Notwithstanding Section 40.2.3.4(c), for the resource adequacy month of January 2013, the Scheduling Coordinator for the Load Serving Entity may submit at any time from 42 days through 11 days in advance of the relevant month, a revision to its monthly Resource Adequacy Plan to correct an error in the plan.

40.2.4 Load Following MSS

A Scheduling Coordinator for a Load following MSS must provide an annual Resource Adequacy Plan that sets forth, at a minimum, the Local Capacity Area Resources, if any, procured by the Load following MSS as described in Section 40.3. The annual Resource Adequacy Plan shall utilize the annual coincident peak Demand determination provided by the California Energy Commission for such Load following MSS using Demand Forecast data submitted to the California Energy Commission by the Load following MSS, or, if the California Energy Commission does not produce coincident peak Demand Forecasts for the Load following MSS, the annual coincident peak Demand Forecast produced by the CAISO for such Load following MSS in accordance with its Business Practice Manual using Demand Forecast data submitted to the CAISO by the Load following MSS. The Local Capacity Area Resources identified by the annual Resource Adequacy Plan submitted by the Load following MSS shall be subject

California Independent System Operator Corporation
Fifth Replacement Tariff

to the Availability Standards, Non-Availability Charge, and Availability Incentive Payment specified in Section 40.9.

40.3 Local Capacity Area Resource Requirements For SCs For LSEs

40.3.1 Local Capacity Technical Study

On an annual basis, pursuant to the schedule set forth in the Business Practice Manual, the CAISO will, perform, and publish on the CAISO Website the Local Capacity Technical Study. The Local Capacity Technical Study shall identify Local Capacity Areas, determine the minimum amount of Local Capacity Area Resources in MW that must be available to the CAISO within each identified Local Capacity Area, and identify the Generating Units within each identified Local Capacity Area. The CAISO shall collaborate with the CPUC, Local Regulatory Authorities within the CAISO Balancing Authority Area, federal agencies, and Market Participants to ensure that the Local Capacity Technical Study is performed in accordance with this Section 40.3 and to establish for inclusion in the Business Practice Manual other parameters and assumptions applicable to the Local Capacity Technical Study and a schedule that provides for: (i) reasonable time for review of a draft Local Capacity Technical Study, (ii) reasonable time for Participating TOs to propose operating solutions, and (iii) release of the final Local Capacity Technical Study no later than 120 days prior to the date annual Resource Adequacy Plans must be submitted under this Section 40.

40.3.1.1 Local Capacity Technical Study Criteria

The Local Capacity Technical Study will determine the minimum amount of Local Capacity Area Resources needed to address the Contingencies identified in Section 40.3.1.2. In performing the Local Capacity Technical Study, the CAISO will apply those methods for resolving Contingencies considered appropriate for the performance level that corresponds to a particular studied Contingency, as provided in NERC Reliability Standards TPL-001-0, TPL-002-0, TPL-003-0, and TPL-004-0, as augmented by CAISO Reliability Criteria in accordance with the Transmission Control Agreement and Section 24.2.1. The CAISO Reliability Criteria shall include:

- (1) Time Allowed for Manual Readjustment: This is the amount of time required for the Operator to take all actions necessary to prepare the system for the next Contingency. This time should not be less than thirty (30) minutes.

California Independent System Operator Corporation
Fifth Replacement Tariff

- (2) No voltage collapse or dynamic instability shall be allowed for a Contingency in Category D – extreme event (any B1-4 system readjusted (Common Mode) L-2), as listed in Section 40.3.1.2.

40.3.1.2 Local Capacity Technical Study Contingencies.

The Local Capacity Technical Study shall assess the following Contingencies:
Contingency Component(s)
NERC/WECC Performance Level A – No Contingencies
<u>NERC/WECC Performance Level B – Loss of a single element</u>
1. Generator (G-1) 2. Transmission Circuit (L-1) 3. Transformer (T-1) 4. Single Pole (dc) Line 5. G-1 system readjusted L-1
<u>NERC/WECC Performance Level C – Loss of two or more elements</u>
3. L-1 system readjusted G-1 3. G-1 system readjusted T-1 or T-1 system readjusted G-1 3. L-1 system readjusted T-1 or T-1 system readjusted L-1 3. G-1 system readjusted G-1 3. L-1 system readjusted L-1 4. Bipolar (dc) Line 5. Two circuits (Common Mode) L-2 WECC-S3. Two generators (Common Mode) G-2
<u>D – Extreme event – loss of two or more elements</u>
Any B1-4 system readjusted (Common Mode) L-2

40.3.2 Allocation Of Local Capacity Area Resource Obligations

The CAISO will allocate responsibility for Local Capacity Area Resources to Scheduling Coordinators for Load Serving Entities in the following sequential manner:

- (a) The responsibility for the aggregate Local Capacity Area Resources required for all Local Capacity Areas within each TAC Area as determined by the Local Capacity Technical Study will be allocated to all Scheduling Coordinators for Load Serving Entities that serve Load in the TAC Area in accordance with the Load Serving Entity's proportionate share of the LSE's TAC Area Load at the time of the CAISO's annual coincident peak Demand set forth in the annual peak Demand Forecast for the next Resource Adequacy Compliance Year as determined by the California Energy Commission. Expressed as a formula, the allocation of Local Area Capacity Resource obligations will be as follows:
$$\left(\frac{\sum \text{Local Capacity Area MW in TAC Area from the Local Capacity Technical Study}}{\text{(LSE Demand in TAC Area at CAISO annual coincident peak Demand)} / \text{(Total TAC Area Demand at the time of CAISO annual coincident peak Demand)}} \right) *$$
 This will result in a MW responsibility for each Load Serving Entity for each TAC Area in which the LSE serves Load. The LSE may meet its MW responsibility, as assigned under this Section, for each TAC Area in which the LSE serves Load by procurement of that MW quantity in any Local Capacity Area in the TAC Area.
- (b) For Scheduling Coordinators for Non-CPUC Load Serving Entities, the Local Capacity Area Resource obligation will be allocated based on Section 40.3.2(a) above.
- (c) For Scheduling Coordinators for CPUC Load Serving Entities, the CAISO will allocate the Local Capacity Area Resource obligation based on an allocation methodology, if any, adopted by the CPUC. However, if the allocation methodology adopted by the CPUC does not fully allocate the total sum of each CPUC Load Serving Entity's proportionate share calculated under Section 40.3.2(a), the CAISO will allocate the difference to all Scheduling Coordinators

California Independent System Operator Corporation
Fifth Replacement Tariff

for CPUC Load Serving Entities in accordance with their proportionate share calculated under 40.3.2(a). If the CPUC does not adopt an allocation methodology, the CAISO will allocate Local Capacity Area Resources to Scheduling Coordinators for CPUC Load Serving Entities based on Section 40.3.2(a).

Once the CAISO has allocated the total responsibility for Local Capacity Area Resources, the CAISO will inform the Scheduling Coordinator for each LSE of the LSE's specific allocated responsibility for Local Capacity Area Resources in each TAC Area in which the LSE serves Load.

40.3.3 Procurement Of Local Capacity Area Resources By LSEs

Nothing in this Section 40 obligates any Scheduling Coordinator to demonstrate on behalf of a Load Serving Entity that the Load Serving Entity has procured Local Capacity Area Resources to satisfy capacity requirements for each Local Capacity Area identified in the technical study. Scheduling Coordinators for Load Serving Entities may aggregate responsibilities for procurement of Local Capacity Area Resources. If a Load Serving Entity has procured Local Capacity Area Resources that satisfy generation capacity requirements for Local Capacity Areas, the Scheduling Coordinator for such Load Serving Entity shall include this information in its annual and monthly Resource Adequacy Plan(s).

40.3.4 [NOT USED]

40.4 General Requirements On Resource Adequacy Resources

40.4.1 Eligible Resources And Determination Of Qualifying Capacity

The CAISO shall use the criteria provided by the CPUC or Local Regulatory Authority to determine and verify, if necessary, the Qualifying Capacity of all Resource Adequacy Resources; however, to the extent a resource is listed by one or more Scheduling Coordinators in their Resource Adequacy Plans, which apply the criteria of more than one Local Regulatory Authority that leads to conflicting Qualifying Capacity values for that resource, the CAISO will accept the methodology that results in the highest Qualifying Capacity value. Only if the CPUC, Local Regulatory Authority, or federal agency has not established any Qualifying Capacity criteria, or chooses to rely on the criteria in this CAISO Tariff, will the provisions of Section 40.8 apply.

40.4.2 Net Qualifying Capacity Report

The CAISO shall produce an annual report posted to the CAISO Website on the schedule set forth in the Business Practice Manual that sets forth the Net Qualifying Capacity of all Participating Generators. All other Resource Adequacy Resources may be included in the annual report under Section 40.4.2 upon their request. The Net Qualifying Capacity of any resource included in the annual report, once posted to the CAISO Website, shall not be reduced by the CAISO for the next Resource Adequacy Compliance Year. Any change proposed to be made to a Net Qualifying Capacity value for a resource included in a prior annual report shall be explained, and any test results or analyses underlying the change provided, to the Scheduling Coordinator within ten (10) days of the CAISO's determination that a change to the resource's Net Qualifying Capacity is appropriate, which also must be at least fifteen (15) days prior to the posting on the CAISO Website of the annual report. Any disputes as to the CAISO's determination regarding Net Qualifying Capacity shall be subject to the CAISO ADR Procedures.

40.4.3 General Qualifications For Supplying Net Qualifying Capacity

Resource Adequacy Resources included in a Resource Adequacy Plan submitted by a Scheduling Coordinator on behalf of a Load Serving Entity serving Load in the CAISO Balancing Authority Area must:

- (1) Be available for testing by the CAISO to validate Qualifying Capacity, which can be no less than a resource's PMin even if the resource's contractual Resource Adequacy Capacity is less than its PMin, and determine Net Qualifying Capacity for the next Resource Adequacy Compliance Year;
- (2) Provide any information requested by the CAISO to apply the performance criteria to be adopted by the CAISO pursuant to Section 40.4.5;
- (3) Submit Bids into the CAISO Markets as required by this CAISO Tariff;
- (4) Be in compliance, as of the date that the CAISO performs any testing or otherwise determines Net Qualifying Capacity for the next Resource Adequacy Compliance Year, with the criteria for Qualifying Capacity established by the CPUC, relevant Local Regulatory Authority, or federal agency and provided to the CAISO; and

California Independent System Operator Corporation
Fifth Replacement Tariff

- (5) Be subject to Sanctions for non-performance as specified in the CAISO Tariff;
and
- (6) For a resource with contractual Resource Adequacy Capacity less than PMin, make the PMin available to the CAISO for commitment or dispatch at PMin, subject to Section 11.8 provisions for Bid Cost Recovery, so that the resource's Resource Adequacy Capacity can be utilized as required by this CAISO Tariff.

40.4.4 Reductions For Testing

In accordance with the procedures specified in the Business Practice Manual, the Generating Unit of a Participating Generator or other Generating Units, System Units or Loads of Participating Loads or Proxy Demand Resources included in a Resource Adequacy Plan submitted by a Scheduling Coordinator on behalf of a Load Serving Entity can have its Qualifying Capacity reduced, for purposes of the Net Qualifying Capacity annual report under Section 40.4.2 for the next Resource Adequacy Compliance Year, if a CAISO testing program determines that it is not capable of supplying the full Qualifying Capacity amount.

40.4.5 Reductions For Performance Criteria

No later than 12 months after the effective date of this Section 40, the CAISO will issue a report outlining a proposal with respect to performance criteria for Resource Adequacy Resources. The CAISO will collaborate with the CPUC and other Local Regulatory Authorities to develop the performance criteria to be submitted to FERC. The Scheduling Coordinator for a Resource Adequacy Resource shall provide or make available to the CAISO, subject to the confidentiality provisions of this CAISO Tariff, all documentation requested by the CAISO to determine, develop or implement the performance criteria, including, but not limited to, NERC Generating Availability Data System data.

40.4.6 Reductions For Deliverability

40.4.6.1 Deliverability Within the CAISO Balancing Authority Area

In order to determine Net Qualifying Capacity from Resource Adequacy Resources subject to this Section 40.4, the CAISO will determine that a Resource Adequacy Resource is available to serve the aggregate of Load by means of a deliverability study. Documentation explaining the CAISO's deliverability analysis will be posted on the CAISO Website. The deliverability study will be performed annually and shall focus

California Independent System Operator Corporation
Fifth Replacement Tariff

on peak Demand conditions. The results of the deliverability study shall be incorporated into the Net Qualifying Capacity annual report under Section 40.4.2 and will be effective for the next Resource Adequacy Compliance Year. To the extent the deliverability study shows that the Qualifying Capacity is not deliverable to the aggregate of Demand under the conditions studied, the Qualifying Capacity of the Resource Adequacy Resource will be reduced on a MW basis for the capacity that is undeliverable. Resources will be electrically grouped in a manner consistent with the CAISO Deliverability Assessment methodology posted on the CAISO Website. For Resource Adequacy Resources in the same electrical group which have identified deliverability constraints, the Qualifying Capacity of the Resource Adequacy Resources that obtained Full Capacity Deliverability Status or partial deliverability through Section 8.2 of Appendix Y to this CAISO Tariff will be reduced prior to reducing the Qualifying Capacity of those resources which were originally provided Full Capacity Deliverability Status pursuant to inclusion in an Interconnection Study Cycle under Appendix Y to this CAISO Tariff.

40.4.6.2 Deliverability of Imports

40.4.6.2.1 Available Import Capability Assignment Process

For Resource Adequacy Plans covering any period after December 31, 2007, total Available Import Capability will be assigned on an annual basis for a one-year term to Load Serving Entities serving Load in the CAISO Balancing Authority Area and other Market Participants through their respective Scheduling Coordinators, as described by the following sequence of steps. However, should the CPUC modify by decision its compliance period from January to December of the calendar year to May through April of the calendar year, the CAISO shall extend the effectiveness of the assignment for Resource Adequacy Compliance Year 2008 through April 2009.

Step 1: Determination of Maximum Import Capability on Interties into the CAISO Balancing Authority Area: The CAISO shall establish the Maximum Import Capability for each Intertie into the CAISO Balancing Authority Area, and will post those values on the CAISO Website in accordance with the schedule and process set forth in the Business Practice Manual.

Step 2: Determination of Available Import Capability by Accounting for Existing Contracts and Transmission Ownership Rights Held by Out-of- Balancing Authority Area LSEs: For each Intertie, the Available Import Capability will be determined by subtracting from the Maximum Import Capability

California Independent System Operator Corporation
Fifth Replacement Tariff

established in Step 1 for each Intertie the import capability on each Intertie associated with (i) Existing Contracts and (ii) Transmission Ownership Rights held by load serving entities that do not serve Load within the CAISO Balancing Authority Area. The remaining sum of all Intertie Available Import Capability is the Total Import Capability. Total Import Capability shall be used to determine the Load Share Quantity for each Load Serving Entity that serves Load within the CAISO Balancing Authority Area.

Step 3: Determination of Existing Contract Import Capability by Accounting for Existing Contracts and Transmission Ownership Rights Held by CAISO Balancing Authority Area LSEs: From the Available Import Capability remaining on each Intertie after Step 2 above, Existing Contracts and Transmission Ownership Rights held by Load Serving Entities that serve Load within the CAISO Balancing Authority Area shall be reserved for the holders of such commitments and will not be subject to reduction under any subsequent steps in this Section. The import capability reserved pursuant to this Step 3 is the Existing Contract Import Capability.

Step 4: Assignment of Pre-RA Import Commitments: From the Available Import Capability remaining on each Intertie after reserving Existing Contract Import Capability under Step 3 above, the CAISO will assign to Load Serving Entities serving Load within the CAISO Balancing Authority Area Pre-RA Import Commitment Capability on a particular Intertie based on Pre-RA Import Commitments in effect (where a supplier has an obligation to deliver the Energy or make the capacity available) at any time during the Resource Adequacy Compliance Year for which the Available Import Capability assignment is being performed. The Pre-RA Import Commitment will be assigned to the Intertie selected by the Load Serving Entity during the Resource Adequacy Compliance Year 2007 import capability assignment process, which was required to be based on the Intertie upon which the Energy or capacity from the Pre-RA Import Commitment had been primarily scheduled or, for a Pre-RA Import Commitment without a scheduling history at the time of the Resource Adequacy Compliance Year 2007 import capability assignment process, the primary Intertie upon which the Energy or capacity was anticipated to be scheduled. To the extent a Pre-RA Import Commitment was not presented during the Resource Adequacy Compliance Year 2007 import capability assignment process, the Load Serving Entity shall select the Intertie upon which the Pre-RA Import Commitment

California Independent System Operator Corporation
Fifth Replacement Tariff

is primarily anticipated to be scheduled during the term of the Pre-RA Import Commitment and that selection shall be utilized in future annual Available Import Capability assignment processes. If a Pre-RA Import Commitment submitted on behalf of a LSE with Existing Contract Import Capability is assigned under this Section to the same Intertie on which the LSE holds Existing Contract Import Capability, the Pre-RA Import Commitment will be assumed to deliver over the Existing Contract Import Capability until exhausted, unless the LSE can demonstrate otherwise.

To the extent a particular Intertie becomes over requested with Pre-RA Import Commitments due to either Pre-RA Import Commitments not included in the Resource Adequacy Compliance Year 2007 import capability assignment process or changes in system conditions that decrease the Maximum Import Capability of the Intertie, such that the MW represented in all Pre-RA Import Commitments utilizing the Intertie exceed the Intertie's Available Import Capability in excess of that reserved for Existing Contracts and Transmission Ownership Rights under Steps 2 and 3, the Pre-RA Import Commitments will be assigned Pre-RA Import Commitment Capability, based on the Import Capability Load Share Ratio of each Load Serving Entity submitting Pre-RA Import Commitments on the particular Intertie. To the extent this initial assignment of Pre-RA Import Commitment Capability has not fully assigned the Available Import Capability of the particular over requested Intertie, the remaining Available Import Capability on the over requested Intertie will be assigned until fully exhausted based on the Import Capability Load Share Ratio of each Load Serving Entity whose submitted Pre-RA Import Commitment has not been fully satisfied by the previous Import Capability Load Share Ratio assignment iteration. The Available Import Capability assigned pursuant to this Step 4 is the Pre-RA Import Commitment Capability.

Step 5: Assignment of Remaining Import Capability Limited by Load Share Quantity: The Total Import Capability remaining after Step 4 will be assigned only to Load Serving Entities serving Load within the CAISO Balancing Authority Area that have not received Existing Contract Import Capability and Pre-RA Import Commitment Capability under Steps 3 and 4, that exceed the Load Serving Entity's Load Share Quantity. Only the MW quantity of any Pre-RA Import Commitment Capability assigned to Existing Contract Import Capability under Step 4 that exceeds the Existing Contract Import Capability on the particular Intertie will be counted for purposes of this Step 5. This Total

California Independent System Operator Corporation
Fifth Replacement Tariff

Import Capability will be assigned until fully exhausted to those Load Serving Entities eligible to receive an assignment under this Step based on each Load Serving Entity's Import Capability Load Share Ratio up to, but not in excess of, its Load Share Quantity. The quantity of Total Import Capability assigned to the Load Serving Entity under this Step is the Load Serving Entity's Remaining Import Capability. This Step 5 does not assign Remaining Import Capability on a specific Intertie.

Step 6: CAISO Posting of Assigned and Unassigned Capability: Following the completion of Step 5, the CAISO will post to the CAISO Website, in accordance with the schedule set forth in the Business Practice Manual the following information:

- (a) The Total Import Capability;
- (b) The quantity in MW of Existing Contracts and Transmission Ownership Rights assigned to each Intertie, distinguishing between Existing Contracts and Transmission Ownership Rights held by Load Serving Entities within the CAISO Balancing Authority Area and those held by load serving entities outside the CAISO Balancing Authority Area;
- (c) The aggregate quantity in MW, and identity of the holders, of Pre-RA Import Commitments assigned to each Intertie; and
- (d) The aggregate quantity in MW of Available Import Capability after Step 4, the identity of the Interties with Available Import Capability, and the MW quantity of Available Import Capability on each such Intertie.

Step 7: CAISO Notification of LSE Assignment Information: Following the completion of Step 5, in accordance with the schedule set forth in the Business Practice Manual, the CAISO will notify the Scheduling Coordinator for each Load Serving Entity of:

- (a) The Load Serving Entity's Import Capability Load Share;
- (b) The Load Serving Entity's Load Share Quantity; and
- (c) The amount of, and Intertie on which, the Load Serving Entity's Existing Contract Import Capability and Pre-RA Import Commitment Capability, as applicable, has been assigned; and
- (d) The Load Serving Entity's Remaining Import Capability.

California Independent System Operator Corporation
Fifth Replacement Tariff

Step 8: Transfer of Import Capability: In accordance with the schedule set forth in the Business Practice Manual, a Load Serving Entity shall be allowed to transfer some or all of its Remaining Import Capability to any other Load Serving Entity or Market Participant. The CAISO will accept transfers among LSEs and Market Participants only to the extent such transfers are reported to the CAISO, in accordance with the schedule set forth in the Business Practice Manual and through the CAISO's Import Capability Transfer Registration Process, by the entity receiving the Remaining Import Capability who must set forth (1) the name of the counter-parties, (2) the MW quantity, (3) term of transfer, and (4) price on a per MW basis. The CAISO will post to the CAISO Website by August 8, 2007 for Resource Adequacy Compliance Year 2008 and for subsequent Resource Adequacy Compliance Years in accordance with the schedule set forth in the Business Practice Manual the information on transfers of Remaining Import Capability received under this Step 8.

Step 9: Initial Scheduling Coordinator Request to Assign Remaining Import Capability by Intertie: In accordance with the schedule set forth in the Business Practice Manual, the Scheduling Coordinator for each Load Serving Entity or Market Participant shall notify the CAISO of its request to assign its post-trading Remaining Import Capability on a MW basis per available Intertie. Total requests for assignment of Remaining Import Capability by a Scheduling Coordinator cannot exceed the sum of the post-traded Remaining Import Capability of its Load Serving Entities. The CAISO will honor the requests to the extent an Intertie has not been over requested. If an Intertie is over requested, the requests for Remaining Import Capability on that Intertie will be assigned based on each Load Serving Entity's Import Capability Load Share Ratio in the same manner as set forth in Step 4. A Market Participant without an Import Capability Load Share will be assigned the Import Capability Load Share equal to the average Import Capability Load Share of those Load Serving Entities from which it received transfers of Remaining Import Capability.

Step 10: CAISO Notification of Initial Remaining Import Capability Assignments and Unassigned Capability: In accordance with the schedule set forth in the Business Practice Manual, the CAISO will:

California Independent System Operator Corporation
Fifth Replacement Tariff

- (a) Notify the Scheduling Coordinator for each Load Serving Entity or Market Participant of the Load Serving Entity or Market Participant's accepted request(s) for assigning Remaining Import Capability under Step 9; and
- (b) Publish on the CAISO Website aggregate unassigned Available Import Capability, if any, the identity of the Interties with unassigned Available Import Capability, and the MW quantity of Available Import Capability, on each such Intertie.

Step 11: Secondary Scheduling Coordinator Request to Assign Remaining Import Capability by Intertie: To the extent Remaining Import Capability remains unassigned as disclosed by Step 10, in accordance with the schedule set forth in the Business Practice Manual, Scheduling Coordinators for Load Serving Entities or Market Participants shall notify the CAISO of their requests to assign any remaining Remaining Import Capability on a MW per available Intertie basis. The CAISO will honor the requests to the extent an Intertie has not been over requested. If an Intertie is over requested, the requests on that Intertie will be assigned based on each Load Serving Entity or Market Participant's Import Capability Load Share Ratio, as used in Steps 4 and 9.

Step 12: Notification of Secondary Remaining Import Capability Assignments and Unassigned Capability: In accordance with the schedule set forth in the Business Practice Manual, the CAISO will:

- (a) Notify the Scheduling Coordinator for each Load Serving Entity or Market Participant of the Load Serving Entity or Market Participant's accepted request(s) for assigning Remaining Import Capability under Step 11; and
- (b) Publish on the CAISO Website unassigned aggregate Available Import Capability, if any, the identity of the Interties with Available Remaining Import Capability, and the MW quantity of Availability Import Capability on each such Intertie.

