**\* Note: Incremental changes are noted in yellow highlight. Language that is**

**pending at FERC in another tariff amendment filing is noted in *italics.* Language that**

**is shaded in gray is pending in the CCDEBE tariff amendment \***

**11.5.6.2.5.2 Allocation of Exceptional Dispatch Costs to Scheduling Coordinators**

Excess Cost Payments for the Exceptional Dispatches used for emergency conditions and to avoid Market Disruption and System Emergencies as determined pursuant to Section 11.5.6.1.1 shall be charged to Scheduling Coordinators as follows in a two-step process. First, each Scheduling Coordinator’s charge shall be the lesser of:

(i) the pro rata share of total Excess Cost Payment based upon the ratio of each Scheduling Coordinator's Net Negative Uninstructed Deviations to the total system Net Negative Uninstructed Deviations; or

(ii) the amount obtained by multiplying the Scheduling Coordinator’s Net Negative Uninstructed Deviation for each Settlement Interval and a weighted average price. The weighted average price is equal to the total Excess Cost Payments to be allocated divided by the MWh of FMM Exceptional Dispatch Energy or RTD Exceptional Dispatch Energy associated with the Excess Cost Payment.

Second, any remaining unallocated costs shall be allocated to all Scheduling Coordinators pro-rata based on their Measured Demand. For a Scheduling Coordinator of an MSS Operator that has elected to follow Load, allocation of this second category of Excess Cost Payments will be based on net metered MSS Demand. In addition, to the extent the Exceptional Dispatches are made to resolve congestion internal to the MSS, the Scheduling Coordinator for such an MSS will also be subject to these two categories of Excess Cost Payments.

A Scheduling Coordinator shall be exempt from the first category of the Excess Cost Payment allocation for a Settlement Interval if the Scheduling Coordinator has sufficient incremental Energy Bids that are from physically available resources in the Real-Time Market for Energy to cover its Net Negative Uninstructed Deviation in the given Settlement Interval and that have been approved by the CAISO consistent with Sections 30.7.12 and 30.11.

**\* \* \* \* \***

**30.4.4 Default Commitment Cost Bids**

**30.4.4.1 Using Proxy Cost Methodology**

For resources under the Proxy Cost methodology, the CAISO will calculate a resource’s Default Commitment Cost Bids as the applicable Proxy Cost multiplied by one hundred and twenty-five percent (125%).

**30.