Step 13: Requests for Balance of Year Unassigned Available Import Capability: To the extent total Available Import Capability remains unassigned as disclosed by Step 12, Scheduling Coordinators for Load Serving Entities or Market Participants may notify the CAISO at any time, except as limited

California Independent System Operator Corporation
Fifth Replacement Tariff

herein, of a request for unassigned Available Import Capability on a specific Intertie on a per MW basis. Each request must include the identity of Load Serving Entity or Market Participant on whose behalf the request is made. The CAISO will accept only two (2) requests per calendar week from any Scheduling Coordinator on behalf of a single Load Serving Entity or other Market Participant. The CAISO will honor requests in priority of the time requests from Scheduling Coordinators were received until the Intertie is fully assigned and without regard to any Load Serving Entity's Load Share Quantity. Any honored request shall be for the remainder of the Resource Adequacy Compliance Year; however, any notification by the CAISO of acceptance of the request in accordance with this Section after the 20th calendar day of any month shall not be permitted to be included in the Load Serving Entity's Resource Adequacy Plan submitted in the same month as the acceptance. The CAISO shall provide an electronic means, either through the Import Capability Transfer Registration Process or otherwise, of notifying the Scheduling Coordinator of the time the request was deemed received by the CAISO and, within seven (7) days of receipt of the request, whether the request was honored. If honored, it shall be the responsibility of the Scheduling Coordinator and its Load Serving Entity to notify the CPUC or applicable Local Regulatory Authority of the acceptance of the request for unassigned Available Import Capability. If the request is not honored because the Intertie requested was fully assigned, the request will be deemed rejected and the Scheduling Coordinator, if it still seeks to obtain unassigned Available Import Capability, will be required to submit a new request for unassigned Available Import Capability on a different Intertie. The CAISO will update on its website the list of unassigned Available Import Capability by Intertie in accordance with the schedule set forth in the Business Practice Manual.

This multi-step process for assignment of Total Import Capability does not guarantee or result in any actual transmission service being assigned and is only used for determining the import capability that can be credited towards satisfying the Reserve Margin of a Load Serving Entity under this Section 40. Upon the request of the CAISO, Scheduling Coordinators must provide the CAISO with information on Pre-RA Import Commitments and any transfers or sales of assigned Total Import Capability.

40.4.6.2.2 Bilateral Import Capability Transfers and Registration Process

40.4.6.2.2.1 Eligibility Registration for Bilateral Import Capability Transfers

California Independent System Operator Corporation
Fifth Replacement Tariff

To be eligible to engage in any bilateral assignment, sale, or other transfer of Remaining Import Capability under Step 8 of Section 40.4.6.2.1 or Section 40.4.6.2.2.2 or Existing Contract Import Capability, and Pre-RA Import Commitment Capability under Section 40.6.2.2.2, a Load Serving Entity or other Market Participant must provide the CAISO through the Import Capability Transfer Registration Process the following information:

- (a) Name of the Load Serving Entity or Market Participant
- (b) E-mail contact information

The CAISO will post to the CAISO Website the information received under this Section on a monthly basis in accordance with the schedule set forth in the Business Practice Manual. Any assignment, sale, or other transfer of Existing Contract Import Capability, Pre-RA Import Commitment Capability, or Remaining Import Capability may only be made by or to a Load Serving Entity or Market Participant whose information received under this Section has been posted to the CAISO Website prior to the date of the assignment, sale, or other transfer of the Existing Contract Import Capability, Pre-RA Import Commitment Capability, or Remaining Import Capability. It shall be the exclusive responsibility of the Scheduling Coordinator for the Load Serving Entity or Market Participant to ensure that the information posted to the CAISO Website under this Section is accurate and up to date.

40.4.6.2.2.2 Reporting Process for Bilateral Import Capability Transfers

This Section shall apply to all transfers of Existing Contract Import Capability, Pre-RA Import Commitment Capability, or Remaining Import Capability other than that provided for in Step 8 of Section 40.4.6.2.1. Any Load Serving Entity or other Market Participant that has obtained Existing Contract Import Capability, Pre-RA Import Commitment Capability, or Remaining Import Capability may assign, sell, or otherwise transfer such Existing Contract Import Capability, Pre-RA Import Commitment Capability, or Remaining Import Capability in MW increments. The import capability subject to each transfer shall remain on the Intertie assigned pursuant to Section 40.4.6.2.1.

The Scheduling Coordinator for the Load Serving Entity or Market Participant receiving the transferred Existing Contract Import Capability, Pre-RA Import Commitment Capability, or Remaining Import Capability must report the transfer to the CAISO through the CAISO's Import Capability Transfer Registration Process by providing the following information:

California Independent System Operator Corporation
Fifth Replacement Tariff

- (a) Identity of the counter-party(ies);
- (b) The MW quantity;
- (c) The Intertie on which the Existing Contract Import Capability, Pre-RA Import Commitment Capability, or Remaining Import Capability was assigned;
- (d) Term of the transfer;
- (e) Price on a per MW basis; and
- (f) Whether the import capability assignment being transferred is Existing Contract Import Capability, Pre-RA Import Commitment Capability, or Remaining Import Capability.

The CAISO will promptly post to the CAISO Website the information on transfers received under this Section except for the information received pursuant to subpart (f) of this Section. On a quarterly basis, the CAISO shall also report to FERC the transfer information received under this Section and Step 8 of Section 40.4.6.2.1. Transfer information received in accordance with this Section after the 20th calendar day of any month shall not be permitted to be included in the Load Serving Entity's Resource Adequacy Plan submitted in the same month as the transfer submission.

40.4.6.2.2.3 Other Import Capability Information Postings

The CAISO will post to the CAISO Website on a monthly basis in accordance with the schedule set forth in the Business Practice Manual, for each Intertie, the holder and that holder's quantity in MW of import capability assigned on the particular Intertie as of the reporting date.

The CAISO will also post to the CAISO Website following submission of the annual Resource Adequacy Plans under Sections 40.2.1.1, 40.2.2.4, 40.2.3.4, and 40.2.4, for each Intertie, by a "yes" or "no" designation, whether each holder of import capability assigned on the particular Intertie has fully included the assigned import capability in the holder's annual Resource Adequacy Plans.

40.4.6.3 Deliverability of Distributed Generation

The CAISO will perform an annual Deliverability Assessment, as described in Section 40.4.6.3.1, to determine MW quantities of Potential DGD at specific Nodes of the CAISO Controlled Grid for Distributed Generation Facilities seeking interconnection to the Distribution System of a Utility Distribution Company under either CPUC Rule 21 or a wholesale distribution access tariff, where such interconnection and

California Independent System Operator Corporation
Fifth Replacement Tariff

Potential DGD can be provided:

- (i) without any additional Delivery Network Upgrades (although Reliability Network Upgrades, Distribution Upgrades or other mitigation may be needed);
- (ii) without the need for the CAISO to conduct any further Deliverability Assessment; and
- (iii) without degrading the Deliverability of Generation in Commercial Operation, proposed Generating Facilities in the CAISO Interconnection queue, or the Distributed Generation Facilities of interconnection customers under a wholesale distribution access tariff who have previously requested Full Capacity or Partial Capacity Deliverability Status.

As described in Section 40.4.6.3.2, following the CAISO's publication of the nodal Potential DGD quantities resulting from the Deliverability Assessment, the CAISO will apportion the identified Potential DGD to Local Regulatory Authorities for their assignment of Full Capacity Deliverability Status or Partial Capacity Deliverability Status to specific Distributed Generation Facilities.

This Section 40.4.6.3 is intended to supplement, and not to preclude or limit, the ability of an interconnection customer for a Distributed Generation Facility to seek and receive Full Capacity Deliverability Status or Partial Capacity Deliverability Status through a CPUC Rule 21 or wholesale distribution access tariff. Nothing in this Section 40.4.6.3 is intended to relieve the interconnection customer for a Distributed Generation Facility from the requirements to request and achieve interconnection to the Distribution System through the appropriate CPUC Rule 21 or wholesale distribution access tariff.

40.4.6.3.1 Deliverability Assessment to Determine Potential DGD

This Section describes the annual Deliverability Assessment the CAISO will perform to determine nodal MW amounts of Potential DGD to be apportioned to Local Regulatory Authorities in accordance with Section 40.4.6.3.2. The Deliverability Assessment and its results will be based on the assumption that the Distributed Generation Facilities that are eventually assigned Deliverability Status under this Section 40.4.6.3 complete all requirements for interconnection to the Distribution System under the appropriate CPUC Rule 21 or wholesale distribution access tariff and that these Distributed Generation Facilities will be supported by needed Reliability Network Upgrades, Distribution Upgrades or other mitigation that

California Independent System Operator Corporation
Fifth Replacement Tariff

would be needed to safely and reliably interconnect to the Distribution System and deliver Energy from the Distribution System to the appropriate CAISO Controlled Grid Node.

40.4.6.3.1.1 Developing the Assessment Model

To develop the base case model for the Potential DGD Deliverability Assessment, the CAISO will include:

- (i) The most recent GIP or GIDAP Queue Cluster Phase II Interconnection Study deliverability power flow base case;
- (ii) Those Generating Facilities that have obtained Deliverability using the annual full capacity deliverability option under either Section 8.2 of the GIP or Section 9.2 of the GIDAP;
- (iii) Transmission additions and upgrades approved in the final comprehensive Transmission Plan for the most recent Transmission Planning Process cycle;
- (iv) Any Generating Facilities in the most recent GIDAP Phase I Interconnection Study that have been determined to be deliverable in accordance with their requested Deliverability Status and were not assigned any Delivery Network Upgrade costs in the Phase I Interconnection Study;
- (v) Delivery Network Upgrades that have received governmental approvals or for which Construction Activities have commenced;
- (vi) The MW amounts of resources interconnected to the distribution system for distributed generation Nodes contained in the most recent Transmission Planning Process base portfolio, except that the CAISO will remove each Node (by using a zero MW value) located within electrical areas for which the most recently completed GIP or GIDAP Phase I or Phase II Interconnection Study has identified a need for a Delivery Network Upgrade or for which the most recent Phase II Interconnection Study identified and then removed a Delivery Network Upgrade to support Deliverability for MW amounts in the Interconnection queue;
- (vii) Actual distributed generation development based on the MW amount of distributed generation in applicable Utility Distribution Company wholesale distribution access tariff

California Independent System Operator Corporation
Fifth Replacement Tariff

interconnection queues and non-net-energy-metering resources in any Utility Distribution Company CPUC Rule 21 interconnection queue;

- (viii) Information provided by each Local Regulatory Authority identifying existing and anticipated distributed generation procurement of Load Serving Entities within its jurisdiction; and
- (ix) Other information that the CAISO, in its reasonable discretion, determines is necessary.

40.4.6.3.1.2 Performing the Potential DGD Deliverability Assessment

The CAISO will perform the Potential DGD Deliverability Assessment using the Deliverability Assessment procedures described in GIDAP Section 6.3.2 to determine the availability of transmission system capability, as reflected in the study model described above, to provide Deliverability Status for targeted amounts of additional distributed generation at given Nodes of the CAISO Controlled Grid. Except for Nodes that the CAISO removes by assigning a zero MW value pursuant to Section 40.4.6.3.1.1(vi), the targeted amounts of additional distributed generation at each Node shall be at least as large as the maximum of the corresponding nodal MW amounts determined in accordance with Sections 40.4.6.3.1.1(vi), 40.4.6.3.1.1(vii) or 40.4.6.3.1.1(viii). The CAISO may use larger targeted amounts as it deems appropriate to enhance the information provided by the Potential DGD Deliverability Assessment. The Potential DGD Deliverability Assessment will preserve modeled transmission system capability to provide requested levels of deliverability for the Generating Facilities of Interconnection Customers or the Distributed Generation Facilities of interconnection customers under a wholesale distribution access tariff who have previously requested Full Capacity or Partial Capacity Deliverability Status. Therefore, at each Node where all modeled Generating Facilities, including the distributed generation target amounts, cannot be simultaneously Dispatched to the modeled output levels corresponding to their Full Capacity or Partial Capacity Deliverability Status without violating operating limits of the CAISO Controlled Grid, the CAISO will reduce the modeled distributed generation target amounts as needed to achieve a feasible Dispatch.

40.4.6.3.1.3 Publishing Results of the Potential DGD Deliverability Assessment

California Independent System Operator Corporation
Fifth Replacement Tariff

The CAISO will publish the results of the Potential DGD Deliverability Assessment by posting on the CAISO Website. The results will identify all Nodes modeled in the assessment with the corresponding nodal MW amounts of Potential DGD that (a) were studied as targeted amounts in the Potential DGD Deliverability Assessment; (b) were found to be deliverable in the Potential DGD Deliverability Assessment; and (c) are available for apportionment to Local Regulatory Authorities in accordance with Section 40.4.6.3.2. The nodal MW amounts of Potential DGD available for apportionment to Local Regulatory Authorities will not exceed the maximum of the corresponding nodal MW amounts determined in accordance with Sections 40.4.6.3.1.1(vi), 40.4.6.3.1.1(vii) or 40.4.6.3.1.1(viii), even though the amounts that were studied and found to be deliverable may be larger.

40.4.6.3.2 Apportionment of Potential DGD to LRAs

Following the annual determination of Potential DGD as described in Section 40.4.6.3.1, the CAISO will apportion the Potential DGD to LRAs for assignment of Deliverability Status to Distributed Generation Facilities. The CAISO will perform the apportionment through a three-round nomination process described in this Section. The CAISO will provide a generic timetable for the process in the Reliability Requirements BPM, and will issue a market notice each year setting out a specific schedule for this process.

40.4.6.3.2.1. Determining LRA Shares of Potential DGD

At the start of each annual cycle for apportionment of Potential DGD to LRAs, the CAISO will determine each LRA's MW share of the total system-wide Potential DGD on the CAISO Controlled Grid, which is the sum of all the nodal Potential DGD MW quantities resulting from the Deliverability Assessment under Section 40.4.6.3.1. Each LRA's share will be based on the LRA's share of system peak load forecast attributable to those LSEs subject to that LRA's jurisdiction, using the Load Forecast for the next Resource Adequacy Compliance Year. The LRA's share determined in this manner will represent the LRA's initial eligibility to use a MW quantity of the total CAISO system-wide Potential DGD to assign Deliverability Status to specific Distributed Generation Facilities, without reference to any particular Nodes or electrical locations. Apportionment to LRAs of Potential DGD at specific Nodes will be performed

California Independent System Operator Corporation
Fifth Replacement Tariff

through the three-stage nomination process described below.

As part of the CAISO's determination of LRA shares, the CAISO will also determine each LRA's share of nodal Potential DGD MW for Nodes at which LSEs for more than one LRA serve Load. For each such Node the CAISO will determine each affected LRA's share of the nodal Potential DGD MW determined in the assessment based on the share of the nodal Load attributable to the LSEs subject to each LRA's jurisdiction, except for Nodes where the following conditions apply:

- (i) The Load under the jurisdiction of one of the affected LRAs is located entirely at that one Node, whereas the Load under the jurisdiction of the other affected LRA is located at multiple Nodes on the CAISO Controlled Grid; and
- (ii) For the LRA whose Load is located entirely at the one Node, the LRA's Load ratio share of the nodal Potential DGD, as described above, is less than the LRA's share of the total system-wide Potential DGD on the CAISO Controlled Grid. This condition means that limiting the LRA's apportionment to the nodal Load ratio share described above would prevent the LRA from obtaining, at the Node where its Load is located, the full amount of system-wide Potential DGD on the CAISO Controlled Grid for which it is eligible.

For a Node where the above two conditions apply, the share of the nodal Potential DGD for the LRA whose Load is located entirely at that Node will equal the lesser of (a) the entire MW quantity of Potential DGD at that Node, or (b) the LRA's Load ratio share of the system-wide Potential DGD on the CAISO Controlled Grid as described above.

After completing the initial determination of eligibility for shares of Potential DGD as described above, the CAISO will notify the LRAs of the results.

40.4.6.3.2.2. Bilateral Transfers of Potential DGD

An LRA shall be entitled to transfer all or a portion of its MW share of Potential DGD at one or more specific Nodes to another LRA, in quantities no smaller than 1 MW. Both LRAs participating in such a transfer shall notify the CAISO of the transfer, and the CAISO will reflect the transfer in the apportionment process only after receiving notification from both LRAs. LRAs may engage in such

California Independent System Operator Corporation
Fifth Replacement Tariff

transfers during the period from the date they received notification of their shares under Section 40.4.6.3.2.1 through the end of third round of LRA nominations.

40.4.6.3.2.3 Appportionment Through LRA Nominations

Each LRA seeking to assign Deliverability Status to specific Distributed Generation Facilities through this Section 40.4.6.3 shall submit nominations, in the form of MW quantities of Potential DGD at specific Nodes of the CAISO Controlled Grid, to the CAISO to utilize portions of its share of the total CAISO system-wide MW of Potential DGD. If an LRA does not submit such nominations, or nominates less than the MW amount for which it is eligible, the CAISO will not appportion Potential DGD beyond the amounts nominated.

There shall be three rounds of nominations. In any given round, and for all rounds cumulatively, each LRA's total nominations cannot exceed its share of the total system-wide MW quantity of Potential DGD on the CAISO Controlled Grid, and its nodal nomination at any Node where the LSEs of more than one LRA serve Load cannot exceed its share of the Potential DGD at that Node as determined under Section 40.4.6.3.2.1, except where its share at that Node has been increased as a result of bilateral transfers under Section 40.4.6.3.2.2.

First Round Nominations

Following the CAISO's notification of LRA shares determined under Section 40.4.6.3.2.1, each LRA shall submit its first round nominations to the CAISO by a date that will be specified in the market notice for the current cycle of this process. In the first round, the LRA may only nominate Nodes at which LSEs under its jurisdiction serve Load. Following the submission of nominations, the CAISO will validate that all nominations comply with this limitation and the eligibility limitations stated above, will notify the submitting LRA of any invalid nominations and will allow the LRA an opportunity to adjust and resubmit its nomination. Once the CAISO has ensured that all LRA nominations are valid in accordance with this Section, the CAISO will approve all validated first round nominations.

Following the CAISO's receipt and validation of the first round nominations and in accordance with the schedule set forth in the market notice for the current cycle, the CAISO will appportion Potential

California Independent System Operator Corporation
Fifth Replacement Tariff

DGD to LRAs in accordance with their nominations and will notify the LRAs that their first round nominations have been approved. The CAISO will then publish on the CAISO Website any MW quantities of Potential DGD at specific Nodes that were not apportioned in the first round.

Second Round Nominations

Each LRA may submit a second round nomination to the CAISO to the extent that the LRA has not yet been apportioned the full MW quantity of Potential DGD for which it is eligible under Section 40.4.6.3.2.1, as modified by any applicable bilateral transfers. In the second round, LRA nominations are not restricted only to those Nodes at which LSEs jurisdictional to the LRA serve Load. Thus an LRA could nominate Potential DGD at a Node where there is no Load at all, or at a Node where another LRA serves Load and that LRA did not nominate all the available Potential DGD at that Node in the first round. For a Node where the combined second round nominations of multiple LRAs exceed the remaining Potential DGD at the Node, the CAISO will apportion shares of the remaining Potential DGD at the Node to LRAs in proportion to their Load ratio shares of system-wide Potential DGD as determined under Section 40.4.6.3.2.1. In addition, the LRA shares of nodal Potential DGD at Nodes where the LSEs of more than one LRA serve load, as determined under Section 40.4.6.3.2.1, will still apply in the second round. Following receipt and validation by the CAISO of second round nominations, the CAISO will apportion any available Potential DGD based on the LRA nominations.

The CAISO will notify LRAs of the outcome of the second round nominations and will publish on the CAISO Website any nodal Potential DGD amounts that were not apportioned through the second round.

Third Round Nominations

Each LRA may submit a third round nomination to the CAISO to the extent that the LRA has not yet been apportioned the full MW quantity of Potential DGD for which it is eligible under Section 40.4.6.3.2.1, as modified by any applicable bilateral transfers. In the third round, LRA nominations are not restricted only to those Nodes at which LSEs jurisdictional to the LRA serve Load, subject to the same provisions as specified above for second round nominations. Following receipt and validation by the CAISO of third

round nominations, the CAISO will apportion any available Potential DGD based on the LRA nominations, and will notify LRAs of the outcome of the third round nominations.

40.4.6.3.3 Assignment of Deliverability Status to Distributed Generation Facilities

Before the start of the next CAISO cycle of the process described in this Section 40.4.6.3, and in accordance with a CAISO market notice setting out the schedule for the new cycle, each LRA should report the following information to the CAISO:

- (i) Any assignment of Deliverability Status to specific Distributed Generation Facilities using Potential DGD that the LRA was apportioned in a prior annual cycle; and
- (ii) Any revocations or re-assignments of Deliverability Status as a result of a failure to meet LRA-specified retention criteria on the part of a Distributed Generation Facility that was previously assigned Deliverability Status under this Section 40.4.6.3 and had not yet achieved commercial operation.

Upon receipt of this information the CAISO will validate that the LRA's assignments of Deliverability Status to specific Distributed Generation Facilities is consistent with the MW quantities of Potential DGD at specific Nodes that were apportioned to the LRA and with the CAISO's methodology for associating the Deliverability Status of a specific generating resource type with a MW quantity of Potential DGD.

40.4.6.3.4 Associating MW of Potential DGD with Deliverability Status of a Distributed Generation Facility

As described further in the Generator Interconnection Business Practice Manual, the association of a MW quantity of Potential DGD at a specific Node with the Deliverability Status of a specific Distributed Generation Facility shall be commensurate with the MW Energy production level appropriate to the type of generating resource comprising the facility modeled in the Deliverability Assessment, the qualifying capacity determination method for that resource type, the installed capacity of the facility, and the Deliverability Status (Full Capacity or Partial Capacity) to be assigned to the facility. If the CAISO identifies an inconsistency between an LRA's use of its apportioned Potential DGD to assign Deliverability Status to a Distributed Generation Facility and the CAISO's methodology for associating MW amounts of

California Independent System Operator Corporation
Fifth Replacement Tariff

Potential DGD with the Deliverability Status of a Distributed Generation Facility, the CAISO will notify the LRA, and the LRA in consultation with the CAISO will adjust its assignments of Deliverability Status as needed.

40.4.6.3.5 Unapportioned Potential DGD and Unassigned Deliverability Status

If an LRA does not nominate the full MW quantity of Potential DGD for which it is eligible under Section 40.4.6.3.2.1 as modified by any bilateral transfers, the CAISO will not apportion to the LRA any Potential DGD beyond the amounts the LRA nominated and will not preserve any unapportioned amount of Potential DGD beyond the current cycle of this process. If an LRA does not, by the start of the next cycle, fully utilize the MW quantity of Potential DGD it was apportioned in the previous cycle to assign Deliverability Status to specific Distributed Generation Facilities, the CAISO will preserve the apportioned but unassigned Potential DGD for that LRA through the next cycle. The CAISO will make reasonable effort in performing the process described in this Section 40.4.6.3 to enable each LRA to be apportioned its load ratio share of total CAISO system-wide Potential DGD on a cumulative basis through successive cycles. The CAISO cannot guarantee, however, that MW quantities of Potential DGD that were available but not apportioned to an LRA in one cycle will be fully available in the next cycle, due to changing conditions on the CAISO Controlled Grid and the need for this process to be coordinated with the CAISO's Transmission Planning Process, GIP and GIDAP.

40.4.6.3.6 Deliverability Status of Distributed Generation Facilities

Subject to the requirements specified in Section 40.4.6.3.7, once an LRA has assigned Deliverability Status to a specific Distributed Generation Facility and reported such assignment to the CAISO, and the CAISO has validated and accepted the reported information as specified under Section 40.4.6.3.3, the Deliverability Status becomes an attribute of the Distributed Generation Facility to which it was assigned. Once that Distributed Generation Facility has achieved Commercial Operation, it will retain that Deliverability Status for as long it remains in Commercial Operation. Prior to the facility achieving Commercial Operation, however, the LRA may revoke the assignment of Deliverability Status if the facility fails to meet LRA-specified criteria for retaining such assignment, and may re-assign the

California Independent System Operator Corporation
Fifth Replacement Tariff

Deliverability Status to another Distributed Generation Facility, provided that the new Distributed Generation Facility is connected to the Distribution System below the same Node on the CAISO Controlled Grid and utilizes no more MW of Potential DGD than the original Distributed Generation Facility. Each LRA that utilizes the provisions of this Section 40.4.6.3 shall provide to the CAISO a description of its retention criteria and its process for revoking an assignment of Deliverability Status from a facility that it determines has failed to meet such criteria. The CAISO will post these descriptions on its web site in conjunction with other documentation regarding the implementation of this Section 40.4.6.3. The LRA must report any such revocations and reassignments to the CAISO, as provided in Section 40.4.6.3.3, and must identify for each such revocation the specific criteria on which the revocation was based.

40.4.6.3.7 Additional Requirements

Assignment of Deliverability Status to any Distributed Generation Facility under this Section 40.4.6.3 is expressly conditioned upon the Distributed Generation Facility's interconnection customer submitting the appropriate interconnection request under the applicable CPUC Rule 21 or wholesale distribution access tariff, completion of such process and achieving Commercial Operation, and completion of all required Reliability Network Upgrades, Distribution Upgrades, or other mitigation that would be needed to safely and reliably interconnect to the Distribution System and deliver Energy from the Distribution System to the appropriate CAISO Controlled Grid Node. In addition, the amount of Resource Adequacy Capacity the Distributed Generation Facility may provide in any given Resource Adequacy Compliance Year is subject to annual Net Qualifying Capacity determination, as specified in Section 40.4.6.1.

40.4.7 Submission Of Supply Plans

40.4.7.1 Schedule for Submission of Supply Plans

Scheduling Coordinators representing Resource Adequacy Resources supplying Resource Adequacy Capacity shall provide the CAISO with annual and monthly Supply Plans, as follows:

- (a) The annual Supply Plan shall be submitted to the CAISO on the schedule set forth in the Business Practice Manual and shall verify their agreement to provide Resource

California Independent System Operator Corporation
Fifth Replacement Tariff

Adequacy Capacity during the next Resource Adequacy Compliance Year.

- (b) The monthly Supply Plans or the same information as required to be included in the monthly Supply Plan, plus any other information the CAISO requires as identified in the Business Practice Manual, shall be submitted to the CAISO at least 45 days in advance of the first day of the month covered by the plan, and in accordance with the schedule and in the reporting format(s) set forth in the Business Practice Manual, and shall verify their agreement to provide Resource Adequacy Capacity during that resource adequacy month.
- (c) The Scheduling Coordinator for the Resource Adequacy Resource may submit, at any time from 45 days through 11 days in advance of the relevant month, a revision to its monthly Supply Plan to correct an error in the plan. The CAISO will not accept any revisions to a monthly Supply Plan from 10 days in advance of the relevant month through the end of the month, unless the Scheduling Coordinator for the Resource Adequacy Resource demonstrates good cause for the change and explains why it was not possible to submit the change earlier.
- (d) The monthly Supply Plan may indicate the willingness of the resource to offer capacity for procurement as **backstop capacity under the Capacity Procurement Mechanism** pursuant to Section 43, and provide the identity of the resource, the available capacity amount, the time periods when the capacity is available, and other information as may be specified in the Business Practice Manual.
- (e) Notwithstanding Section 40.4.7.1(b), for the resource adequacy month of January 2013, the monthly Supply Plans or the same information as required to be included in the monthly Supply Plans, plus any other information the CAISO requires as identified in the Business Practice Manual, shall be submitted to the CAISO no later than November 20, 2012, which is 42 days in advance of the first day of the month. Notwithstanding Section 40.2.2.4(c), for the resource adequacy month of January 2013, the Scheduling Coordinator for the resource adequacy resource may submit at any time from 42 days through 11 days in advance of the relevant month, a revision to its monthly Supply Plan

California Independent System Operator Corporation
Fifth Replacement Tariff

to correct an error in the plan.

40.4.7.2 Form of Supply Plans

The Supply Plan must be in the form of the template provided on the CAISO Website, which shall include an affirmative representation by the Scheduling Coordinator submitting the Supply Plan that the CAISO is entitled to rely on the accuracy of the information provided in the Supply Plan to perform those functions set forth in this Section 40.

40.4.7.3 Validation of Supply Plans

The CAISO shall be entitled to take reasonable measures to validate the accuracy of the information submitted in Supply Plans under this Section. Supply Plan validation measures may include the following:

- (a) The CAISO may compare a Resource Adequacy Resource's Resource Adequacy Capacity against the Resource Adequacy Resource's Net Qualifying Capacity, if applicable. To the extent the Resource Adequacy Capacity of a Resource Adequacy Resource included in a Supply Plan is greater than the Resource Adequacy Resource's Net Qualifying Capacity, the CAISO will notify the respective Scheduling Coordinators for the Resource Adequacy Resource and each Load Serving Entity that has included the Resource Adequacy Resource in its Resource Adequacy Plan that the Resource Adequacy Capacity from the Resource Adequacy Resource shall be reduced to the Resource Adequacy Resource's Net Qualifying Capacity and that it will be considered a mismatch under Section 40.7. If the CAISO is not advised as to how the reduction in Resource Adequacy Capacity to conform with the Resource Adequacy Resource's Net Qualifying Capacity shall be allocated among each Load Serving Entity that included the Resource Adequacy Resource on its Resource Adequacy Plan, the CAISO will apply a pro rata reduction based on the Supply Plan.
- (b) The CAISO may verify whether the Resource Adequacy Capacity listed in the monthly Supply Plan is scheduled to take an Approved Maintenance Outage

California Independent System Operator Corporation
Fifth Replacement Tariff

during the month. To the extent the Resource Adequacy Capacity of a Resource Adequacy Resource included in a Supply Plan is greater than the Resource Adequacy Capacity designated for the resource in the Resource Adequacy Plan, or includes Resource Adequacy Capacity that is scheduled to take an Approved Maintenance Outage during the month, the CAISO will notify the Scheduling Coordinator for the Resource Adequacy Resource and the respective Scheduling Coordinators for each Load Serving Entity that has included the Resource Adequacy Resource in its Resource Adequacy Plan that there is a discrepancy, which will be treated as a mismatch under Section 40.7. To the extent the Resource Adequacy Capacity of a Resource Adequacy Resource included in a Supply Plan is less than the Resource Adequacy Capacity designated for the resource in the Resource Adequacy Plan, or includes Resource Adequacy Capacity that is scheduled for an Approved Maintenance Outage during the month, the CAISO will notify the Local Regulatory Authority, the Scheduling Coordinator for the Resource Adequacy Resource, and the respective Scheduling Coordinators for each Load Serving Entity that has included the Resource Adequacy Resource in its Resource Adequacy Plan that there is a discrepancy, which will be treated as a mismatch under Section 40.7.

- (c) Other errors or inaccuracies identified by the CAISO in a Supply Plan shall be treated as a mismatch under Section 40.7.

Disputes regarding the CAISO's determination of Net Qualifying Capacity shall be subject to Section 40.5.2. The provisions of this Section shall not affect a Resource Adequacy Resource's Net Qualifying Capacity posted by the CAISO under Section 40.5.2.

40.5 Requirements Applying To Modified Reserve Sharing LSEs Only

40.5.1 Day Ahead Scheduling And Bidding Requirements

- (1) Scheduling Coordinators on behalf of Modified Reserve Sharing LSEs serving Load within the CAISO Balancing Authority Area for whom they submit Demand Bids shall submit into the IFM Bids or Self-Schedules for Demand equal to one

California Independent System Operator Corporation
Fifth Replacement Tariff

hundred (100) percent and for Supply equal to one hundred and fifteen (115) percent of the hourly Demand Forecasts for each Modified Reserve Sharing LSE it represents for each Trading Hour for the next Trading Day. Subject to Section 40.5.5, the resources included in a Self-Schedule or a Bid in each Trading Hour to satisfy one hundred and fifteen (115) percent of the Modified Reserve Sharing LSE's hourly Demand Forecasts will be deemed Resource Adequacy Resources and (a) shall be comprised of those resources listed in the Modified Reserve Sharing LSE's monthly Resource Adequacy Plan and (b) shall include all Local Capacity Area Resources listed in the Modified Reserve Sharing LSE's annual Resource Adequacy Plan, if any, except to the extent the Local Capacity Area Resources, if any, are unavailable due to any Outages or reductions in capacity reported to the CAISO in accordance with this CAISO Tariff.

- (i) Local Capacity Area Resources physically capable of operating must submit: (a) Economic Bids for Energy and/or Self-Schedules for all their Resource Adequacy Capacity and (b) Economic Bids for Ancillary Services and/or a Submission to Self-Provide Ancillary Services for all of their Resource Adequacy Capacity that is certified to provide Ancillary Services. For Local Resource Adequacy Capacity that is certified to provide Ancillary Services and is not covered by a Submission to Self-Provide Ancillary Services, the resource must submit Economic Bids for each Ancillary Service for which the resource is certified. For Resource Adequacy Capacity subject to this requirement for which no Economic Energy Bid or Self-Schedule has been submitted, the CAISO shall insert a Generated Bid in accordance with Section 40.6.8. For Resource Adequacy Capacity subject to this requirement for which no Economic Bids for Ancillary Services or Submissions to Self-Provide Ancillary Services have been submitted, the CAISO shall insert a Generated Bid in accordance with Section 40.6.8 for each Ancillary Service the resource

California Independent System Operator Corporation
Fifth Replacement Tariff

is certified to provide. However, to the extent the Generating Unit providing Local Capacity Area Resource capacity constitutes a Use-Limited Resource under Section 40.6.4, the provisions of Section 40.6.4 will apply.

- (ii) Resource Adequacy Resource must participate in the RUC to the extent that the resource has available Resource Adequacy Capacity that was offered into the IFM and is not reflected in an IFM Schedule. Resource Adequacy Capacity participating in RUC will be optimized using zero dollar (\$0/MW-hour) RUC Availability Bid.
- (iii) Capacity from Resource Adequacy Resources selected in RUC will not be eligible to receive a RUC Availability Payment.
- (iv) Through the IFM co-optimization process, the CAISO will utilize available Local Capacity Area Resource Adequacy Capacity to provide Energy or Ancillary Services in the most efficient manner to clear the Energy market, manage congestion and procure required Ancillary Services. In so doing the IFM will honor submitted Energy Self-Schedules of the Local Capacity Area Resource Adequacy Capacity of the Modified Reserve Sharing LSE unless the CAISO is unable to satisfy one hundred (100) percent of the Ancillary Services requirements. In such cases the CAISO may curtail all or a portion of a submitted Energy Self-Schedule to allow Ancillary Service-certified Local Capacity Area Resource Adequacy Capacity to be used to meet the Ancillary Service requirements. The CAISO will not curtail for the purpose of meeting Ancillary Service requirements a Self-Schedule of a resource internal to a Metered Subsystem that was submitted by the Scheduling Coordinator for that Metered Subsystem. If the IFM reduces the Energy Self-Schedule of Resource Adequacy Capacity to provide an Ancillary Service, the Ancillary Service Marginal Price for that Ancillary Service will

California Independent System Operator Corporation
Fifth Replacement Tariff

be calculated in accordance with Section 27.1.2 using the Ancillary Service Bids submitted by the Scheduling Coordinator for the Resource Adequacy Resource or inserted by the CAISO pursuant to this Section 40.5.1, and using the resource's Generated Energy Bid to determine the Resource Adequacy Resource's opportunity cost of Energy. If the Scheduling Coordinator for the Modified Reserve Sharing LSE's Resource Adequacy Resource believes that the opportunity cost of Energy based on the Resource Adequacy Resource's Generated Energy Bid is insufficient to compensate for the resource's actual opportunity cost, the Scheduling Coordinator may submit evidence justifying the increased amount to the CAISO and to the FERC no later than seven (7) days after the end of the month in which the submitted Energy Self-Schedule was reduced by the CAISO to provide an Ancillary Service. The CAISO will treat such information as confidential and will apply the procedures in Section 20.4 of this CAISO Tariff with regard to requests for disclosure of such information. The CAISO shall pay the higher opportunity costs after those amounts have been approved by FERC.

- (2) Resource Adequacy Resources of Modified Reserve Sharing LSEs that do not clear in the IFM or are not committed in RUC shall have no further offer requirements in HASP or Real-Time, except under System Emergencies as provided in this CAISO Tariff.
- (3) Resource Adequacy Resources committed by the CAISO must maintain that commitment through Real-Time. In the event of a Forced Outage on a Resource Adequacy Resource committed in the Day-Ahead Market to provide Energy, the Scheduling Coordinator for the Modified Reserve Sharing LSE will have up to the next HASP bidding opportunity, plus one hour, to replace the lesser of: (i) the committed resource suffering the Forced Outage, (ii) the quantity of Energy

California Independent System Operator Corporation
Fifth Replacement Tariff

committed in the Day-Ahead Market, or (iii) one hundred and seven (107) percent of the hourly forecast Demand.

40.5.2 Demand Forecast Accuracy

On a monthly basis, the CAISO will review Meter Data to evaluate the accuracy or quality of the hourly Day-Ahead Demand Forecasts submitted by the Scheduling Coordinator on behalf of Modified Reserve Sharing LSEs. If the CAISO determines, based on its review, that one or more Demand Forecasts materially under-forecasts the Demand of the Modified Reserve Sharing LSEs for whom the Scheduling Coordinator schedules, after accounting for weather adjustments, the CAISO will notify the Scheduling Coordinator of the deficiency and will cooperate with the Scheduling Coordinator and Modified Reserve Sharing LSE(s) to revise its Demand Forecast protocols or criteria. If the material deficiency affects ten (10) hourly Demand Forecasts over a minimum of two (2) non-consecutive Business Days within a month, the CAISO may: (i) inform State of California authorities including, but not necessarily limited to, the California Legislature, and identify the Modified Reserve Sharing LSE(s) represented by the Scheduling Coordinator and (ii) assign to the Scheduling Coordinator responsibility for all tier 1 RUC charges as specified in Section 11.8.6.5 to address the uncertainty caused by the Scheduling Coordinator's deficient hourly Demand Forecasts until the deficiency is addressed.

40.5.3 Requirement To Make Resources Available In System Emergency

Scheduling Coordinators for Modified Reserve Sharing LSEs that are MSS Operators shall make resources available to the CAISO during a System Emergency in accordance with the provisions of their Metered Subsystem Agreement. Scheduling Coordinators for all other Modified Reserve Sharing LSEs shall make available to the CAISO upon a warning or emergency notice of an actual or imminent System Emergency all resources that have not submitted a Self-Schedule or Economic Bid in the IFM that were listed in the Modified Reserve Sharing LSE's monthly Resource Adequacy Plan that are physically capable of operating without violation of any applicable law.

40.5.4 Consequence Of Failure To Meet Scheduling Obligation

- (1) If the Scheduling Coordinator for the Modified Reserve Sharing LSE fails to submit a Self-Schedule or submit Bids equal to 115% of its hourly Demand Forecasts for each Trading Hour for the next Trading Day in the IFM and RUC,

California Independent System Operator Corporation
Fifth Replacement Tariff

the Scheduling Coordinator will be charged a capacity surcharge of three times the price of the relevant Day-Ahead Hourly LAP LMP in the amount of the shortfall. To the extent the Scheduling Coordinator for the Modified Reserve Sharing LSE schedules imports on one or more Scheduling Points in an aggregate megawatt amount greater than its aggregate import deliverability allocation under Section 40.4.6.2, the quantity of megawatts in excess of its import deliverability allocation will not count toward satisfying the Modified Reserve Sharing LSE's scheduling obligation, unless it clears the Day-Ahead Market.

- (2) If the Scheduling Coordinator for the Modified Reserve Sharing LSE cannot fulfill its obligations under Section 40.5.1(3), the Scheduling Coordinator for the Modified Reserve Sharing LSE will be charged a capacity surcharge of two times the average of the six (6) Settlement Interval LAP prices for the hour in the amount of the shortfall. Energy scheduled in the HASP will not net against, or be used as a credit to correct, any failure to fulfill the Day-Ahead IFM hourly scheduling and RUC obligation in Section 40.5.1(1).
- (3) Any Energy surcharge received by the CAISO pursuant to this Section 40.5.4 shall be allocated to Scheduling Coordinators representing other Load Serving Entities in proportion to each such Scheduling Coordinator's Measured Demand during the relevant Trading Hour(s) to the aggregate CAISO Measured Demand during the relevant Trading Hour(s).

40.5.5 Substitution Of Resources

Subject to the provisions of this Section 40.5, the Scheduling Coordinator for a Modified Reserve Sharing LSE may substitute for its Resource Adequacy Resources listed in its monthly Resource Adequacy Plan provided:

- (1) Substitutions must occur no later than the close of the IFM; and
- (2) Resources eligible for substitution are either imports or capacity from non-Resource Adequacy Resources or Resource Adequacy Resources with

California Independent System Operator Corporation
Fifth Replacement Tariff

additional available capacity defined as Net Qualifying Capacity in excess of previously sold Resource Adequacy Capacity; however a Local Capacity Area Resource may be substituted only with capacity from non-Resource Adequacy Resources located in the same Local Capacity Area.

40.6 Requirements For SCs And Resources For Reserve Sharing LSEs

This Section 40.6 does not apply to Resource Adequacy Resources of Load following MSSs and those entities that participate in the Modified Reserve Sharing LSE program under Section 40.5. Scheduling Coordinators supplying Resource Adequacy Capacity shall make the Resource Adequacy Capacity listed in the Scheduling Coordinator's monthly Supply Plans under Section 40.4.7 available to the CAISO each hour of each day of the reporting month in accordance with this Section 40.6 and Section 9.3.1.3.

40.6.1 Day-Ahead Availability

Scheduling Coordinators supplying Resource Adequacy Capacity shall make the Resource Adequacy Capacity, except for that subject to Section 40.6.4, available Day-Ahead to the CAISO as follows:

- (1) Resource Adequacy Resources physically capable of operating must submit: (a) Economic Bids for Energy and/or Self-Schedules for all their Resource Adequacy Capacity and (b) Economic Bids for Ancillary Services and/or a Submission to Self-Provide Ancillary Services in the IFM for all of their Resource Adequacy Capacity that is certified to provide Ancillary Services. For Resource Adequacy Capacity that is certified to provide Ancillary Services and is not covered by a Submission to Self-Provide Ancillary Services, the resource must submit Economic Bids for each Ancillary Service for which the resource is certified. For Resource Adequacy Capacity subject to this requirement for which no Economic Energy Bid or Self-Schedule has been submitted, the CAISO shall insert a Generated Bid in accordance with Section 40.6.8. For Resource Adequacy Capacity subject to this requirement for which no Economic Bids for Ancillary Services or Submissions to Self-Provide Ancillary Services have been submitted, the CAISO shall insert a Generated Bid in accordance with Section 40.6.8 for each Ancillary Service the resource is certified to provide.

California Independent System Operator Corporation
Fifth Replacement Tariff

- (2) Resource Adequacy Resources that are Extremely Long-Start Resources must make themselves available to the CAISO by complying with the Extremely Long-Start Commitment Process under Section 31.7 or otherwise committing the ELS Resource upon instruction from the CAISO, if physically capable. Once the ELS Resource is committed by the CAISO, it is subject to the provisions of this Section 40.6.1 regarding Day-Ahead Availability and Section 40.6.2 regarding Real-Time Availability for the Trading Days for which it was committed.
- (3) Resource Adequacy Resources must be available except for limitations specified in the Master File, legal or regulatory prohibitions or as otherwise required by this CAISO Tariff or by Good Utility Practice.
- (4) Through the IFM co-optimization process, the CAISO will utilize available Resource Adequacy Capacity to provide Energy or Ancillary Services in the most efficient manner to clear the Energy market, manage congestion and procure required Ancillary Services. In so doing, the IFM will honor submitted Energy Self-Schedules of Resource Adequacy Capacity unless the CAISO is unable to satisfy one hundred percent (100%) of the Ancillary Services requirements. In such cases, the CAISO may curtail all or a portion of a submitted Energy Self-Schedule to allow Ancillary Service-certified Resource Adequacy Capacity to be used to meet the Ancillary Service requirements. The CAISO will not curtail for the purpose of meeting Ancillary Service requirements a Self-Schedule of a resource internal to a Metered Subsystem that was submitted by the Scheduling Coordinator for that Metered Subsystem. If the IFM reduces the Energy Self-Schedule of Resource Adequacy Capacity to provide an Ancillary Service, the Ancillary Service Marginal Price for that Ancillary Service will be calculated in accordance with Section 27.1.2 using the Ancillary Service Bids submitted by the Scheduling Coordinator for the Resource Adequacy Resource or inserted by the CAISO pursuant to this Section 40.6.1, and using the resource's Generated Energy Bid to determine the Resource Adequacy Resource's opportunity cost of

California Independent System Operator Corporation
Fifth Replacement Tariff

Energy. If the Scheduling Coordinator for the Resource Adequacy Resource believes that the opportunity cost of Energy based on the Resource Adequacy Resource's Generated Energy Bid is insufficient to compensate for the resource's actual opportunity cost, the Scheduling Coordinator may submit evidence justifying the increased amount to the CAISO and to the FERC no later than seven (7) days after the end of the month in which the submitted Energy Self-Schedule was reduced by the CAISO to provide an Ancillary Service. The CAISO will treat such information as confidential and will apply the procedures in Section 20.4 of this CAISO Tariff with regard to requests for disclosure of such information. The CAISO shall pay any higher opportunity costs approved by FERC.

- (5) A Resource Adequacy Resources must participate in the RUC to the extent that the resource has available Resource Adequacy Capacity that is not reflected in an IFM Schedule. Resource Adequacy Capacity participating in RUC will be optimized using a zero dollar (\$0/MW-hour) RUC Availability Bid.
- (6) Capacity from Resource Adequacy Resources selected in RUC will not be eligible to receive a RUC Availability Payment.

40.6.2 Real-Time Availability

Resource Adequacy Resources that have received an IFM Schedule for Energy or Ancillary Services or a RUC Schedule for all or part of their Resource Adequacy Capacity must remain available to the CAISO through Real-Time for Trading Hours for which they receive an IFM or RUC Schedule, including any Resource Adequacy Capacity of such resources that is not included in an IFM Schedule or RUC Schedule, except for Resource Adequacy Capacity that is subject to Section 40.6.4.

Short Start Units or Long Start Units that are Resource Adequacy Resources that do not have an IFM Schedule or a RUC Schedule for any of their Resource Adequacy Capacity for a given Trading Hour may be required to be available to the CAISO through Real-Time as specified in Sections 40.6.3 and 40.6.7. Resource Adequacy Resources with Resource Adequacy Capacity that is required to be available to the CAISO through Real-Time and does not have an IFM Schedule or a RUC Schedule for a given Trading

California Independent System Operator Corporation
Fifth Replacement Tariff

Hour must submit to the RTM for that Trading hour: (a) Energy Bids and Self-Schedules for the full amount of the available Resource Adequacy Capacity, including capacity for which it has submitted Ancillary Services Bids or Submissions to Self-Provide Ancillary Services; and (b) Ancillary Services Bids and Submissions to Self-Provide Ancillary Services for the full amount of the available Ancillary Service-certified Resource Adequacy Capacity and for each Ancillary Service for which the resource is certified, including capacity for which it has submitted Energy Bids and Self-Schedules. The CAISO will insert Generated Bids in accordance with Section 40.6.8 for any Resource Adequacy Capacity subject to the above requirements for which the resource has failed to submit the appropriate bids to the RTM.

The CAISO will honor submitted Energy Self-Schedules of Resource Adequacy Capacity unless the CAISO is unable to satisfy one hundred (100) percent of its Ancillary Services requirements. In such cases, the CAISO may curtail all or a portion of a submitted Energy Self-Schedule to allow Ancillary Service-certified Resource Adequacy Capacity to be used to meet the Ancillary Service requirements, as long as such curtailment does not lead to a real-time shortfall in energy supply. If the CAISO reduces a submitted Real-Time Energy Self-Schedule for Resource Adequacy Capacity when that capacity is needed to meet an Ancillary Services requirement, the Ancillary Service Marginal Price for that capacity will be calculated in accordance with Sections 27.1.2 and 40.6.1.

40.6.3 Additional Availability Requirements For Short Start Units

A Short Start Unit that is a Resource Adequacy Resource and that does not have an IFM Schedule or a RUC Schedule for any of its capacity for a given Trading Hour is required to participate in the Real Time Market in accordance with Section 40.6.2. Such a resource that is also a Use-Limited Resource subject to Section 40.6.4 is required, consistent with their applicable use plan, to submit Economic Bids or Self Schedules for Resource Adequacy Capacity into the Real Time Market.

The CAISO may waive these availability obligations for a Short Start Unit that does not have an IFM Schedule or a RUC Schedule based on the procedure to be published on the CAISO Website.

40.6.4 Use-Limited Resources Additional Availability Requirements

40.6.4.1 Registration of Use-Limited Resources

Hydroelectric Generating Units, Proxy Demand Resources, and Participating Load, including Pumping Load, are deemed to be Use-Limited Resources for purposes of this Section 40 and are not required to

California Independent System Operator Corporation
Fifth Replacement Tariff

submit the application described in this Section 40.6.4.1. Scheduling Coordinators for other Use-Limited Resources, must provide the CAISO an application in the form specified on the CAISO Website requesting registration of a specifically identified resource as a Use-Limited Resource. This application shall include specific operating data and supporting documentation including, but not limited to:

- (1) a detailed explanation of why the resource is subject to operating limitations;
- (2) historical data to show attainable MWhs for each 24-hour period during the preceding year, including, as applicable, environmental restrictions for NO_x, SO_x, or other factors; and
- (3) further data or other information as may be requested by the CAISO to understand the operating characteristics of the unit.

Within five (5) Business Days after receipt of the application, the CAISO will respond to the Scheduling Coordinator as to whether or not the CAISO agrees that the facility is eligible to be a Use-Limited Resource. If the CAISO determines the facility is not a Use-Limited Resource, the Scheduling Coordinator may challenge that determination in accordance with the CAISO ADR Procedures.

40.6.4.2 Use Plan

The Scheduling Coordinator shall provide for the following Resource Adequacy Compliance Year a proposed annual use plan for each Use-Limited Resource that is a Resource Adequacy Resource. The proposed annual use plan will delineate on a month-by-month basis the total MWhs of Generation, total run hours, expected daily supply capability (if greater than four hours) and the daily Energy limit, operating constraints, and the timeframe for each constraint. The CAISO will have an opportunity to discuss the proposed annual use plan with the Scheduling Coordinator and suggest potential revisions to meet reliability needs of the system. The Scheduling Coordinator shall then submit its final annual use plan. Scheduling Coordinators for Use-Limited Resources must submit the proposed and final annual use plans in accordance with the schedule set forth in the Business Practice Manual. The Scheduling Coordinator will be able to update the projections made in the annual use plan in the monthly Resource Adequacy Plans. Hydroelectric Generating Units and Pumping Load will be able to update use plans intra-monthly as necessary to reflect evolving hydrological and meteorological conditions. The annual

California Independent System Operator Corporation
Fifth Replacement Tariff

use plan must reflect the potential operation of the Use-Limited Resource at a level no less than the minimum criteria set forth by the Local Regulatory Authority for qualification of the resource.

40.6.4.3 Bidding Requirements on Use-Limited Resources

40.6.4.3.1 Non-Hydro and Dispatchable Use-Limited Resources

Use-Limited Resources, other than those subject to the provisions of 40.6.4.3.2, must submit a Supply Bid or Self-Schedule for their Resource Adequacy Capacity in the Day-Ahead Market whenever the Use-Limited Resources are physically capable of operating in accordance with their operating criteria, including environmental or other regulatory requirements. Use-Limited Resources will also provide a daily Energy limit as part of their Day-Ahead Market offer to enable the CAISO to schedule them for the period in which they are capable of providing the Energy. To the extent that the daily Energy limit has been reached through Self-Schedules, no further action will be taken by the CAISO, unless rescheduling of the Energy is necessary for System Reliability. Use-Limited Resources will attempt to reschedule the Energy in recognition of the System Reliability concern, to the extent that the change is possible without violating a Use-Limited Resource's operating criteria.

40.6.4.3.2 Hydro and Non-Dispatchable Use-Limited Resources

Hydroelectric Generating Units, Pumping Load, and Non-Dispatchable Use-Limited Resources shall submit Self-Schedules or Bids in the Day-Ahead Market for their expected available Energy or their expected as-available Energy, as applicable, in the Day-Ahead Market and HASP. Such resources shall also revise their Self-Schedules or submit additional Bids in HASP based on the most current information available regarding expected Energy deliveries. Hydroelectric Generating Units, Pumping Load, and Non-Dispatchable Use-Limited Resources will not be subject to commitment in the RUC process. The CAISO will retain discretion as to whether a particular resource should be considered a Non-Dispatchable Use-Limited Resource, and this decision will be made in accordance with the provisions of Section 40.6.4.1.

40.6.4.3.3 Availability of Use-Limited Resources During System Emergencies

All Use-Limited Resources remain subject to Section 7.7.2.3 regarding System Emergencies to the extent the Use-Limited Resource is owned or controlled by a Participating Generator.

40.6.4.3.4 Availability of Intermittent Resources

Any Eligible Intermittent Resource that provides Resource Adequacy Capacity may, but is not required to, submit Bids in the Day-Ahead Market.

40.6.5 Additional Availability Requirements For System Resources

In the IFM, the multi-hour block constraints of a System Resource, other than a System Resource capable of submitting a Dynamic Schedule or a Resource-Specific System Resource, are honored in the optimization. Such a resource that is also a Resource Adequacy Resource must be capable of hourly scheduling by the CAISO in RUC if it is not fully scheduled in the IFM. If such a Resource Adequacy Resource is scheduled in the RUC, the CAISO will schedule the resource in the HASP for each hour of the resource's RUC schedule without regard to the multi-hour block constraint that was submitted to the IFM. For an existing System Resource that provides Resource Adequacy Capacity through a call-option that expires prior to the close of the IFM, such a System Resource listed on a Resource Adequacy Plan must be reported to the CAISO for consideration in the Extremely Long-Start Commitment Process.

40.6.5.1 Additional Availability Requirements for Dynamic and Non-Dynamic Resource-Specific System Resources

A Dynamic or Non-Dynamic Resource-Specific System Resource that supplies Resource Adequacy Capacity, and is not otherwise a Use-Limited Resource under Section 40.6.4, will be subject to the requirements of Sections 40.6.1, 40.6.2 and either Section 40.6.3 as a Short Start Unit or Section 40.6.7 as a Long Start Unit based upon the Dynamic Resource-Specific System Resource's registered physical operating characteristics.

40.6.5.2 Dynamic Non-Resource-Specific System Resources

A Dynamic non-Resource-Specific System Resource that provides Resource Adequacy Capacity will be subject to the provisions of 40.6.1 and 40.6.2.

40.6.6 Requirements For Partial Resource Adequacy Resources

Only that output of a Partial Resource Adequacy Resource that is designated by a Scheduling Coordinator as Resource Adequacy Capacity in its monthly or annual Supply Plan shall have an availability obligation to the CAISO. Exports being supported by non-Resource Adequacy Capacity from a Partial Resource Adequacy Resource that becomes unavailable or unusable shall be considered as an export of non-Resource Adequacy Capacity based on the pro-rata allocation of derated capacity of the Partial Resource Adequacy Resource as follows:

California Independent System Operator Corporation
Fifth Replacement Tariff

- (a) Resource Adequacy Capacity – [(Resource Adequacy Capacity/PMax Capacity of Resource Adequacy Resource) x MW Derate or Outage]; or
- (b) [1- (Resource Adequacy Capacity/PMax Capacity of Resource Adequacy Resource)] x De-rated PMax].

40.6.7 Release Of Long Start Units

Long Start Units not committed in the Day-Ahead Market will be released from any further obligation to submit Self-Schedules or Bids for the relevant Operating Day. Scheduling Coordinators for Long Start Units are not precluded from self-committing the unit after the Day-Ahead Market and submitting a Self-Schedule for Wheeling-Out in the HASP, unless precluded by terms of their contracts.

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. As provided in the Business Practice Manuals, a Generated Bid for Energy will be calculated and will include a greenhouse gas cost adder for a resource registered with the California Air Resources Board as having a greenhouse gas compliance obligation. 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.

40.6.8.1 Generated Bids for NRS-RA Resources

Generated Bids to be submitted by the CAISO pursuant to Section 40.6.8 for non-Resource-Specific System Resources that provide Resource Adequacy capacity shall be calculated in accordance with this Section.

40.6.8.1.1 Calculation Options for Generated Bids

The Scheduling Coordinator for each non-Resource Specific System Resource that provides Resource Adequacy Capacity shall select the price taker option, LMP-based option, or negotiated price option as the methodology for calculating the Generated Bids to be submitted by the CAISO under Section 40.6.8 for both the DAM and RTMs. If no selection is made, the CAISO will apply the price taker option to calculate the Generated Bids. For the first ninety (90) days after a resource becomes a non-Resource-Specific System Resource, the calculation of Generated Bids for Resource Adequacy capacity is limited to the price taker option or negotiated price option.

40.6.8.1.2 Price Taker Option

The price taker option is a Generated Bid of \$0/MWh plus the CAISO's estimate of the applicable grid management charge per MWh based on the gross amount of MWh scheduled in the DAM and HASP.

40.6.8.1.3 LMP-Based Option

The LMP-based option calculates the Generated Bid as the weighted average of the lowest quartile of LMPs, at the Intertie point designated for the non-Resource-Specific System Resource's Resource Adequacy Capacity in the Supply Plan, during periods in which the resource was dispatched in the preceding ninety (90) days for which LMPs that have passed the price validation and correction process set forth in Section 35 are available. The weighted average will be calculated based on the quantities Dispatched within each segment of the Generated Bid curve. Each Bid segment created under the LMP-based option for Generated Bids will be subject to a feasibility test, as set forth in a Business Practice Manual, to determine whether there are a sufficient number of data points to allow for the calculation of an LMP-based Generated Bid. The feasibility test is designed to avoid excessive volatility of the Generated Bid under the LMP-based option that could result when calculated based on a relatively small number of prices. If the Scheduling Coordinator for the non-Resource Specific System Resource elects the LMP-based method, it must additionally select either the price-taker method or the negotiated-rate

California Independent System Operator Corporation
Fifth Replacement Tariff

method as the alternative calculation method for the Generated Bids in the event that the feasibility test fails for the LMP-based method.

40.6.8.1.4 Negotiated Price Option

Under the negotiated price option, a Scheduling Coordinator shall submit a proposed Generated Bid along with supporting information and documentation as described in a Business Practice Manual. Within ten (10) Business Days of receipt, the CAISO or an Independent Entity selected by the CAISO will provide a written response. If the CAISO or Independent Entity accepts the proposed Generated Bid, it will become effective within three (3) Business Days from the date of acceptance by the CAISO and remain in effect until: (1) the Generated Bid is modified by FERC; (2) the Generated Bid is modified by mutual agreement of the CAISO and the Scheduling Coordinator; or (3) the Generated Bid expires, is terminated or is modified pursuant to any agreed upon term or condition or pertinent FERC order.

If the CAISO or Independent Entity selected by the CAISO does not accept the proposed Generated Bid, the CAISO or Independent Entity selected by the CAISO and the Scheduling Coordinator shall enter a period of good faith negotiations that terminates sixty (60) days following the date of submission of a proposed Generated Bid by a Scheduling Coordinator. If at any time during this period, the CAISO or Independent Entity selected by the CAISO and the Scheduling Coordinator agree upon the Generated Bid, it will become effective within three (3) Business Days of the date of agreement and remain in effect until: (1) the Generated Bid is modified by FERC; (2) the Generated Bid is modified by mutual agreement of the CAISO and the Scheduling Coordinator; or (3) the Generated Bid expires, is terminated or is modified pursuant to any agreed upon term or condition or pertinent FERC order.

If by the end of the sixty (60) day period the CAISO or Independent Entity selected by the CAISO and the Scheduling Coordinator fail to agree on the Generated Bid to be used under the negotiated price option, the Scheduling Coordinator has the right to file a proposed Generated Bid with FERC pursuant to Section 205 of the Federal Power Act.

During the sixty (60) day period following the submission of a proposed negotiated Generated Bid by a Scheduling Coordinator, and pending FERC's acceptance in cases where the CAISO or Independent Entity selected by the CAISO fail to agree on the Generated Bid for use under the negotiated price option and the Scheduling Coordinator filed a proposed Generated Bid with FERC pursuant to Section 205 of

California Independent System Operator Corporation
Fifth Replacement Tariff

the Federal Power Act, the Scheduling Coordinator has the option of electing to use any of the other options available pursuant to this Section.

The CAISO shall make an informational filing with FERC of any Generated Bids negotiated pursuant to this Section no later than seven (7) days after the end of the month in which the Generated Bids were established.

40.6.8.1.5 Partial Bids

If a Scheduling Coordinator for a non-Resource-Specific System Resource that provides Resource Adequacy Capacity submits a bid for a MW quantity less than the Resource Adequacy Capacity identified in the resource's Supply Plan, the CAISO will insert a Generated Bid only for the remaining Resource Adequacy Capacity by extending the last segment of the resource's bid curve to the full quantity (MWh) of the Resource Adequacy obligation.

40.6.8.1.6 Subset-of-Hours Contracts

The CAISO will submit Generated Bids for non-Resource-Specific System Resources that provide Resource Adequacy Capacity subject to a Subset-of-Hours Contract during only those hours in which the resource is contractually obligated to make the Resource Adequacy Capacity available and the CAISO has not received either notification of an Outage or a Bid for such capacity. If the Scheduling Coordinator for the non-Resource Specific System Resource submits a Bid for part of the Resource Adequacy Capacity subject to a Subset-of-Hours Contract for any hour the resource is contractually obligated to provide the Resource Adequacy Capacity, the CAISO will insert a Generated Bid only for the remaining Resource Adequacy Capacity. Non-Resource-Specific System Resources that provide Resource Adequacy Capacity subject to a Subset-of-Hours Contract must meet the technical interface specifications and submit contractual information as required by a Business Practice Manual.

40.6.9 Grandfathered Firm Liquidated Damages Contracts Requirements

Resource Adequacy Capacity represented by a Firm Liquidated Damages Contract and relied upon by a Scheduling Coordinator in a monthly or annual Resource Adequacy Plan shall be submitted as a Self-Schedule or Bid in the Day-Ahead IFM to the extent such scheduling right exists under the Firm Liquidated Damages Contract.

40.6.10 Exports Of Energy From Resource Adequacy Capacity

Resource Adequacy Capacity may be utilized to serve an Export Bid. An Export Bid may be submitted into the CAISO Markets and be cleared by the Energy being provided by Resource Adequacy Capacity.

40.6.11 Curtailment Of Exports In Emergency Situations

At its sole discretion, the CAISO may curtail exports from Resource Adequacy Capacity to prevent or alleviate a System Emergency. An Export Bid or a Self-Schedule to provide exports included in a binding Schedule accepted in the IFM or HASP will not be distinguished from a Demand Bid or Self-Schedule to serve Load within the CAISO Balancing Authority Area included in a binding Schedule accepted in the IFM or HASP for purposes of curtailment under this Section, except as consistent with Good Utility Practice.

40.6.12 Participating Loads and Proxy Demand Resources

Participating Loads or Proxy Demand Resources that are included in a Resource Adequacy Plan and Supply Plan, if the Scheduling Coordinator for the Participating Loads or Proxy Demand Resources is not the same as that for the Load Serving Entity, will be administered by the CAISO in accordance with the terms and conditions established by the CPUC or the Local Regulatory Authority.

40.7 Compliance

The CAISO will evaluate Resource Adequacy Plans and Supply Plans as follows:

- (a) The CAISO will evaluate whether each annual and monthly Resource Adequacy Plan submitted by a Scheduling Coordinator on behalf of a Load Serving Entity demonstrates Resource Adequacy Capacity sufficient to satisfy the Load Serving Entity's (i) allocated responsibility for Local Capacity Area Resources under Section 40.3.2 and (ii) applicable Demand and Reserve Margin requirements. If the CAISO determines that a Resource Adequacy Plan does not demonstrate Local Capacity Area Resources sufficient to meet its allocated responsibility under Section 40.3.2, compliance with applicable Demand and Reserve Margin requirements, or compliance with any other resource adequacy requirement in this Section 40 or adopted by the CPUC, Local Regulatory Authority, or federal agency, as applicable, the CAISO will notify the relevant Scheduling Coordinator, CPUC, Local Regulatory Authority, or federal agency with jurisdiction over the relevant

California Independent System Operator Corporation
Fifth Replacement Tariff

Load Serving Entity, or in the case of a mismatch between Resource Adequacy Plan(s) and Supply Plan(s), the relevant Scheduling Coordinators, in an attempt to resolve any deficiency in accordance with the procedures set forth in the Business Practice Manual. The notification will be made at least 25 days in advance of the first day of the month covered by the plan and will include the reasons the CAISO believes a deficiency exists. If the deficiency relates to the demonstration of Local Capacity Area Resources in a Load Serving Entity's annual Resource Adequacy Plan, and the CAISO does not provide a written notice of resolution of the deficiency as set forth in the Business Practice Manual, the Scheduling Coordinator for the Load Serving Entity may demonstrate that the identified deficiency is cured by submitting a revised annual Resource Adequacy Plan within thirty (30) days of the beginning of the Resource Adequacy Compliance Year. For all other identified deficiencies, at least ten (10) days prior the effective month of the relevant Resource Adequacy Plan, the Scheduling Coordinator for the Load Serving Entity shall (i) demonstrate that the identified deficiency is cured by submitting a revised Resource Adequacy Plan or (ii) advise the CAISO that the CPUC, Local Regulatory Authority, or federal agency, as appropriate, has determined that no deficiency exists.

- (b) The CAISO will evaluate whether each monthly Resource Adequacy Plan submitted by a Scheduling Coordinator on behalf of a Load Serving Entity demonstrates operationally available Resource Adequacy Capacity, excluding capacity scheduled to take an Approved Maintenance Outage during the resource adequacy month, that is equal to or greater than the Load Serving Entity's applicable forecasted monthly Demand and Reserve Margin. For each day of the month where the CAISO determines that the criteria set forth in Section 9.3.1.3.2.3(b) is not met, if a monthly Resource Adequacy Plan (i) includes capacity scheduled to take an Approved Maintenance Outage on that day that has not been replaced pursuant to Sections 9.3.1.3.1, or 9.3.1.3.2, and (ii) does not demonstrate operationally available Resource Adequacy Capacity equal to or greater than the Load Serving Entity's applicable forecasted monthly Demand and Reserve Margin, the CAISO will require outage replacement and will provide notice of the outage

California Independent System Operator Corporation
Fifth Replacement Tariff

replacement requirement to the Local Regulatory Authority, the Scheduling Coordinator for the Load Serving Entity, and the Scheduling Coordinator for the Resource Adequacy Resource scheduled to take the Approved Maintenance Outage. The notification will be made at least 25 days in advance of the first day of the month covered by the plan and will include the reasons why the CAISO believes an outage replacement requirement exists. At least eleven (11) days prior to the resource adequacy month, the Scheduling Coordinator for either the Load Serving Entity or the Resource Adequacy Resource may demonstrate that the identified outage replacement requirement is cured by submitting to the CAISO a revision or update to the monthly Resource Adequacy Plan or Supply Plan, as applicable. If neither the Scheduling Coordinator for the Load Serving Entity nor the Scheduling Coordinator for the Resource Adequacy Resource timely advises the CAISO that the identified outage replacement requirement is cured, the CAISO may exercise its authority to procure **backstop capacity under the Capacity Procurement Mechanism pursuant to Section 43.**

- (c) In the case of a mismatch between Resource Adequacy Plan(s) and Supply Plan(s), if resolved, the relevant Scheduling Coordinator(s) must provide the CAISO with revised Resource Adequacy Plan(s) or Supply Plans, as applicable, at least ten (10) days prior to the effective month. If the CAISO is not advised that the deficiency or mismatch is resolved at least ten (10) days prior to the effective month, the CAISO will use the information contained in the Supply Plan to set the obligations of Resource Adequacy Resources under this Section 40 and/or to assign any costs incurred under this Section 40 and Section 43.

40.7.1 Other Compliance Issues

Scheduling Coordinators representing Generating Units, System Units or System Resources supplying Resource Adequacy Capacity that fail to provide the CAISO with an annual or monthly Supply Plan, as applicable, as set forth in Section 40.7, shall be subject to Section 37.6.1. Further, Scheduling Coordinators representing Generating Units, System Units or System Resources supplying Resource Adequacy Capacity that fail to provide the CAISO with information required for the CAISO to determine

California Independent System Operator Corporation
Fifth Replacement Tariff

Net Qualifying Capacity shall not be eligible for inclusion in the Net Qualifying Capacity annual report under Section 40.4.2 for the next Resource Adequacy Compliance Year and shall be subject to any applicable Sanctions under Section 37.6.1.

40.7.2 Penalties For Non-Compliance

The failure of a Resource Adequacy Resource or Resource Adequacy Capacity to be available to the CAISO in accordance with the requirements of this Section 40 or Section 9.3.1.3, and the failure to operate a Resource Adequacy Resource by placing it online or in a manner consistent with a submitted Bid or Generated Bid shall be subject to the applicable Sanctions set forth in Section 37.2.4. However, any failure of the Resource Adequacy Resource to satisfy any obligations prescribed under this Section 40 or Section 9.3.1.3 during a Resource Adequacy Compliance Year for which Resource Adequacy Capacity has been committed to a Load Serving Entity shall not limit in any way, except as otherwise established under Section 40.4.5 or requirements of the CPUC, Local Regulatory Authority, or federal agency, as applicable, the ability of the Load Serving Entity to whom the Resource Adequacy Capacity has been committed to use such Resource Adequacy Capacity for purposes of satisfying the resource adequacy requirements of the CPUC, Local Regulatory Authority, or federal agency, as applicable. In addition, a Reserve Sharing LSE shall not be subject to any sanctions, penalties, or other compensatory obligations under this Section 40 on account of a Resource Adequacy Resource's satisfaction or failure to satisfy its obligations under this Section 40 or Section 9.3.1.3.

40.8 CAISO Default Qualifying Capacity Criteria

40.8.1 Applicability

The criteria in this Section 40.8 shall apply only: (i) where the CPUC or Local Regulatory Authority has not established and provided to the CAISO criteria to determine the types of resources that may be eligible to provide Qualifying Capacity and for calculating Qualifying Capacity for such eligible resource types and (ii) until the CAISO has been notified in writing by the CPUC of its intent to overturn, reject or fundamentally modify the capacity-based framework in CPUC Decisions 04-01-050 (Jan. 10, 2004), 04-10-035 (Oct. 28, 2004), and 05-10-042 (Oct. 31, 2005). The types of resources specified in this Section 40.8.1 will be eligible to provide Qualifying Capacity to the extent they meet the criteria for each type of resource set forth in this Section 40.8.1.

40.8.1.2 Nuclear and Thermal

Nuclear and thermal Generating Units, other than Qualifying Facilities with Existing QF Contracts addressed in Section 40.8.1.8 below, must be a Participating Generator or a System Unit. The Qualifying Capacity of nuclear and thermal units, other than Qualifying Facilities addressed in Section 40.8.1.8, will be based on net dependable capacity defined by NERC Generating Availability Data System information.

40.8.1.3 Hydro

Hydroelectric Generating Units, other than Qualifying Facilities with Existing QF Contracts, must be either Participating Generators or System Units. The Qualifying Capacity of a pond or Pumped-Storage Hydro Unit, other than a QF, will be determined based on net dependable capacity defined by NERC GADS minus variable head derate based on an average dry year reservoir level. The Qualifying Capacity of a pond or Pumped-Storage Hydro Unit that is a QF will be determined based on historic performance during the hours of noon to 6:00 p.m., using a three-year rolling average.

The Qualifying Capacity of all run-of-river hydro units, including Qualifying Facilities, will be based on net dependable capacity defined by NERC GADS minus an average dry year conveyance flow, stream flow, or canal head derate. As used in this section, average dry year reflects a one-in-five year dry hydro scenario (for example, using the 4th driest year from the last 20 years on record).

40.8.1.4 Unit-Specific Contracts

Unit-specific contracts with Participating Generators or System Units will qualify as Resource Adequacy Capacity subject to the verification that the total MW quantity of all contracts from a specific unit do not exceed the total Net Qualifying Capacity (MW) consistent with the Net Qualifying Capacity determination for that unit.

40.8.1.5 Contracts with Liquidated Damage Provisions

Firm Energy contracts with liquidated damages provisions, as generally reflected in Service Schedule C of the Western Systems Power Pool Agreement or the Firm LD product of the Edison Electric Institute pro forma agreement, or any other similar firm Energy contract that does not require the seller to source the Energy from a particular unit, and specifies a delivery point internal to the CAISO Balancing Authority Area entered into before October 27, 2005 shall be eligible to count as Qualifying Capacity until the end

California Independent System Operator Corporation
Fifth Replacement Tariff

of 2008. A Scheduling Coordinator, however, cannot have more than twenty-five percent (25%) of its portfolio of Qualifying Capacity met by contracts with liquidated damage provisions for 2008.

40.8.1.6 Wind and Solar

As used in this Section, wind units are those wind Generating Units without backup sources of Generation and solar units are those solar Generating Units without backup sources of Generation. Wind and solar units, other than Qualifying Facilities with Existing QF Contracts, must be Participating Intermittent Resources or subject to availability provisions of Section 40.6.4.3.4.

The Qualifying Capacity of all wind or solar units, including Qualifying Facilities, for each month will be based on their monthly historic performance during that same month during the hours of noon to 6:00 p.m., using a three-year rolling average. For wind or solar units with less than three years operating history, all months for which there is no historic performance data will utilize the monthly average production factor of all units (wind or solar, as applicable) within the TAC Area, or other production data from another area determined by the CAISO to be appropriate if the unit is not within a TAC Area, in which the Generating Unit is located.

40.8.1.7 Geothermal

Geothermal Generating Units, other than Qualifying Facilities with Existing QF Contracts addressed in Section 40.8.1.8, must be Participating Generators or System Units. The Qualifying Capacity of geothermal units, other than Qualifying Facilities addressed in Section 40.8.1.8, will be based on NERC GADS net dependable capacity minus a derate for steam field degradation.

40.8.1.8 Treatment of Qualifying Capacity for Qualifying Facilities

Qualifying Facilities must be subject to an effective Participating Generator Agreement or Net Scheduled Participating Generator Agreement or must be System Units, unless they have an Existing QF Contract. Except for hydro, wind, and solar Qualifying Facilities addressed pursuant to Sections 40.8.1.3 and 40.8.1.6, the Qualifying Capacity of Qualifying Facilities under Existing QF Contracts, will be based on historic monthly Generation output during the hours of noon to 6:00 p.m. (net of Self-provided Load) during a three-year rolling average.

40.8.1.9 Participating Loads

California Independent System Operator Corporation
Fifth Replacement Tariff

The Qualifying Capacity of Participating Loads shall be the average reduction in Demand over a three-year period on a per Dispatch basis or, if the Load does not have three years of performance history, based on comparable evaluation data using similar programs. Loads of Participating Loads must be available at least 48 hours, and if the Loads can only be dispatched for a maximum of two hours per event, then only 0.89 percent of a Scheduling Coordinator's portfolio may be made up of such Loads.

40.8.1.10 Jointly-Owned Facilities

A jointly-owned facility must be either a Participating Generator or a System Unit. The Qualifying Capacity for the entire facility will be determined based on the type of resource as described elsewhere in this Section 40.8.1. In addition, the Scheduling Coordinator must provide the CAISO with a demonstration of its entitlement to the output of the jointly-owned facility's Qualified Capacity and an explanation of how that entitlement may change if the facility's output is restricted.

40.8.1.11 Facilities under Construction

The Qualifying Capacity for facilities under construction will be determined based on the type of resource as described elsewhere in this Section 40.8. In addition, the facility must have been in commercial operation for no less than one month to be eligible to be included as a Resource Adequacy Resource in a Scheduling Coordinator's monthly Resource Adequacy Plan.

40.8.1.12 System Resources and Pseudo-Ties

40.8.1.12.1 Dynamic System Resources and Pseudo-Ties

Dynamic System Resources and Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area shall be treated similar to resources within the CAISO Balancing Authority Area, except with respect to the deliverability screen under Section 40.4.6.1 and with respect to the limitation on the Qualifying Capacity of wind and solar resources set forth in Section 40.8.1.6. However, eligibility as a Resource Adequacy Resource is contingent upon a showing by the Scheduling Coordinator that the Dynamic System Resource or Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area has secured transmission through any intervening Balancing Authority Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission and that the Load Serving Entity for which the Scheduling Coordinator is submitting Demand Bids has an allocation of import capacity at the import Scheduling Point under Section 40.4.6.2 that is not less than the Resource

California Independent System Operator Corporation
Fifth Replacement Tariff

Adequacy Capacity provided by the Dynamic System Resource or Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area.

40.8.1.12.2 Non-Dynamic System Resources

For Non-Dynamic System Resources, the Scheduling Coordinator must demonstrate that the Load Serving Entity for which the Scheduling Coordinator is scheduling Demand has an allocation of import capacity at the import Scheduling Point under Section 40.4.6.2 that is not less than the Resource Adequacy Capacity from the Non-Dynamic System Resource. The Scheduling Coordinator must also demonstrate that the Non-Dynamic System Resource is covered by Operating Reserves, unless unit contingent, in the sending Balancing Authority Area. Eligibility as Resource Adequacy Capacity is contingent upon a showing by the Scheduling Coordinator of the System Resource that it has secured transmission through any intervening Balancing Authority Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission. With respect to Non-Dynamic System Resources, any inter-temporal constraints, such as multi-hour run blocks, must be explicitly identified in the monthly Resource Adequacy Plan, and no constraints may be imposed beyond those explicitly stated in the plan.

40.8.1.13 Proxy Demand Resources

The Qualifying Capacity of a Proxy Demand Resource, for each month, will be based on the resource's average monthly historic demand reduction performance during that same month during the Availability Assessment Hours, as described in Section 40.9.3, using a three-year rolling average. For a Proxy Demand Resource with fewer than three years of performance history, for all months for which there is no historic data, the CAISO will utilize a monthly megawatt value as certified and reported to the CAISO by the Demand Response Provider; otherwise, where available, the CAISO will use the average of historic demand reduction performance data available, by month, for a Proxy Demand Resource. Proxy Demand Resources must be available at least four (4) hours per month in which they are eligible to provide RA Capacity and must be dispatchable for a minimum of thirty (30) minutes per event within each of those months.

40.9. Availability Standards And Payment; Non-Availability Charges

40.9.1 General

Except for the exemptions specified in Section 40.9.2, the CAISO will track the availability of Resource Adequacy Capacity during the Availability Assessment Hours of each month, as specified in Section 40.9.3, in order to determine the amount of Resource Adequacy Capacity that was available to the CAISO. Each non-exempt Resource Adequacy Resource will be subject to the Availability Standards determined in accordance with either Section 40.9.4 or 40.9.7, whichever is applicable, for each month during each Resource Adequacy Compliance Year, starting with the 2010 Resource Adequacy Compliance Year. Scheduling Coordinators for Resource Adequacy Resources will be subject to Non-Availability Charges or Availability Incentive Payments as specified in either Section 40.9.4 or Section 40.9.7, whichever is applicable. MW values or percentages used by the CAISO in this Section 40.9 will be calculated to no less than two decimal places.

40.9.2 Exemptions

The following exemptions apply to the CAISO's Availability Standards program of this Section 40.9:

- (1) Resources with a PMax less than one (1.0) MW will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9.
- (2) Capacity under a resource specific power supply contract that existed prior to June 28, 2009 and Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval prior to June 28, 2009, and is associated with specific Generating Units or System Resources, will not be subject to Non-Availability Charges or Availability Incentive Payments. Such contracted Resource Adequacy Capacity, except for non Resource-Specific System Resources, will be included in the development of Availability Standards and will be subject to any Outage reporting requirements necessary for this purpose. The exemption will apply only for the initial term of the contract and to the MW capacity quantity and Resource Adequacy Resources specified in the contract prior to June 28,

California Independent System Operator Corporation
Fifth Replacement Tariff

2009. The exemption shall terminate upon the conclusion of the initial contract term.

Exempt contracts may be re-assigned or undergo novation on or after June 28, 2009, but the exemption shall not apply for any extended contract term, increased capacity quantity or additional resource(s) beyond those specified in the contract prior to June 28, 2009, except as provided in Section 40.9.2(7) or 40.9.2(8). Scheduling Coordinators for Resource Adequacy Resources subject to these contracts will be required to certify the start date of the contract, the expiration date, the Resource ID(s), and the amount of Resource Adequacy Capacity associated with each Resource ID included in the contract. For Resource Adequacy Resources whose Qualifying Capacity value is determined by historical output, the capacity under a resource specific power supply contract or Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval that meets the requirements in this subsection (2) will not be subject to Non-Availability Charges or Availability Incentive Payments, except that the deadline date for either type of contract shall be August 22, 2010 instead of June 28, 2009.

- (3) For a contract entered into prior to June 28, 2009 that provides for the amount of Resource Adequacy Capacity to increase during the original term of the contract, based on a ratio of the Resource Adequacy Resource's output or due to an addition of capacity, the exemption provided in subsection (2) of this Section 40.9.2 will apply to the additional capacity allowed under the contract; provided that the capacity increase (i) is expressly contained in the provisions of the contract, (ii) occurs during the primary term of the contract; and (iii) does not result from contract extensions or other amendments to the original terms and conditions of the contract, except as provided in Section 40.9.2(7) or 40.9.2(8). Scheduling Coordinators for Resource Adequacy Resources subject to contracts that provide for such capacity increases or additions must include in their certification, in addition to the requirements of subsection (2) of this Section 40.9.2, (i) the citation to any contract provisions that might entitle them to increased exempt Resource Adequacy Capacity from the contracted resources during the primary term of the

California Independent System Operator Corporation
Fifth Replacement Tariff

contract; (ii) the amount of additional capacity to which they might be entitled; and (iii) the actual effective date of the capacity increase. If the actual amount of capacity and/or the actual effective date of the capacity increase is not known at the time of the initial certification, the Scheduling Coordinator shall provide a supplemental certification(s) when this information becomes known. For Resource Adequacy Resources whose Qualifying Capacity value is determined by historical output the exemption provided in subsection (2) of this Section 40.9.2 will apply to an increase in the capacity under a resource specific power supply contract or Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval that meets the requirements in this subsection (3), except that the deadline date for either type of contract to be exempt shall be August 22, 2010 instead of June 28, 2009.

- (4) Demand response resources will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9.
- (5) Resource Adequacy Capacity provided through contracts for Energy from non-specified resources delivered within the CAISO Balancing Authority Area will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9.
- (6) Resource Adequacy Resources of a Modified Reserve Sharing LSE or a Load following MSS will be used to determine the Availability Standards and will be subject to any Outage reporting requirements necessary for this purpose. Non-Local Capacity Area Resource Adequacy Resources of a Modified Reserve Sharing LSE or a Load following MSS will not be subject to Non-Availability Charges or Availability Incentive Payments, but those entities shall remain responsible for any other applicable deficiency payments under this CAISO Tariff or the applicable MSS Agreement.
- (7) Scheduling Coordinators for resources with Existing QF Contracts or Amended QF

California Independent System Operator Corporation
Fifth Replacement Tariff

Contracts that are Resource Adequacy Resources shall be exempt from the Outage reporting requirements of Section 40.9 if the resource previously provided Resource Adequacy Capacity under an Existing QF Contract that was exempt from the application of Non-Availability Charges and Availability Incentive Payments pursuant to Section 40.9.2(2) or 40.9.2(3). This exemption from the Outage reporting requirements of Section 40.9 shall end for each resource when the Existing QF Contract or Amended QF Contract terminates or it is no longer eligible for exemption under Section 40.9.2(2) or 40.9.2(3), or if requested by the Scheduling Coordinator for the resource, whichever is earlier.

- (8) Scheduling Coordinators for resources with Existing QF Contracts or Amended QF Contracts that are Resource Adequacy Resources shall be exempt from the Outage reporting requirements of Section 40.9, and will not be subject to Non-Availability Charges or Availability Incentive Payments, if the QF resource previously provided Resource Adequacy Capacity pursuant to an Existing QF Contract that was executed prior to the August 22, 2010 deadline for exemption under Section 40.9.2(2), and remained in effect pursuant to California Public Utilities Commission Decision 07-09-040 that extended the term of expiring contracts until such time as the new contracts resulting from that decision are available. This exemption from the Outage reporting requirements of Section 40.9, and the Availability Incentive Payments and Non-Availability Charges, shall end for each resource when its Existing QF Contract or Amended QF Contract terminates or if requested by the Scheduling Coordinator for the resource, whichever is earlier.

Exclusions from the Availability Standards and Outage reporting requirements established in this Section 40.9 are for this Section 40.9 alone and do not affect any other obligation arising under the CAISO Tariff.

40.9.3 Availability Assessment Hours

The CAISO shall establish Availability Assessment Hours applicable for each month of each Resource Adequacy Compliance Year, which shall be applied starting with Resource Adequacy Compliance Year 2010, in order to assess the extent to which each Resource Adequacy Resource has met the Availability

California Independent System Operator Corporation
Fifth Replacement Tariff

Standards of this Section 40.9. The Availability Assessment Hours shall be a pre-defined set of hours in each month corresponding to the operating periods when high demand conditions typically occur and when the availability of Resource Adequacy Capacity is most critical to maintaining system reliability. The Availability Assessment Hours shall be comprised of five consecutive hours of each non-weekend, non-federal holiday day. The five hour period will vary by season as necessary such that, based on historical actual load data, the coincident peak load hour typically falls within the five-hour range each day during the month. The CAISO shall annually determine the five hour range for the Availability Assessment Hours for each month of the next Resource Adequacy Compliance year prior to the start of each Resource Adequacy Compliance Year and shall specify them in the Business Practice Manual.

40.9.4 Availability Determinations

This Section 40.9.4 addresses availability assessment for all Resource Adequacy Capacity, including the Resource Adequacy Capacity of Resource-Specific System Resources, subject to the Section 40.9 Availability Standards program; however, this Section 40.9.4 does not apply to Resource Adequacy Capacity provided by non-Resource-Specific System Resources which are addressed in Section 40.9.7.

40.9.4.1 Availability Standard

The CAISO shall calculate and publish the monthly Availability Standards for Resource Adequacy Compliance Year 2010 no later than forty five (45) days after a FERC order approving this section and by July 1 prior to each Resource Adequacy Compliance Year thereafter. For Resource Adequacy Compliance Year 2010, the monthly Availability Standards applicable to Resource Adequacy Resources subject to this Section 40.9.4 will be based on the historical availability of Resource Adequacy Resources during the Availability Assessment Hours of the corresponding months during the period from June 2006 through December 2008. For subsequent years, the monthly Availability Standards 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 Resource Adequacy Resources across all the 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 100 to obtain a number between zero (0) and one hundred percent (100%). For the purpose of determining the available Resource Adequacy Capacity in each month, the CAISO will

California Independent System Operator Corporation
Fifth Replacement Tariff

use the Outage information reported in SLIC and, when available, the Outage reports submitted pursuant to Section 40.9.5. To ensure consistency between the calculation of the monthly Availability Standard and the calculation of each resource's monthly availability, the data utilized for both calculations will be in accordance with the provisions of Sections 40.9.4.2. All Resource Adequacy Resources except for the following will be included in the calculation of the Availability Standards:

- (1) Resource Adequacy Resources exempted in Section 40.9.2;
- (2) Non-Resource-Specific System Resources;
- (3) Resources between one (1) MW and ten (10) MW subject to the reporting requirements of Section 40.9.5, until such time that the CAISO has received the outage reports and can begin to utilize the data; and
- (4) Use-Limited Resources for Compliance Year 2010 and 2011.

40.9.4.2 Availability Calculation for a Resource Adequacy Resource

The CAISO will calculate the monthly availability for each Resource Adequacy Resource subject to this Section 40.9.4 as follows:

The sum of the hourly available Resource Adequacy Capacity of the resource over all Availability Assessment Hours of the month, divided by the sum of the hourly Resource Adequacy Capacity of the resource as designated in the Supply Plan for the resource for those hours, and multiplied by 100 to obtain a number between zero percent (0%) and one hundred percent (100%).

- (c) A Resource Adequacy Resource will be determined to be less than one hundred percent (100%) available in a given month if it has any Forced Outages or temperature-related ambient de-rates that impact the availability of its designated Resource Adequacy Capacity during the Availability Assessment Hours of that month.
- (d) For Resource Adequacy Resources whose Qualifying Capacity value is determined by historical output, its hourly available Resource Adequacy Capacity for each Availability Assessment Hour will be determined from three components: the total actual amount of Energy the resource delivered during that hour; Resource Adequacy Capacity of the resource as designated in its Supply Plan; and the resource's Net Qualifying Capacity as reduced for that hour by the same percentage by which any Forced Outages or

California Independent System Operator Corporation
Fifth Replacement Tariff

temperature-related ambient de-rates reduced the resource's capacity from its PMax capacity. If the total actual amount of Energy delivered by the resource in an Availability Assessment Hour is greater than or equal to the amount of Resource Adequacy Capacity designated in the Supply Plan, the hourly available Resource Adequacy Capacity for the hour will equal the resource's Resource Adequacy Capacity as designated in its Supply Plan. If the total actual amount of Energy delivered by the resource in an Availability Assessment Hour is less than the amount of Resource Adequacy Capacity designated in the Supply Plan, the available Resource Adequacy Capacity of the resource for that hour will be the higher of the total actual Energy the resource delivered in that hour or the resource's Net Qualifying Capacity as reduced for that hour by the same percentage by which any Forced Outages or temperature-related ambient de-rates reduced the resource's capacity from its PMax capacity. The Resource Adequacy Capacity for each resource will be determined in accordance with the following formula:

$$\text{Hourly Available Resource Adequacy Capacity} = \text{Min (RA Capacity, Max (Actual Energy, Proportional Derated Capacity))}$$

Where:

RA Capacity = Resource Adequacy Capacity designated in the Supply Plan

Actual Energy = Total actual Energy delivered by the resource in the Availability Assessment Hour

Proportional Derated Capacity = Resource's Net Qualifying Capacity as reduced for that hour by the same percentage by which any Forced Outages or temperature-related ambient de-rates reduced the resource's capacity from its PMax capacity

If the SC for the Resource Adequacy Resource requests to convert from a Forced Outage to a Maintenance Outage in accordance with Section 9.3.3, the SC must terminate the existing Forced Outage and submit a new request for a Maintenance Outage. In the event the CAISO rejects the request to convert from a Forced Outage to a Maintenance Outage due to reliability criteria, the Outage will not be converted and the Forced Outage will continue. Outages properly submitted for temperature-related

California Independent System Operator Corporation
Fifth Replacement Tariff

ambient derates for a Use Limited Resource will be counted against its availability only until such time as the Use Limited Resource reaches its energy limit constraint, at which time such Outages or derates will no longer count against the availability of the Use Limited Resource for the relevant month.

The start and end times used in calculating the availability of each resource each month will be the Outage time reported in the SLIC system or through the alternative reporting process of Section 40.9.5 for resources not included in the SLIC system.

40.9.4.2.1 Substitute Capacity

A Scheduling Coordinator may substitute capacity that is not Resource Adequacy Capacity for its Resource Adequacy Capacity that is on a Forced Outage or de-rate in order to mitigate the impact of the Forced Outage or de-rate on its availability calculation. Such substitution will be accepted by the CAISO in accordance with the following procedures.

- (1) For Local Capacity Area Resources. A Scheduling Coordinator providing Resource Adequacy Capacity to satisfy a Local Capacity Area requirement may pre-qualify alternate resources by providing a prequalification request in accordance with the form and schedule specified in the Business Practice Manual. If the alternate resource is located at the same bus as the Resource Adequacy Resource it would replace and has similar operational characteristics, the CAISO will approve the pre-qualification request as a substitute resource for use in the subsequent Resource Adequacy Compliance Year. Additionally, when a Local Capacity Area Resource Adequacy Resource subsequently has a Forced Outage or de-rate, the Scheduling Coordinator may, prior to the close of IFM, request to substitute a non-pre-qualified resource. The CAISO will grant the request if the alternate resource is (i) located at the same bus and meets the CAISO's operational needs, or (ii) if not located at the same bus, is located in the same Local Capacity Area, and which meets the CAISO's effectiveness and operational needs, including size of resource, as determined by the CAISO in its reasonable discretion.
- (2) Non-Local Capacity Area Resources (Resource Adequacy Resources designated to meet system requirements). If a Resource Adequacy Resource that is not also a Local Capacity Area Resource has an outage that would count against its availability, the Scheduling Coordinator for that resource may, prior to the close of the IFM, request to substitute a non-Resource

California Independent System Operator Corporation
Fifth Replacement Tariff

Adequacy Resource to be used in the place of the original resource. A Scheduling Coordinator for a non-Resource Specific System Resource that has an outage that would count against its availability may, prior to the close of the IFM, request to substitute a non-Resource Adequacy Resource that is internal to the CAISO Balancing Area Authority (which does not include a Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area) to be used in the place of the original resource. The CAISO shall approve the request if the substitute resource provides the same MW quantity of deliverable capacity as the original Resource Adequacy Resource.

40.9.4.2.2 Accounting for De-Rates

In accounting for a de-rate of a unit that has not committed one hundred percent (100%) of its Net Qualified Capacity in its Monthly Supply Plan, the CAISO will follow the following principles:

- (1) Any de-rate will be applied first to any non Resource Adequacy Capacity of the resource; and
- (2) Any de-rate to Resource Adequacy Capacity will be applied pro-rata to any contract capacity exempt under Section 40.9.2(2) and any non-exempt Resource Adequacy Capacity commitment from that resource.

40.9.5 Outage Reporting

Scheduling Coordinators for Generating Units or Resource-Specific System Resources that are also Resource Adequacy Resources with a maximum output capability of one (1) MW or more, but which do not meet the requirement to provide information on Forced Outages in accordance with Section 9.3.10, shall provide equivalent availability-related information in the form and on the schedule specified in the Business Practice Manuals. This information shall identify all Forced Outages and temperature-related ambient de-rates that have occurred over the previous calendar month and shall contain all relevant details needed to enable the CAISO to perform the availability calculation for the resource in accordance with Section 40.9.4, including: the start and end times of any Outages or de-rates, the MW availability in all Availability Assessment Hours, and the causes of any Forced Outages or de-rates. Scheduling Coordinators for Resource Adequacy Resources whose maximum output capability is ten (10) MW or more shall report Outage-related information in accordance with the reporting obligations in Section 9.3.10.

40.9.6 Non-Availability Charges And Availability Incentive Payments

A Resource Adequacy Resource that is subject to the availability assessment in accordance with Section 40.9.4 and whose monthly availability calculation under Section 40.9.4.2 is more than two and a half percent (2.5%) below the monthly Availability Standard will be subject to a Non-Availability Charge for the month. A Resource Adequacy Resource subject to Section 40.9.4 whose availability calculation under Section 40.9.4.2 is more than two and a half percent (2.5%) above the monthly Availability Standard will be eligible for an Availability Incentive Payment for the month. For Resources whose Qualifying Capacity is determined by their historical output, the CAISO will calculate but not apply through the settlements process the Non-Availability Charges or Availability Incentive Payments to Trading Days within the three months of January, February, and March 2011.

40.9.6.1 Determination of Resource Adequacy Capacity Subject to Non-Availability Charge

The amount of Resource Adequacy Capacity of a Resource Adequacy Resource subject to the Non-Availability Charge will be determined as follows:

- (1) A Resource Adequacy Resource with actual availability calculated in accordance with Section 40.9.4.2 that is less than the Availability Standard minus the tolerance band of two and a half percent (2.5%) for a given month will have the Non-Availability Charge assessed to that portion of its non-exempt Resource Adequacy Capacity determined in accordance with the following formula:

$$P = RA \cdot (S - .025) - X$$

Where:

- P = The RA Resource's RA Capacity subject to Non-Availability Charge
- S = Monthly Availability Standard as a fraction, so that $0 < S < 1.0$
- RA = The RA Resource's RA Capacity (MW) {as designated in its Supply Plan, less any exempt capacity}
- X = The {mean of the} RA Resource's {hourly available RC Capacity over all Availability Assessment Hours of the month (MW).}

California Independent System Operator Corporation
Fifth Replacement Tariff

- (2) No Non-Availability Charge will be applied when a Resource Adequacy Resource's actual availability, calculated in accordance with Section 40.9.4.2 for a given month, is equal to or greater than the Availability Standard less two and a half percent (2.5%).
- (3) Any Forced Outage or temperature-related ambient de-rates of a resource that the CAISO has accepted as a substitute for a Resource Adequacy Resource in accordance with Section 40.9.4.2.1 will be applied in calculating the availability of the Resource Adequacy Resource for which it is substituting.

40.9.6.2 Determination of the Non-Availability Charge

The per-MW Non-Availability Charge rate will be the Monthly CPM Capacity Payment price as specified in Schedule 6 of Appendix F of this CAISO Tariff. The Non-Availability Charge for a Resource Adequacy Resource shall be determined by multiplying the resource's capacity subject to the Non-Availability Charge calculated in accordance with Section 40.9.6.1 by the Non-Availability Charge rate.

40.9.6.3 Availability Incentive Payment

Scheduling Coordinators for Resource Adequacy Resources that achieve monthly availability that is more than two and a half percent (2.5%) above the monthly Availability Standard are eligible to receive the monthly Availability Incentive Payment. This payment will be funded entirely through the monthly Non-Availability Charges assessed for the same month. For each resource eligible for the Availability Incentive Payment, its eligible capacity will be that portion of its designated Resource Adequacy Capacity equal to its actual availability calculated in accordance with Section 40.9.4.2 minus the Availability Standard percent minus two and a half percent (2.5%). The monthly Availability Incentive Payment rate will equal the total Non-Availability Charges assessed for the month divided by the total Resource Adequacy Capacity eligible to receive the Availability Incentive Payment that month, provided that the Availability Incentive Payment rate shall not exceed three times the Non-Availability Charge rate. The Availability Incentive Payment the CAISO shall pay to each eligible resource will equal the product of its eligible capacity and the Availability Incentive Payment rate. Any remaining Non-Availability Charge funds that are not distributed to eligible Resource Adequacy Resources will be credited against the Real-Time neutrality charge to metered CAISO Demand for that Trade Month.

40.9.6.4 Monthly Settlement

California Independent System Operator Corporation
Fifth Replacement Tariff

The CAISO shall calculate and settle Non-Availability Charges and Availability Incentive Payments on a Trade Month basis so that all Non-Availability Charges collected for a Trade Month are allocated in accordance with Section 40.9.6.3 for that same Trade Month.

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 for the 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)

California Independent System Operator Corporation
Fifth Replacement Tariff

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

California Independent System Operator Corporation
Fifth Replacement Tariff

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.

40.9.8 Reporting

By July 1 of each year, the CAISO will provide an informational report that will be posted on the CAISO Website and include the following information: (1) the Availability Standard value for each month of the year and (2) information on the average actual availability each month of Resource Adequacy Resources,

California Independent System Operator Corporation
Fifth Replacement Tariff

the total amount of Non-Availability Charges assessed and the total amount of Availability Incentive Payments made.

41. Procurement Of RMR Generation

41.1 Procurement Of Reliability Must-Run Generation By The CAISO

A Reliability Must-Run Contract is a contract entered into by the CAISO with a Generator which operates a Generating Unit giving the CAISO the right to call on the Generator to generate Energy and, only as provided in this Section 41.1, or as needed for Black Start or Voltage Support required to meet local reliability needs, or to procure Ancillary Services from Potrero power plant to meet operating criteria associated with the San Francisco local reliability area, to provide Ancillary Services from the Generating Units as and when this is required to ensure that the reliability of the CAISO Controlled Grid is maintained.

41.2 Designation Of Generating Unit As Reliability Must-Run Unit

The CAISO will, subject to any existing power purchase contracts of a Generating Unit, have the right at any time based upon CAISO Controlled Grid technical analyses and studies to designate a Generating Unit as a Reliability Must-Run Unit. A Generating Unit so designated shall then be obligated to provide the CAISO with its proposed rates for Reliability Must-Run Generation for negotiation with the CAISO. Such rates shall be authorized by FERC or the Local Regulatory Authority, whichever authority is applicable.

41.3 Reliability Studies And Determination Of RMR Unit Status

In addition to the Local Capacity Technical Study under 40.3.1, the CAISO may perform additional technical studies, as necessary, to ensure compliance with Reliability Criteria. The CAISO will then determine which Generating Units it requires to continue to be Reliability Must-Run Units, which Generating Units it no longer requires to be Reliability Must-Run Units and which Generating Units it requires to become the subject of a Reliability Must-Run Contract which had not previously been so contracted to the CAISO. None of the Generating Units owned by Local Publicly Owned Electric Utilities are planned to be designated as Reliability Must-Run Units by the CAISO as of the CAISO Operations Date but are expected to be operated in such a way as to maintain the safe and reliable operation of the interconnected transmission system comprising the CAISO Balancing Authority Area. However, in the

California Independent System Operator Corporation
Fifth Replacement Tariff

future, Local Publicly Owned Electric Utilities may contract with the CAISO to provide Reliability Must-Run Generation.

41.4 Reliability Must-Run Contracts

A pro forma of the Reliability Must-Run Contract is attached as Appendix G. From the CAISO Operations Date all Reliability Must-Run Units will be placed under the "As Called" conditions, but the parties may, pursuant only to the terms of the Reliability Must-Run Contract, transfer any such unit to one of the alternative forms of conditions under specific circumstances. The CAISO will review the terms of the applicable forms of agreement applying to each Reliability Must-Run Unit to ensure that the CAISO will procure Reliability Must-Run Generation from the cheapest available sources and to maintain System Reliability. The CAISO shall give notice to terminate Reliability Must-Run Contracts that are no longer necessary or can be replaced by less expensive and/or more competitive sources for maintaining the reliability of the CAISO Controlled Grid.

41.5 RMR Dispatch

41.5.1 Day-Ahead And HASP RMR Dispatch

RMR Dispatches will be determined in accordance with the RMR Contract, the MPM process addressed in Sections 31 and 33 and through manual RMR Dispatch Notices to meet Applicable Reliability Criteria. The CAISO will notify Scheduling Coordinators for RMR Units of the amount and time of Energy requirements from specific RMR Units in the Trading Day prior to or at the same time as the Day-Ahead Schedules and AS and RUC Awards are published, to the extent that the CAISO is aware of such requirements, through an RMR Dispatch Notice or flagged RMR Dispatch in the IFM Day-Ahead Schedule. The CAISO may also issue RMR Dispatch Notices after Market Close of the DAM and through Dispatch Instructions flagged as RMR Dispatches in the Real-Time Market. The Energy to be delivered for each Trading Hour pursuant to the RMR Dispatch Notice an RMR Dispatch in the IFM or Real-Time shall be referred to as the RMR Energy. Scheduling Coordinators may submit Bids in the DAM or the HASP for RMR Units operating under Condition 1 of the RMR Contract in accordance with the bidding rules applicable to non-RMR Units. A Bid submitted in the DAM or the HASP for a Condition 1 RMR Unit shall be deemed to be a notice of intent to substitute a market transaction for the amount of MWh specified in each Bid for each Trading Hour pursuant to Section 5.2 of the RMR Contract. In the event

California Independent System Operator Corporation
Fifth Replacement Tariff

the CAISO issues an RMR Dispatch Notice or an RMR Dispatch in the IFM or Real-Time Market for any Trading Hour, any MWh quantities cleared through the MPM shall be considered as a market transaction in accordance with the RMR Contract. RMR Units operating as Condition 2 RMR Units may not submit Bids until and unless the CAISO issues an RMR Dispatch Notice or issues an RMR Dispatch in the IFM, in which case a Condition 2 RMR Unit shall submit Bids in accordance with the RMR Contract in the next available market for the Trading Hours specified in the RMR Dispatch Notice or Day-Ahead Schedule.

41.5.2 RMR Payments

RMR Units operating as Condition 1 RMR Units or Condition 2 RMR Units that receive an RMR Dispatch Notice will be paid in accordance with the RMR Contract.

41.5.3 RMR Units And Ancillary Services Requirements

The CAISO may call upon RMR Units in any amounts that the CAISO has determined is necessary at any time after the issuance of Day-Ahead Schedules for the Trading Day if: (i) the CAISO determines that it requires more of an Ancillary Service than it has been able to procure, except that the CAISO shall not be required to accept Ancillary Services Bids that exceed the price caps specified in Section 39 or any other FERC-imposed price caps; and (ii) the CAISO has notified Scheduling Coordinators of the circumstances existing in this Section 41.5.3, and after such notice, the CAISO determines that a bid insufficiency condition in accordance with the RMR Contract exists in the HASP and the CAISO requires more of an Ancillary Service. The CAISO must provide the notice specified in sub paragraph (ii) of this Section 41.5.3 as soon as possible after the CAISO determines that additional Ancillary Services are needed for which Bids are not available. The CAISO may only determine that a Bid insufficiency exists after the Market Close of the HASP, unless an earlier determination is required in order to accommodate the RMR Unit's operating constraints. For the purposes of this Section 41.5.3, a Bid insufficiency exists in HASP if, and only if: (i) Bids in the HASP for the particular Ancillary Service that can be used to satisfy that particular Ancillary Services requirement that remain after first procuring the megawatts of the Ancillary Service that the CAISO had notified Scheduling Coordinators it would procure in the HASP ("remaining Ancillary Services requirement") represent, in the aggregate, less than two times such remaining Ancillary Services requirement; or (ii) there are less than two unaffiliated bidders to provide such remaining Ancillary Services requirement. If the CAISO determines that a Bid insufficiency condition exists as

California Independent System Operator Corporation
Fifth Replacement Tariff

described in this Section 41.5.3, the CAISO may nonetheless accept available Bids if it determines in its sole discretion that the prices specified in the Bids and the Energy Bid Curves created by the Bids indicate that the Scheduling Coordinators were not attempting to exercise market power.

41.6 Reliability Must-Run Charge

The CAISO shall prepare and send to each Responsible Utility in accordance with Section 11.13, a CAISO Invoice as provided in the RMR Contract in respect of those costs incurred under each Reliability Must-Run Contract that are payable to the CAISO by such Responsible Utility or payable by the CAISO to such Responsible Utility pursuant to Section 41.7. The CAISO Invoices as provided in the RMR Contract shall reflect all reductions or credits required or allowed under or arising from the Reliability Must-Run Contract or under this Section 41.6. The CAISO Invoice as provided in the RMR Contract shall separately show the amounts due for services from each RMR Owner. Each Responsible Utility shall pay the amount due under each CAISO Invoice as provided in the RMR Contract by the due date specified in the CAISO Invoice as provided in the RMR Contract, in default of which interest shall become payable at the interest rate provided in the Reliability Must-Run Contract from the due date until the date on which the amount is paid in full. For each Reliability Must-Run Contract, the CAISO shall establish two segregated commercial bank accounts under the Facility Trust Account referred to in Section 11.13.2.1 and Article 9 of the Reliability Must-Run Contract. One commercial bank account, the RMR Owner Facility Trust Account, shall be held in trust by the CAISO for the RMR Owner. The other commercial bank account, the Responsible Utility Facility Trust Account, shall be held in trust by the CAISO for the Responsible Utility. Payments received by the CAISO from the Responsible Utility in connection with the Reliability Must-Run Contract, including payments following termination of the Reliability Must-Run Contract, will be deposited into the RMR Owner Facility Trust Account and payments from the CAISO to the RMR Owner will be withdrawn from such account, in accordance with this Section 41.6, Article 9 of the Reliability Must-Run Contract and Section 11.13. Any payments received by the CAISO from the RMR Owner in connection with the Reliability Must-Run Contract will be deposited into the Responsible Utility Facility Trust Account. Any payments due to the Responsible Utility of funds received from the RMR Owner in connection with the Reliability Must-Run Contract will be withdrawn from the Responsible Utility Facility Trust Account, in accordance with this Section 41.6, Section 11.13, and Article 9 of the

California Independent System Operator Corporation
Fifth Replacement Tariff

Reliability Must-Run Contract. Neither the RMR Owner Facility Trust Account nor the Responsible Utility Facility Trust Account shall have other funds commingled in it at any time. The CAISO shall not modify this Section or Section 11.13 as it applies to procedures for the billing, invoicing and payment of charges under Reliability Must-Run Contracts without the Responsible Utility's consent, provided, however, that no such consent shall be required with respect to any change in the method by which costs incurred by the CAISO under RMR Contracts are allocated to or among Responsible Utilities.

41.6.1 No Offsets To Responsible Utility's CAISO Invoice Payments

Except where the Responsible Utility is also the RMR Owner, the Responsible Utility's payment of the CAISO Invoice as provided in the RMR Contract shall be made without offset, recoupment or deduction of any kind whatsoever. Notwithstanding the foregoing, if the CAISO fails to deduct an amount required to be deducted under Section 41.6.2, the Responsible Utility may deduct such amount from payment otherwise due under such CAISO Invoice as provided in the RMR Contract.

41.6.2 Refunds Of Disputed Amounts On RMR Invoices

If the Responsible Utility disputes a CAISO Invoice as provided in the RMR Contract, Revised Estimated RMR Invoice, or Revised Adjusted RMR Invoice, or Final Invoice, it shall pay the CAISO Invoice as provided in the RMR Contract but may pay under protest and reserve its right to seek a refund, with interest, from the CAISO. If resolution of the dispute results in an amount paid by the Responsible Utility under protest being due from the CAISO to the Responsible Utility and from the RMR Owner to the CAISO, and such amount was paid to the RMR Owner by the CAISO, then such amount, with interest at the interest rate specified in the applicable Reliability Must-Run Contract from the date of payment until the date on which the amount is repaid in full, shall be refunded by the RMR Owner to the CAISO and from the CAISO to the Responsible Utility, pursuant to Article 9 of the Reliability Must-Run Contract and Section 11.13, by the RMR Owner's inclusion of such refund amount in the appropriate invoice. If the RMR Owner does not include such refund amount (including interest) in the appropriate invoice, then such refund amount shall be deducted by the CAISO from the next succeeding amounts otherwise due from the Responsible Utility to the CAISO and from the next succeeding amounts otherwise due from the CAISO to the RMR Owner with respect to the applicable Reliability Must-Run Contract or, if such RMR Contract has terminated, such amount shall be refunded by the CAISO to the Responsible Utility;

California Independent System Operator Corporation
Fifth Replacement Tariff

provided, however, that if and to the extent that such resolution is based on an error or breach or default of the RMR Owner's obligations to the CAISO under the Reliability Must-Run Contract, then such refund obligation shall extend only to amounts actually collected by the CAISO from the RMR Owner as a result of such resolution. If resolution of the dispute requires the CAISO, but not the RMR Owner, to pay the Responsible Utility, then such award shall be recovered from any applicable insurance proceeds, provided that to the extent sufficient funds are not recoverable through insurance, the amount of the award (whether determined through settlement, or the CAISO ADR Procedures or otherwise) shall be collected by the CAISO pursuant to Section 13.5, and in any event, the award shall be paid by the CAISO to the Responsible Utility pursuant to Section 13.5.

41.6.3 Time-Frame For Responsible Utility To Dispute RMR Invoices

If the Responsible Utility disputes a CAISO Invoice as provided in the RMR Contract, a Revised Estimated RMR Invoice, a Revised Adjusted RMR Invoice, or a Final Invoice, or part thereof, based in whole or in part on an alleged error by the RMR Owner or breach or default of the RMR Owner's obligations to the CAISO under the Reliability Must-Run Contract, the Responsible Utility shall notify the CAISO of such dispute within twelve (12) months of its receipt of the applicable Revised Adjusted RMR Invoice or Final Invoice from the CAISO, except that the Responsible Utility may also dispute a Revised Estimated RMR Invoice, Revised Adjusted RMR Invoice, or Final Invoice for the reasons set forth above in this Section 41.6.3, within sixty (60) days from the issuance of a final report with respect to an audit of the RMR Owner's books and accounts allowed by a Reliability Must-Run Contract.

41.6.4 Disputes After Operational Compliance Review

If the Responsible Utility disputes a CAISO Invoice as provided in the RMR Contract, a Revised Estimated RMR Invoice, a Revised Adjusted RMR Invoice, or a Final Invoice, based in whole or in part on an alleged error by the CAISO or breach or default of the CAISO's obligations to the Responsible Utility, the Responsible Utility shall notify the CAISO of such dispute prior to the later to occur of: (i) the date twelve (12) months following the date on which the CAISO submitted such invoice to the Responsible Utility for payment or (ii) the date sixty (60) days following the date on which a final report is issued in connection with an operational compliance review, pursuant to Section 22.1.2.2, of the CAISO's performance of its obligations to Responsible Utilities under this Section 41.6.4 conducted by an

California Independent System Operator Corporation
Fifth Replacement Tariff

independent third party selected by the CAISO Governing Board and covering the period to which such alleged dispute relates. The CAISO or any Responsible Utility shall have the right to request, but not to require, that the CAISO Governing Board arrange for such an operational compliance review at any time.

41.6.5 Invoice Disputes Subject To RMR Contract Resolution Process

Notwithstanding Section 13, any Responsible Utility dispute relating to a CAISO Invoice as provided in the RMR Contract, a Revised Estimated RMR Invoice, a Revised Adjusted RMR Invoice, a Final Invoice, or a RMR Charge, RMR Payment or RMR Refund shall be resolved through the dispute resolution process specified in the relevant RMR Contract. If the Responsible Utility fails to notify the CAISO of any dispute as provided above, it shall be deemed to have validated the invoice and waived its right to dispute such invoice.

41.6.6 RMR Owner's Rights As A Third Party Beneficiary

The RMR Owner shall, to the extent set forth herein, be a third party beneficiary of, and have all rights that the CAISO has under the CAISO Tariff, at law, in equity or otherwise, to enforce the Responsible Utility's obligation to pay all sums invoiced to it in the CAISO Invoices as provided in the RMR Contract but not paid by the Responsible Utility, to the extent that, as a result of the Responsible Utility's failure to pay, the CAISO does not pay the RMR Owner on a timely basis amounts due under the Reliability Must-Run Contract. The RMR Owner's rights as a third party beneficiary shall be no greater than the CAISO's rights and shall be subject to the dispute resolution process specified in the relevant RMR Contract.

Either the CAISO or the RMR Owner (but not both) will be entitled to enforce any claim arising from an unpaid CAISO Invoice as provided in the RMR Contract, and only one party will be a "disputing party" under the dispute resolution process specified in the relevant RMR Contract with respect to such claim so that the Responsible Utility will not be subject to duplicative claims or recoveries. The RMR Owner shall have the right to control the disposition of claims against the Responsible Utility for non-payments that result in payment defaults by the CAISO under a Reliability Must-Run Contract. To that end, in the event of non-payment by the Responsible Utility of amounts due under the CAISO Invoice as provided in the RMR Contract, the CAISO will not take any action to enforce its rights against the Responsible Utility unless the CAISO is requested to do so by the RMR Owner. The CAISO shall cooperate with the RMR Owner in a timely manner as necessary or appropriate to most fully effectuate the RMR Owner's rights

California Independent System Operator Corporation
Fifth Replacement Tariff

related to such enforcement, including using its best efforts to enforce the Responsible Utility's payment obligations if, as, to the extent, and within the time frame, requested by the RMR Owner. The CAISO shall intervene and participate where procedurally necessary to the assertion of a claim by the RMR Owner.

41.7 Responsibility For Reliability Must-Run Charge

Except as otherwise provided in Section 41.8 , the costs incurred by the CAISO under each Reliability Must-Run Contract shall be payable to the CAISO by the Responsible Utility in whose PTO Service Territory the Reliability Must-Run Units covered by such Reliability Must-Run Contract are located or, where a Reliability Must-Run Unit is located outside the PTO Service Territory of any Responsible Utility, by the Responsible Utility or Responsible Utilities whose PTO Service Territories are contiguous to the Service Area in which the Generating Unit is located, in proportion to the benefits that each such Responsible Utility receives, as determined by the CAISO. Where costs incurred by the CAISO under a Reliability Must-Run Contract are allocated among two or more Responsible Utilities pursuant to this section, the CAISO will file the allocation under Section 205 of the Federal Power Act.

41.8 Responsibility For RMR Charges Associated With SONGS

If the CAISO procures Reliability Must-Run Generation from the San Onofre Nuclear Generation Station Units 2 or 3, it shall determine prior to the operation of such facilities as Reliability Must-Run Generation the appropriate allocation of associated charges, if any, among Responsible Utilities. The allocation of such charges shall be based on the reliability benefits that the CAISO reasonably identifies through studies and analysis as accruing to the respective Service Areas of the Responsible Utilities.

41.9 Exceptional Dispatch Of Condition 2 RMR Units

The CAISO may Dispatch an RMR Unit that has currently selected Condition 2 of its RMR Contract to provide Energy through an Exceptional Dispatch under this CAISO Tariff for reasons other than as prescribed in the RMR Contract under the following conditions:

- (1) The CAISO projects that it will require Energy from the Condition 2 RMR Unit to
 - (a) meet forecast Demand and operating reserve requirements or (b) manage Congestion and no other Generating Unit that is available is capable of meeting the identified requirement;

41.9.1 Notification Required Before Condition 2 RMR Unit Dispatch

Before dispatching a Condition 2 RMR Unit in accordance with this Section, the CAISO must notify Market Participants of (a) the situation for which the CAISO is contemplating dispatching a Condition 2 RMR Unit in accordance with this Section, and (b) the date and time the CAISO requires the Condition 2 RMR Unit so dispatched to be operating. The CAISO shall provide such notice as far in advance as practical and prior to directing the Condition 2 RMR Unit to Start-Up

Notwithstanding anything to the contrary in the applicable RMR Contract, all MWh, Start-Ups and service hours provided by a Generating Unit that has currently selected Condition 2 of its RMR Contract pursuant to this Section 41.9.1 through an Exceptional Dispatch outside of the RMR Contract shall not be used to determine future "Annual Service Limits" as defined in the RMR Contract. Payment for Dispatches pursuant to this Section 41.9.1 is governed by Section 11.

42. Adequacy Of Facilities To Meet Operating & Planning Reserve

42.1 Generation Planning Reserve Criteria

Generation planning reserve criteria shall be met as follows:

42.1.1. On an annual basis, the CAISO shall prepare a forecast of weekly Generation capacity and weekly peak Demand on the CAISO Controlled Grid. This forecast shall cover a period of twelve months and be posted on the CAISO Website and the CAISO may make the forecast available in other forms at the CAISO's option.

42.1.2 Applicable Reliability Criteria Met In Peak Demand

If the forecast shows that the Applicable Reliability Criteria can be met during peak Demand periods, then the CAISO shall take no further action

42.1.3 Applicable Reliability Criteria Not Met In Peak Demand

If the forecast shows that the Applicable Reliability Criteria cannot be met during peak Demand periods, then the CAISO shall facilitate the development of market mechanisms to bring the CAISO Controlled Grid during peak periods into compliance with the Applicable Reliability Criteria (or such more stringent criteria as the CAISO may impose). The CAISO shall solicit Bids in the form of Ancillary Services, short-term Generation supply contracts of up to one (1) year with Generators, and Load curtailment contracts giving the CAISO the right to reduce the Demands of those parties that win the contracts when there is

California Independent System Operator Corporation
Fifth Replacement Tariff

insufficient Generation capacity to satisfy those Demands in addition to all other Demands. The Load curtailment contracts shall provide that the CAISO's curtailment rights can only be exercised after all available Generation capacity has been fully utilized unless the exercise of such rights would allow the CAISO to satisfy the Applicable Reliability Criteria at lower cost, and the curtailment rights shall not be exercised to stabilize or otherwise influence prices for power in the Energy markets.

42.1.4 Lowest Cost Bids Satisfying Applicable Reliability Criteria

If Ancillary Services, short-term Generation supply contracts, or Load curtailment contracts are required to meet Applicable Reliability Criteria, the CAISO shall select the Bids that permit the satisfaction of those Applicable Reliability Criteria at the lowest cost.

42.1.5 CAISO To Take Necessary Steps To Ensure Criteria Compliance

Notwithstanding the foregoing, if the CAISO concludes that it may be unable to comply with the Applicable Reliability Criteria, the CAISO shall, acting in accordance with Good Utility Practice, take such steps as it considers to be necessary to ensure compliance, including the negotiation of contracts through processes other than competitive solicitations. These steps can include the negotiation of contracts for Generation or Ancillary Services on a Real-Time basis.

42.1.6 Long Term Forecast For Information Purposes

The CAISO may, in addition to the required annual forecast, publish a forecast of the peak Demands and Generation resources for two or more additional years. This forecast would be for information purposes to allow Market Participants to take appropriate steps to satisfy the Applicable Reliability Criteria, and would not be used by the CAISO to determine whether additional resources are necessary.

42.1.7 Reliance On Market Forces To Maximum Possible Extent

In fulfilling its requirement to ensure that the applicable Generation planning reserve criteria are satisfied, the CAISO shall rely to the maximum extent possible on market forces.

42.1.8 Allocation Of Costs Incurred By CAISO In Trading Hour To SCs

Except where and to the extent costs incurred by the CAISO for any contract entered into under Section 42.1.5 are recovered from Scheduling Coordinators pursuant to Sections 11.5.8, 11.10 or 42.1.9, all costs incurred by the CAISO in any Trading Hour shall be charged to each Scheduling Coordinator pro rata

based upon the same proportion as the Scheduling Coordinator's Measured Demand bears to the total Measured Demand served in that hour.

42.1.9 Costs For Difference In Schedules And Real-Time Deviations

Costs incurred by the CAISO pursuant to any contract entered into under this Section for resources to meet any portion of the anticipated difference between forward Schedules and the Real-Time deviations from those Schedules shall be charged to each Scheduling Coordinator pro rata based upon the same proportion as the Scheduling Coordinator's obligation for RUC Availability Payments.

43. Capacity Procurement Mechanism

43.1 Interim Capacity Procurement Mechanism

The ICPM as well as changes made to other Sections to implement the ICPM shall expire at midnight on the last day of the twenty-fourth month following the effective date of this Section and shall be replaced with the CPM. ICPM designations in existence on the date the CPM becomes effective shall, as of that date, be subject to the CPM, including the provisions concerning compensation, cost allocation and Settlement, until such time as the ICPM resources have been finally compensated for their services rendered under the ICPM prior to the termination of the ICPM, and the CAISO has finally allocated and recovered the costs associated with such ICPM compensation.

43.1.1 Capacity Procurement Mechanism Expiration

The CPM as well as changes made to other Sections to implement the CPM shall expire at midnight on the last day of the forty-eighth month following the effective date of this Section. CPM designations in existence on the expiration date shall continue in effect and remain subject to the CPM, including the provisions concerning compensation, cost allocation and Settlement, until such time as the CPM resources have been finally compensated for their services rendered under the CPM prior to the termination of the CPM, and the CAISO has finally allocated and recovered the costs associated with such CPM compensation.

43.2 Capacity Procurement Mechanism Designation

The CAISO shall have the authority to designate Eligible Capacity to provide CPM Capacity services under the CPM to address the following circumstances, as discussed in greater detail in Section 43:

California Independent System Operator Corporation
Fifth Replacement Tariff

1. Insufficient Local Capacity Area Resources in an annual or monthly Resource Adequacy Plan;
2. Collective deficiency in Local Capacity Area Resources;
3. Insufficient Resource Adequacy Resources in an LSE's annual or monthly Resource Adequacy Plan;
4. A CPM Significant Event;
5. A reliability or operational need for an Exceptional Dispatch CPM; and
6. Capacity at risk of retirement within the current RA Compliance Year that will be needed for reliability by the end of the calendar year following the current RA Compliance Year.

43.2.1 SC Failure To Show Sufficient Local Capacity Area Resources

43.2.1.1 Annual Resource Adequacy Plan

Where a Scheduling Coordinator fails to demonstrate in an annual Resource Adequacy Plan, submitted separately for each represented LSE, procurement of each LSE's share of Local Capacity Area Resources, as determined in Section 40.3.2 for each month of the following Resource Adequacy Compliance Year, the CAISO shall have the authority to designate CPM Capacity; provided, however, that the CAISO shall not designate CPM Capacity under this Section 43.2.1.1 until after the Scheduling Coordinator has had the opportunity to cure the deficiency set forth in Section 40.7. The CAISO's authority to designate CPM Capacity under this Section 43.2.1.1 is to ensure that each Local Capacity Area in a TAC Area in which the LSE serves Load has Local Capacity Area Resources in the amounts and locations necessary to comply with the Local Capacity Technical Study criteria provided in Section 40.3.1.1, after assessing the effectiveness of Generating Units under RMR Contracts, if any, and all Resource Adequacy Resources reflected in all submitted annual Resource Adequacy Plans and any supplements thereto, as may be permitted by the CPUC, Local Regulatory Authority, or federal agency and provided to the CAISO in accordance with Section 40.7, whether or not such Generating Units under RMR Contracts and Resource Adequacy Resources are located in the applicable Local Capacity Area.

43.2.1.2 Monthly Resource Adequacy Plan

Where a Scheduling Coordinator fails to demonstrate in a monthly Resource Adequacy Plan, submitted separately for each represented LSE, procurement of each LSE's share of Local Capacity Area

California Independent System Operator Corporation
Fifth Replacement Tariff

Resources, as determined in Section 40.3.2 for the reported month, the CAISO shall have the authority to designate CPM Capacity; provided, however, that the CAISO shall not designate CPM Capacity under this Section 43.2.1.2 until after the Scheduling Coordinator has had the opportunity to cure the deficiency as set forth in Section 40.7. The CAISO's authority to designate CPM Capacity under this Section 43.2.1.2 is to ensure that each Local Capacity Area in a TAC Area in which the LSE serves Load has Local Capacity Area Resources in the amounts and locations necessary to comply with the Local Capacity Technical Study criteria provided in Section 40.3.1.1, after assessing the effectiveness of Generating Units under RMR Contracts, if any, and all Resource Adequacy Resources reflected in all submitted annual and monthly Resource Adequacy Plans and any supplements thereto, as may be permitted by the CPUC, Local Regulatory Authority, or federal agency and provided to the CAISO in accordance with Section 40.7, whether or not such Generating Units under RMR Contracts and Resource Adequacy Resources are located in the applicable Local Capacity Area.

43.2.2 Collective Deficiency In Local Capacity Area Resources

The CAISO shall have the authority to designate CPM Capacity where the Local Capacity Area Resources specified in the annual Resource Adequacy Plans of all applicable Scheduling Coordinators, after the opportunity to cure under Section 43.2.2.1 has been exhausted, fail to ensure compliance in one or more Local Capacity Areas with the Local Capacity Technical Study criteria provided in Section 40.3.1.1, regardless of whether such resources satisfy, for the deficient Local Capacity Area, the minimum amount of Local Capacity Area Resources identified in the Local Capacity Technical Study, and after assessing the effectiveness of Generating Units under RMR Contracts, if any, and all Resource Adequacy Resources reflected in all submitted annual Resource Adequacy Plans, whether or not such Generating Units under RMR Contracts and Resource Adequacy Resources are located in the applicable Local Capacity Area. The CAISO may, pursuant to this Section 43.2.2, designate CPM Capacity in an amount and location sufficient to ensure compliance with the Reliability Criteria applied in the Local Capacity Technical Study.

43.2.2.1 LSE Opportunity to Resolve Collective Deficiency in Local Capacity Area Resources

Where the CAISO determines that a need for CPM Capacity exists under Section 43.2.2, but prior to any designation of CPM Capacity, the CAISO shall issue a Market Notice identifying the deficient Local

California Independent System Operator Corporation
Fifth Replacement Tariff

Capacity Area and the quantity of capacity that would permit the deficient Local Capacity Area to comply with the Local Capacity Technical Study criteria provided in Section 40.3.1.1 and, where only specific resources are effective to resolve the Reliability Criteria deficiency, the CAISO shall provide the identity of such resources. Any Scheduling Coordinator may submit a revised annual Resource Adequacy Plan within thirty (30) days of the beginning of the Resource Adequacy Compliance Year demonstrating procurement of additional Local Capacity Area Resources consistent with the Market Notice issued under this Section.

Any Scheduling Coordinator that provides such additional Local Capacity Area Resources consistent with the Market Notice under this Section shall have its share of any CPM procurement costs under Section 43.7.3 reduced on a proportionate basis. If the full quantity of capacity is not reported to the CAISO under revised annual Resource Adequacy Plans in accordance with this Section, the CAISO may designate CPM Capacity sufficient to alleviate the deficiency.

43.2.3 SC Failure To Show Sufficient Resource Adequacy Resources

The CAISO shall have the authority to designate CPM Capacity where a Scheduling Coordinator fails to demonstrate in an annual or monthly Resource Adequacy Plan, submitted separately for each represented LSE, procurement of sufficient Resource Adequacy Resources to comply with each LSE's annual and monthly Demand and Reserve Margin requirements under Section 40; provided that the CAISO shall not designate CPM Capacity under this Section 43.2.3 until after the Scheduling Coordinator has had the opportunity to cure the deficiency as set forth in Section 40.7; provide further that the CAISO shall not designate CPM Capacity under this Section 42.2.3 unless there is an overall net deficiency in meeting the total annual or monthly Demand and Reserve Margin requirements, whichever is applicable, after taking into account all LSE demonstrations in their applicable or monthly Resource Adequacy Plans.

43.2.4 CPM Significant Events

The CAISO may designate CPM Capacity to provide service on a prospective basis following CPM Significant Event, to the extent necessary to maintain compliance with Reliability Criteria and taking into account the expected duration of the CPM Significant Event.

43.2.5 Exceptional Dispatch CPM

California Independent System Operator Corporation
Fifth Replacement Tariff

Except as provided in Section 43.2.5.1, the CAISO shall designate as CPM Capacity to provide service on a prospective basis the capacity of a resource that responds to an Exceptional Dispatch if the Exceptional Dispatch is issued pursuant to Section 34.9.1, subsections (6), (9) or (10) of Section 34.9.2, or Section 34.9.3, unless the Exceptional Dispatch directs the curtailment or shut down of the resource.

43.2.5.1 Limitation on Eligibility for Exceptional Dispatch CPM Designation

The following capacity is not eligible to receive an Exceptional Dispatch CPM designation under this Section 43.2.5.1:

- (1) RA Capacity, RMR Capacity, and CPM Capacity; and
- (2) Capacity of a resource that is eligible to receive supplemental revenues under Section 39.10.3 during any month for which the resource has notified the CAISO under Section 39.10.3 that it chooses to receive supplemental revenues in lieu of an Exceptional Dispatch CPM designation

43.2.5.2 Quantity of Capacity included in an Exceptional Dispatch CPM Designation

43.2.5.2.1 Exceptional Dispatch Commitments of Non RA, Non RMR and Non CPM Resources

If a resource does not have any self-schedule, market-based commitment, or RA, RMR or CPM Capacity and receives an Exceptional Dispatch CPM designation under Section 43.2.5 following an Exceptional Dispatch eligible for a CPM designation, the CAISO shall designate as CPM Capacity the greater of the resource's PMin or the quantity of capacity needed from the resource to address the reliability issue as determined in an engineering assessment if available at that time. For designations made in the post-day ahead timeframe, the CAISO will make an initial determination of the quantity of Exceptional Dispatch CPM Capacity and will subsequently make a post-day ahead reliability assessment of the amount of capacity needed to address the reliability issue, as set forth in the Business Practice Manuals. If the post-day ahead reliability assessment shows that no additional Exceptional Dispatch CPM Capacity is needed from the resource to address the reliability issue, the resource will be compensated based on the initial quantity of capacity designated. If the post-day ahead reliability assessment shows that additional Exceptional Dispatch CPM Capacity is needed from the resource to address the reliability issue, the CAISO will designate the incremental quantity of capacity, will treat the initial and incremental quantities of the Exceptional Dispatch CPM Capacity as a single designation effective as of the date of the initial

California Independent System Operator Corporation
Fifth Replacement Tariff

designation, and will compensate the resource based on the sum of the initial and incremental quantities of the Exceptional Dispatch CPM Capacity for the term of the designation. Any incremental Exceptional Dispatch CPM Capacity designated under this section does not result in a new thirty (30) day term or sixty (60) -day term, as applicable.

43.2.5.2.2 Exceptional Dispatch of Partial RA, Partial CPM Unit, or Market Committed Resource

If a resource is a Partial Resource Adequacy Resource, has a CPM designation of less than its entire capacity, has a Self Schedule or has a market based commitment, or has already received an Exceptional Dispatch CPM designation under Section 43.2.5, the CAISO shall designate as CPM Capacity the amount by which the quantity of capacity needed from the resource to address the reliability issue exceeds the greater of –

- (1) the capacity that the resources must make available to the CAISO as the result of an RA Capacity or CPM Capacity obligation; if any; and
- (2) the sum of any Self-Schedule and any market-based commitment or dispatch of the resource.

43.2.5.2.3 Subsequent Exceptional Dispatch

If the CAISO, during the term of a resource's Exceptional Dispatch CPM designation, issues a subsequent Exceptional Dispatch to the resource that exceeds the sum of the resource's CPM Capacity and RA Capacity, the subsequent Exceptional Dispatch CPM Capacity shall equal the difference between the quantity of capacity needed from the resource to address the reliability issue, as determined in an engineering assessment conducted as set forth in the Business Practice Manuals, and the sum of the resource's CPM Capacity and RA Capacity, but not to exceed the resource's Eligible Capacity. The increase will be effective for the remainder of the initial Exceptional Dispatch CPM Term and retroactively to the beginning of the initial Exceptional Dispatch CPM Term or the first day of the month in which the increase occurs, whichever is later. Any incremental Exceptional Dispatch issued within any Exceptional Dispatch CPM Term does not result in a new 30-day term or 60-day term, as applicable.

43.2.5.2.4 Change in RA, RMR or CPM Status

If a resource has an RA, RMR or CPM Capacity obligation that pre-existed the resource's Exceptional Dispatch CPM designation and, during the term of the resource's Exceptional Dispatch CPM designation,

California Independent System Operator Corporation
Fifth Replacement Tariff

the amount of the resource's RA, RMR or CPM Capacity is reduced, the CAISO will increase the CPM designation by the amount, if any, necessary to ensure that the sum of Exceptional Dispatch CPM designation quantity and any remaining RA Capacity is not less than PMin. If capacity that receives an Exceptional Dispatch CPM designation becomes RA Capacity or receives a monthly CPM designation or Significant Event designation or receives an RMR Contract as of a certain date, then the Exceptional Dispatch CPM designation shall be reduced by the amount of the new RA Capacity, CPM Significant Event designation, or RMR Contract from that date through the rest of the 30-day term.

43.2.6 Capacity At Risk Of Retirement Needed For Reliability

The CAISO shall have the authority to designate CPM Capacity to keep a resource in operation that is at risk of retirement during the current RA Compliance Year and that will be needed for reliability by the end of the calendar year following the current RA Compliance Year. The CAISO may issue this risk of retirement CPM designation in the event that all of the following requirements apply:

- (1) the resource was not contracted as RA Capacity nor listed as RA Capacity in any LSE's annual Resource Adequacy Plan during the current RA Compliance Year;
- (2) the CAISO did not identify any deficiency, individual or collective, in an LSE's annual Resource Adequacy Plan for the current RA Compliance Year that resulted in a CPM designation for the resource in the current RA Compliance Year;
- (3) CAISO technical assessments project that the resource will be needed for reliability purposes, either for its locational or operational characteristics, by the end of the calendar year following the current RA Compliance Year;
- (4) no new generation is projected by the ISO to be in operation by the start of the subsequent RA Compliance Year that will meet the identified reliability need; and
- (5) the resource owner submits to the CAISO and DMM, at least 180 days prior to terminating the resource's PGA or removing the resource from PGA Schedule 1, a request for a CPM designation under this Section 43.2.6 and the affidavit of an executive officer of the company who has the legal authority to bind such entity, with the supporting financial information and documentation discussed in the BPM for Reliability Requirements, that attests that it will be uneconomic for the resource to remain in service

California Independent System Operator Corporation
Fifth Replacement Tariff

in the current RA Compliance Year and that the decision to retire is definite unless CPM procurement occurs.

If the CAISO determines that all of the requirements have been met, prior to issuing the CPM designation, the CAISO shall prepare a report that explains the basis and need for the CPM designation. The CAISO shall post the report on the CAISO's Website and allow an opportunity of no less than seven (7) days for stakeholders to review and submit comments on the report and no less than thirty (30) days for an LSE to procure Capacity from the resource. If an LSE does not, within that period, procure sufficient RA Capacity to keep the resource in operation during the current RA Compliance Year, the CAISO may issue the risk of retirement CPM designation; provided that the CAISO determines that the designation is necessary and that all other available procurement measures have failed to procure the resources needed for reliable operation. The ISO will not issue CPM designations in order to circumvent existing procurement mechanisms that could adequately resolve reliability needs.

43.3 Terms Of CPM Designation

43.3.1 SC Annual Plan Failure To Show Local Capacity Area Resources

CPM Capacity designated under Section 43.2.1.1 shall have a minimum commitment term of one (1) month and a maximum commitment term of one (1) year, based on the period(s) of overall shortage as reflected in the annual Resource Adequacy Plans that have been submitted. The term of the designation may not extend into a subsequent Resource Adequacy Compliance Year.

43.3.2 SC Month Plan Failure To Show Local Capacity Area Resources

CPM Capacity designated under Section 43.2.2.2 shall have a minimum commitment term of one (1) month. The term of the designation may not extend into a subsequent Resource Adequacy Compliance Year.

43.3.3 Annual Plan Collective LCA Resources Insufficient

CPM Capacity designated under Section 43.2.2 shall have a minimum commitment term of one (1) month and a maximum commitment term of one year, based on the period(s) of overall shortage as reflected in the annual Resource Adequacy Plans that have been submitted. The term of the designation may not extend into a subsequent Resource Adequacy Compliance Year.

43.3.4 SC Failure To Show Sufficient Resource Adequacy Resources

CPM Capacity designated under Section 43.2.3 shall: (a) have a minimum commitment term of one (1) month and a maximum commitment term equal to the maximum annual procurement period established by the Local Reliability Authority based on the period of the deficiency reflected in the annual Resource Adequacy Plan or (b) have a commitment term of one (1) month if the deficiency is in the monthly Resource Adequacy Plan. The term of the designation may not extend into a subsequent Resource Adequacy Compliance Year.

43.3.5 Term – CPM Significant Event

CPM Capacity designated under Section 43.2.4 shall have an initial term of thirty (30) days. If the CAISO determines that the CPM Significant Event is likely to extend beyond the thirty (30) day period, the CAISO shall extend the designation for another sixty (60) days. During this additional sixty (60) day period, the CAISO will provide Market Participants with an opportunity to provide alternative solutions to meet the CAISO's operational and reliability needs in response to the CPM Significant Event, rather than rely on the CAISO's designation of capacity under the CPM. The CAISO shall consider and implement, if acceptable to the CAISO in accordance with Good Utility Practice, such alternative solutions provided by Market Participants in a timely manner. If Market Participants do not submit any alternatives to the designation of CPM capacity that are fully effective in addressing the deficiencies in Reliability Criteria resulting from CPM Significant Event, the CAISO shall extend the term of the designation under Section 43.2.4 for the expected duration of the CPM Significant Event.

If the solutions offered by Market Participants are only partially effective in addressing the CAISO's operational and reliability needs resulting from the CPM Significant Event, the CAISO shall extend the designation under Section 43.2.4 for the expected duration of the CPM Significant Event, but only as to the amount of CPM Capacity necessary to satisfy the CAISO's operational and reliability needs after taking into account the effective capacity provided by the alternative solution. If there is a reasonable alternative solution that fully resolves the CAISO's operational and reliability needs, the CAISO will not extend the designation under Section 43.2.4.

43.3.6 Term – Exceptional Dispatch CPM

California Independent System Operator Corporation
Fifth Replacement Tariff

The CAISO shall make an explicit determination for each initial Exceptional Dispatch CPM designation as to whether it was necessary to address an Exceptional Dispatch CPM System Reliability Need or an Exceptional Dispatch CPM Non-System Reliability Need. Exceptional Dispatch CPM Capacity designated under Section 43.2.5 for an Exceptional Dispatch CPM System Reliability Need shall have an Exceptional Dispatch CPM Term of thirty (30) days. If the CAISO determines that the circumstances that led to the Exceptional Dispatch are likely to extend beyond the initial thirty (30) day period, the CAISO shall issue an Exceptional Dispatch CPM or other CPM designation for an additional thirty (30) days. Exceptional Dispatch CPM Capacity designated under Section 43.2.5 for an Exceptional Dispatch CPM Non-System Reliability Need shall have an Exceptional Dispatch CPM Term of sixty (60) days. If the CAISO determines that the circumstances that led to the Exceptional Dispatch are likely to extend beyond the initial sixty (60) day period, the CAISO shall issue an Exceptional Dispatch CPM or other CPM designation for an additional sixty (60) days.

43.3.7 Term - Capacity At Risk Of Retirement Needed For Reliability

A CPM designation for Capacity at risk of retirement under Section 43.2.6 shall have a minimum commitment term of one (1) month and a maximum commitment term of one (1) year, based on the number of months for which the capacity is to be procured within the current RA Compliance Year. The term of the designation may not extend into a subsequent Resource Adequacy Compliance Year. The CAISO shall rescind the CPM designation for any month during which the resource is under contract with an LSE to provide RA Capacity.

43.4 Selection Of Eligible Capacity Under The CPM

In accordance with Good Utility Practice, the CAISO shall make designations of Eligible Capacity as CPM Capacity under Section 43.1 by applying the following criteria in the order listed:

- (1) the effectiveness of the Eligible Capacity at meeting the designation criteria specified in Section 43.2;
- (2) the capacity costs associated with the Eligible Capacity;
- (3) the quantity of a resource's available Eligible Capacity, based on a resource's PMin, relative to the remaining amount of capacity needed;

California Independent System Operator Corporation
Fifth Replacement Tariff

- (4) the operating characteristics of the resource, such as dispatchability, Ramp Rate, and load-following capability;
- (5) whether the resource is subject to restrictions as a Use-Limited Resource; and
- (6) for designations under Section 43.2.3, the effectiveness of the Eligible Capacity in meeting local and/or zonal constraints or other CAISO system needs.

In applying these selection criteria, the goal of the CAISO is to designate lower cost resources that will be effective in meeting the reliability needs underlying the CPM designations. In making this determination, the CAISO will apply the first criterion to identify the effective Eligible Capacity by considering the effectiveness of the resources at meeting the designation criteria for the type of CPM to be issued and at resolving the underlying reliability need. The CAISO will apply the second criterion by considering the cost of the effective Eligible Capacity. The CAISO will endeavor to designate a resource at the CPM Capacity price determined in accordance with Section 43.6.1 before selecting a resource with a higher unit-specific CPM Capacity price specified under Section 43.6.2. The CAISO will endeavor to designate resources that have specified a capacity price before designating resources that have not specified a CPM Capacity price under Section 43.6.2.1. The CAISO will apply the third criterion by considering the quantity of a resource's Eligible Capacity. The CAISO will endeavor to select a resource that has a PMin at or below the capacity that is needed to meet the reliability need before selecting a resource that has a PMin that would result in over-procurement. The CAISO will apply the fourth criterion by considering specific operating characteristics of a resource, such as dispatchability, ramp rate, and load-following capability to the extent that such characteristics are an important factor in resolving the reliability need. The CAISO will apply the fifth criterion by considering whether a resource is use-limited and whether that status may restrict its ability to be available to the CAISO in the Day-Ahead Market and Real-Time Market throughout the period for which it is being procured. To the extent that use-limited resources are capable of performing the required service for the duration of the CPM designation, the CAISO will not unduly discriminate in favor of non-Use Limited resources when applying the selection criteria. The ISO will apply the sixth criterion by considering the effectiveness of the Eligible Capacity to meet local and/or zonal constraints or other CAISO system needs for CPM designations under 43.2.3. If after applying

California Independent System Operator Corporation
Fifth Replacement Tariff

these criteria, two or more resources that are eligible for designation equally satisfy these criteria, the CAISO shall utilize a random selection method to determine the designation between those resources. While the CAISO does not have to designate the full capability of a resource, the CAISO may designate under the CPM an amount of CPM Capacity from a resource that exceeds the amount of capacity identified to ensure compliance with the Reliability Criteria set forth in Section 40.3 due to the PMin or other operational requirements/limits of a resource that has available capacity to provide CPM service. The CAISO shall not designate the capacity of a resource for an amount of capacity that is less than the resource's PMin.

43.5 Obligations Of A Resource Designated Under The CPM

43.5.1 Availability Obligations

Capacity from resources designated under the CPM shall be subject to all of the availability, dispatch, testing, reporting, verification and any other applicable requirements imposed under Section 40.6 on Resource Adequacy Resources identified in Resource Adequacy Plans. In accordance with those requirements, CPM Capacity designated under the CPM shall meet the Day-Ahead availability requirements specified in Section 40.6.1 and the Real-Time availability requirements of Section 40.6.2. Also in accordance with those requirements, Generating Units designated under the CPM that meet the definition of Short Start Units shall have the obligation to meet the additional availability requirements of Section 40.6.3, and Generating Units designated under the CPM that meet the definition of Long Start Units will have the rights and obligations specified in Section 40.6.7.1.

If the CAISO has not received an Economic Bid or a Self-Schedule for CPM Capacity, the CAISO shall utilize a Generated Bid in accordance with the procedures specified in Section 40.6.8.

In addition to Energy Bids, resources designated under the CPM shall submit Ancillary Service Bids for their CPM Capacity to the extent that the resource is certified to provide the Ancillary Service.

43.5.2 Obligation To Provide Capacity And Termination

The decision to accept an CPM designation shall be voluntary for the Scheduling Coordinator for any resource. If the Scheduling Coordinator for a resource accepts an CPM designation, it shall be obligated to perform for the full quantity and full period of the designation with respect to the amount of CPM Capacity for which it has accepted an CPM designation. If a Participating Generator's or Participating

California Independent System Operator Corporation
Fifth Replacement Tariff

Load's Eligible Capacity is designated under the CPM after the Participating Generator or Participating Load has filed notice to terminate its Participating Generator Agreement, Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement or withdraw the Eligible Capacity from its Participating Generator Agreement, Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement, and the Scheduling Coordinator for the resource agrees to provide service under the CPM, then the Scheduling Coordinator shall enter into a new Participating Generator Agreement, Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement, as applicable, with the CAISO.

43.6 Reports

The CAISO shall publish the following reports and notices.

43.6.1 CPM Designation Market Notice

The CAISO shall issue a Market Notice within two (2) Business Days of an CPM designation under Sections 43.2.1 through 43.2.6. CPM designations as a result of Exceptional Dispatches shall be subject to the reporting requirement set forth in Section 34.9.4. The Market Notice shall include a preliminary description of what caused the CPM designation, the name of the resource(s) procured, the preliminary expected duration of the CPM designation, the initial designation period, and an indication that a designation report is being prepared in accordance with Section 43.6.2. For Exceptional Dispatch CPM designations, the market notice shall additionally indicate whether the designation was made to address an Exceptional Dispatch CPM System Reliability Need or an Exceptional Dispatch CPM Non-System Reliability Need, specify the quantity of the Exceptional Dispatch CPM capacity that was procured and the Exceptional Dispatch CPM Term, and identify the engineering assessment the CAISO used to determine the quantity of capacity needed from the resource to address the reliability issue.

43.6.2 Designation Of A Resource Under The CPM

The CAISO shall post a designation report to the CAISO Website and provide a Market Notice of the availability of the report within the earlier of thirty (30) days of procuring a resource under Sections 43.2.1 through 43.2.6 or ten (10) days after the end of the month. The designation report shall include the following information:

California Independent System Operator Corporation
Fifth Replacement Tariff

- (1) A description of the reason for the designation (LSE procurement shortfall, Local Capacity Area Resource effectiveness deficiency, or CPM Significant Event), and an explanation of why it was necessary for the CAISO to utilize the CPM authority);
- (2) The following information would be reported for all backstop designations:
 - (a) the resource name;
 - (b) the amount of CPM Capacity designated (MW),
 - (c) an explanation of why that amount of CPM Capacity was designated,
 - (d) the date CPM Capacity was designated,
 - (e) the duration of the designation; and
 - (f) the price for the CPM procurement; and
- (3) If the reason for the designation is an CPM Significant Event, the CAISO will also include:
 - (a) a discussion of the event or events that have occurred, why the CAISO has procured CPM Capacity, and how much has been procured;
 - (b) an assessment of the expected duration of the CPM Significant Event;
 - (c) the duration of the initial designation (thirty (30) days); and
 - (d) a statement as to whether the initial designation has been extended (such that the backstop procurement is now for more than thirty (30) days), and, if it has been extended, the length of the extension.
- (4) If the reason for the designation is Exceptional Dispatch CPM Capacity, the CAISO will also include additional information about the CAISO's determination of the quantity and term of the designation, which supplements the information included in the market notice issued pursuant to Section 43.6.1.

43.6.3 Non-Market And Repeated Market Commitment Of Non-RA Capacity

Within ten (10) calendar days after the end of each month, the CAISO shall post a report to the CAISO Website that identifies for the prior month:

California Independent System Operator Corporation
Fifth Replacement Tariff

- (1) Any non-market commitments of non-Resource Adequacy Capacity; and
- (2) All market commitments of non-Resource Adequacy Capacity.

The CAISO will provide a Market Notice of the availability of this report. The report will not include commitments of RMR Generation capacity, Resource Adequacy Capacity or designated CPM Capacity.

The report shall include the following information:

- (a) the name of the resource;
- (b) the IOU Service Area and Local Capacity Area (if applicable);
- (c) the maximum capacity committed in response to the event (MW);
- (d) how capacity was procured (for example, by RUC or Exceptional Dispatch);
- (e) the reason capacity was committed; and
- (f) information as to whether or not all Resource Adequacy Resources and previously-designated CPM Capacity were used first and, if not, why they were not.

43.6.4 Board Of Governors Report

The CAISO will include in the operations report provided to the CAISO Governing Board at each board meeting a summary of CPM costs.

43.7 Payments To Resources Designated Under The CPM

Scheduling Coordinators for Eligible Capacity may submit to the CAISO an intention to be paid a monthly CPM Capacity Payment under Section 43.7.1 or Section 43.7.2. Scheduling Coordinators for Eligible Capacity will be able to change their selections annually within thirty (30) days of a CAISO Market Notice seeking such payment preferences. To the extent a Scheduling Coordinator for Eligible Capacity does not submit a selection to be compensated in accordance with Section 43.7.1, the Scheduling Coordinator shall be deemed to have selected to be paid on a resource-specific basis pursuant to Section 43.7.2, for purposes of the CAISO's CPM designation determinations.

43.7.1 Monthly CPM Capacity Payment

On February 16, 2012, the fixed CPM Capacity price of \$67.50/kW-year shall become effective and shall remain in effect for two (2) years. On February 16, 2014, the fixed CPM Capacity price shall increase by

California Independent System Operator Corporation
Fifth Replacement Tariff

five (5) percent and the effective price shall be \$70.88/kW-year, which shall remain in effect for two (2) years until February 16, 2016.

43.7.1.1 Calculation of Monthly CPM Capacity Payment

Scheduling Coordinators representing resources receiving payment under Section 43.7.1 shall receive a monthly CPM Capacity Payment for each month of CPM designation equal to the product of the amount of their CPM Capacity, the relevant CPM Availability Factor for Forced Outages, as determined in accordance with Appendix F, Schedule 6, a monthly shaping factor as set forth in Appendix F, Schedule 6, the effective fixed CPM Capacity price per kW-year and the CPM Availability Percentage for Maintenance Outages, so that the formula for determining the monthly CPM Capacity Payment would be as follows:

$$\begin{aligned} &(\text{CPM Capacity MW}) \times (\text{CPM Availability Factor for Forced Outages}) \times (1/12 \text{ monthly} \\ &\text{shaping factor}) \times (\text{effective fixed CPM Capacity price per kW-year}) \times \text{CPM Availability} \\ &\text{Percentage for Maintenance Outages.} \end{aligned}$$

The CPM Availability Percentage for Maintenance Outages is equal to the ratio of: (1) the sum of the CPM Capacity MW for each hour of the month across all hours of the month, where the actual capacity MW available to the CAISO, if less than the CPM Capacity MW, shall be substituted for CPM Capacity MW for each hour the resource is not available due to a Maintenance Outage or non-temperature-related ambient de-rates to (2) the product of CPM Capacity MW and the total hours in the month.

The foregoing formula shall apply to all CPM Capacity receiving monthly CPM Capacity Payments under this Section 43.7.1 except for CPM Capacity designated to respond to a CPM Significant Event or an Exceptional Dispatch CPM, in which case the monthly CPM Capacity Payment shall be based proportionately on the actual number of days the resource was designated as CPM Capacity during the month to the total number of days in the month.

For purposes of CPM designations, except for designations for CPM Significant Events and Exceptional Dispatch CPM, the CPM Availability Factor for Forced Outages shall be calculated as the ratio of: (1) the sum of the CPM Capacity MW for each hour of the month across all hours of the month, where the actual capacity MW available to the CAISO, if less than the CPM Capacity MW, shall be substituted for CPM

California Independent System Operator Corporation
Fifth Replacement Tariff

Capacity MW for each hour the resource is not available due to a Forced Outage or temperature-related ambient de-rate, to (2) the product of CPM Capacity MW and the total hours in the month.

For purposes of CPM designations for CPM Significant Events and Exceptional Dispatch CPM, the CPM Availability Factor for Forced Outages shall be calculated as the ratio of: (1) the sum of the CPM Capacity MW for each hour across all hours of the month or part of the month for which a unit is designated, whichever is applicable, where the actual capacity MW available to the CAISO, if less than the CPM Capacity MW, shall be substituted for CPM Capacity MW for each hour the resource is not available due to a Forced Outage or temperature-related ambient de-rate, to (2) the product of CPM Capacity MW and the total hours in the month or part of the month for which a unit is designated, whichever is applicable.

43.7.2 Resource-Specific CPM Capacity Payment

If a Scheduling Coordinator for Eligible Capacity believes that the fixed CPM Capacity price per KW-year in effect under Section 43.7.1 will not compensate a resource for its going forward costs, as calculated in accordance with the formula provided in Section 43.7.2.2, the Scheduling Coordinator may annually in accordance with Section 43.7, inform the CAISO of what proposed higher CPM Capacity price would compensate the resource for its going forward costs and which the Scheduling Coordinator is willing to have the CAISO use for purposes of the CPM designation process ("going forward cost offer price").

43.7.2.1 Failure to Submit Going Forward Cost Offer Price

A Scheduling Coordinator for a resource is not required to submit a specific going forward cost offer price for such resource under the process provided for in Section 43.7; however, except for an Exceptional Dispatch CPM designation, a Scheduling Coordinator that has not previously identified the going forward cost offer price for a resource must notify the CAISO of what that price is before any CAISO designation of that resource's capacity as CPM Capacity can become effective. In the case of an Exceptional Dispatch CPM designation on behalf of a resource that has not selected the supplemental revenues option, the CPM designation shall become effective notwithstanding the resource's failure to select compensation pursuant to Section 43.7.1 or to identify a going forward cost offer price pursuant to Section 43.7.2. In such a case, the CAISO shall use the compensation under Section 43.7.1 for both dispatch and compensation for the Exceptional Dispatch CPM Term. In the case of a Scheduling

California Independent System Operator Corporation
Fifth Replacement Tariff

Coordinator that has not previously identified the going forward cost offer price for a resource, the cap on supplemental revenues under Section 39.10.4 will be calculated using the monthly capacity payment under Section 43.7.1.

43.7.2.1.1 Determination of Capacity Price

If the CAISO designates a resource that has proposed a CPM Capacity price above the fixed CPM Capacity price per kW-year in effect under Section 43.7.1, and the sales from the resource are under the jurisdiction of the FERC, the Scheduling Coordinator for the resource shall make a limited resource-specific filing before the FERC to determine the just and reasonable capacity price for the going forward costs for the resource to be used in applying the CAISO's FERC jurisdictional monthly CPM Capacity Payment formula. If the sales from the resource are not under the jurisdiction of the FERC, the Scheduling Coordinator for the resource shall make a non-jurisdictional filing with the FERC to determine the just and reasonable capacity price for the going forward costs for the resource to be used in applying the CAISO's FERC-jurisdictional monthly CPM Capacity Payment formula.

43.7.2.1.2 Going Forward Cost

In making the cost justification filing with FERC for an CPM Capacity price above the fixed CPM Capacity price per kW-year under Section 43.7.1, the Scheduling Coordinator for the resource may not propose -- and shall not get paid -- an amount higher than the going forward cost offer price that it had previously proposed to the CAISO as its going forward cost offer price under Section 43.7 or this Section 43.7.2, either prior to or at the time of CPM designation.

Going forward costs for any resource-specific filing under this Section shall be calculated based on the following formula:

(fixed operation & maintenance costs, plus ad valorem taxes, plus administrative & general costs, plus ten (10) percent of the foregoing amounts),

provided such costs shall be converted to a fixed \$/kW-year amount.

43.7.2.2 Resource-Specific Monthly CPM Capacity Payment

Scheduling Coordinators representing resources receiving payment under Section 43.7.2 shall receive a monthly CPM Capacity Payment for each month of CPM designation equal to the product of the amount of their CPM Capacity, the relevant CPM Availability Factor for Forced Outages as determined in

California Independent System Operator Corporation
Fifth Replacement Tariff

accordance with Appendix F, Schedule 6, a monthly shaping factor as set forth in Appendix F, Schedule 6, the resource-specific CPM Capacity price, as determined by FERC and the CPM Availability

Percentage for Maintenance Outages, in accordance with the following formula:

$(\text{CPM Capacity MW}) \times (\text{CPM Availability Factor for Forced Outages}) \times (1/12 \text{ monthly shaping factor}) \times (\text{the resource-specific CPM Capacity price as determined by FERC}) \times \text{CPM Availability Percentage for Maintenance Outages}.$

The CPM Availability Percentage for Maintenance Outages is equal to the ratio of: (1) the sum of the CPM Capacity MW for each hour of the month across all hours of the month, where the actual capacity MW available to the CAISO, if less than the CPM Capacity MW, shall be substituted for CPM Capacity MW for each hour the resource is not available due to a Maintenance Outage or non-temperature-related ambient de-rate to (2) the product of CPM Capacity MW and the total hours in the month.

The foregoing formula shall apply to all CPM Capacity receiving monthly CPM Capacity Payments under Section 43.7.2 except for CPM Capacity designated to respond to an CPM Significant Event or Exceptional Dispatch CPM, in which case the monthly CPM Capacity Payment shall be based proportionately on the actual number of days the resource was designated as CPM Capacity during the month and available to the CAISO to the total number of days in the month.

Prior to the determination by FERC of the resource-specific going forward costs for CPM Capacity designated and paid pursuant to Section 43.7.2, the CAISO shall proceed as follows. For the period between the CAISO's designation and the FERC's determination, the CAISO shall utilize the fixed CPM Capacity price per kW-year in effect under Section 43.7.1 for purposes of the resource-specific monthly CPM Capacity Payment for financial Settlement. This amount shall be subject to surcharge based on the outcome of the FERC proceeding so that the resource will receive any higher actual resource-specific payment as determined by FERC for the full period of the CPM designation. Once approved by FERC, the CAISO shall apply the higher of the fixed CPM Capacity price per kW-year in effect under Section 43.7.1 or the resource-specific CPM Capacity price as determined by the FERC.

For purposes of CPM designations, except for designations for CPM Significant Events, the CPM Availability Factor for Forced Outages shall be calculated as the ratio of: (1) the sum of the CPM Capacity MW for each hour of the month across all hours of the month, where the actual capacity MW

California Independent System Operator Corporation
Fifth Replacement Tariff

available to the CAISO, if less than the CPM Capacity MW, shall be substituted for CPM Capacity MW for each hour the resource is not available due to a Forced Outage or temperature-related ambient de-rates, to (2) the product of CPM Capacity MW and the total hours in the month.

For purposes of CPM designations for CPM Significant Events, the CPM Availability Factor for Forced Outages shall be calculated as the ratio of: (1) the sum of the CPM Capacity MW for each hour across all hours of the month or part of the month for which a unit is designated, whichever is applicable, where the actual capacity MW available to the CAISO, if less than the CPM Capacity MW, shall be substituted for CPM Capacity MW for each hour the resource is not available and is not on an authorized Outage, to (2) the product of CPM Capacity MW and the total hours in the month or part of the month for which a unit is designated, whichever is applicable.

For purposes of this Section 43.7.2, an authorized Outage shall be limited to a CAISO Approved Maintenance Outage.

43.7.3 Market Payments

In addition to the CPM Capacity Payment identified in Section 43.7, CPM resources shall be entitled to retain any revenues received as a result of their selection in the CAISO Markets, provided, however, that CPM resources are required to participate in the RUC process will be optimized using a zero (\$0) dollar RUC Availability Bid and are not eligible to receive compensation through the RUC process.

43.8 Allocation Of CPM Capacity Payment Costs

For each month, the CAISO shall allocate the costs of CPM Capacity Payments made pursuant to Section 43.6 as follows:

43.8.1 LSE Shortage Of Local Capacity Area Resources In Annual Plan

If the CAISO makes CPM designations under Section 43.2.1.1 to address a shortage resulting from the failure of a Scheduling Coordinator for an LSE to identify sufficient Local Capacity Area Resources to meet its applicable Local Capacity Area capacity requirements in its annual Resource Adequacy Plan, then the CAISO shall allocate the total costs of the CPM Capacity Payments for such CPM designations (for the full term of those CPM designations) pro rata to each Scheduling Coordinator for an LSE based on the ratio of its Local Capacity Area Resource Deficiency to the sum of the deficiency of Local Capacity Area Resources in the deficient Local Capacity Area(s) within a TAC Area. The Local Capacity Area

California Independent System Operator Corporation
Fifth Replacement Tariff

Resource Deficiency under this Section shall be computed on a monthly basis and the CPM Capacity Payments allocated based on deficiencies during the month(s) covered by the CPM designation(s).

43.8.2 LSE Shortage Of Local Capacity Area Resources In Month Plan

If the CAISO makes CPM designations under Section 43.2.1.2 to address a shortage resulting from the failure of a Scheduling Coordinator for an LSE to identify sufficient Local Capacity Area Resources to meet its applicable Local Capacity Area capacity requirements in its monthly Resource Adequacy Plan, then the CAISO shall allocate the total costs of the CPM Capacity Payments for such CPM designations (for the full term of those CPM designations) pro rata to each Scheduling Coordinator for an LSE based on the ratio of its Local Capacity Area Resource Deficiency to the sum of the deficiency of Local Capacity Area Resources in the deficient Local Capacity Area(s) within a TAC Area.

43.8.3 Collective Deficiency In Local Capacity Area Resources

If the CAISO makes designations under Section 43.1.2 the CAISO shall allocate the costs of such designations to all Scheduling Coordinators for LSEs serving Load in the TAC Area(s) in which the deficient Local Capacity Area was located. The allocation will be based on the Scheduling Coordinators' proportionate share of Load in such TAC Area(s) as determined in accordance with Section 40.3.2, excluding Scheduling Coordinators for LSEs that procured additional capacity in accordance with Section 43.2.1.2 on a proportionate basis, to the extent of their additional procurement.

43.8.4 LSE Shortage Of Demand Or Reserve Margin Requirement In Plan

If the CAISO makes CPM designations under Section 43.1.3, then the CAISO will allocate the total costs of the CPM Capacity Payments for such CPM designations (for the full term of those CPM designations) pro rata to each LSE based on the proportion of its deficiency to the aggregate deficiency.

43.8.5 Allocation Of CPM Significant Event Costs

If the CAISO makes any CPM Significant Event designations under Section 43.2.4, the CAISO shall allocate the costs of such designations to all Scheduling Coordinators for LSEs that serve Load in the TAC Area(s) in which the CPM Significant Event caused or threatened to cause a failure to meet Reliability Criteria based on the percentage of actual Load of each LSE represented by the Scheduling Coordinator in the TAC Area(s) to total Load in the TAC Area(s) as recorded in the CAISO Settlement system for the actual days during any Settlement month period over which the designation has occurred.

43.8.6 Allocation Of Exceptional Dispatch CPMs

If the CAISO makes any Exceptional Dispatch CPM designations under Section 43.2.5, the CAISO shall allocate the costs of such designations to all Scheduling Coordinators for LSEs that serve Load in the TAC Area(s) in which the need for the Exceptional Dispatch CPM arose based on the percentage of actual Load of each LSE represented by the Scheduling Coordinator in the TAC Area(s) to total Load in the TAC Area(s) as recorded in the CAISO Settlement system for the actual days during any Settlement month period over which the designation has occurred.

43.8.7 Allocation of CPM Costs For Resources At Risk of Retirement

If the CAISO makes any CPM designations under Section 43.2.6 for resources at risk of retirement needed for reliability, the CAISO shall allocate the costs of such designations to all Scheduling Coordinators for LSEs that serve Load in the TAC Area(s) in which the need for the CPM designation arose based on the percentage of actual Load of each LSE represented by the Scheduling Coordinator in the TAC Area(s) to total Load in the TAC Area(s) as recorded in the CAISO Settlement system for the actual days during any Settlement month period over which the designation has occurred.

43.9 Crediting Of CPM Capacity

The CAISO shall credit CPM designations to the resource adequacy obligations of Scheduling Coordinators for Load Serving Entities as follows:

- (a) To the extent the cost of CPM designation under Section 43.2.1.1 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43.8.1, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards (1) the LSE's Local Capacity Area Resource obligation under Section 40.3.2 in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43.2.1.1 and (2) the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43.2.1.1.
- (b) To the extent the cost of CAISO designation under Section 43.2.2 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43.8.3, the CAISO

California Independent System Operator Corporation
Fifth Replacement Tariff

shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43.2.2.

- (c) To the extent the cost of CPM designation under Section 43.2.3 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43.8.4, and the designation is for greater than one month under Section 43.3.4, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43.2.3.
- (d) To the extent the cost of CPM designation under Section 43.2.6 is allocated to a Scheduling Coordinator on behalf of a LSE under Section 43.8.7, and the designation is for greater than one month under Section 43.3.7, the CAISO shall provide the Scheduling Coordinator on behalf of the LSE, for the term of the designation, credit towards the LSE's Demand and Reserve Margin requirements determined under Section 40 in an amount equal to the LSE's pro rata share of the CPM Capacity designated under Section 43.2.6.
- (e) The credit provided in this Section shall be used for determining the need for the additional designation of CPM Capacity under Section 43.2 and for allocation of CPM costs under Section 43.8.
- (f) For each Scheduling Coordinator that is provided credit pursuant to this Section, the CAISO shall provide information, including the quantity of capacity procured in MW, necessary to allow the CPUC, other Local Regulatory Authority, or federal agency with jurisdiction over the LSE on whose behalf the credit was provided to determine whether the LSE should receive credit toward its resource adequacy requirements adopted by such agencies or authorities.

California Independent System Operator Corporation
Fifth Replacement Tariff

44. [NOT USED]

44.1 [NOT USED]

44.2 [NOT USED]

44.3 [NOT USED]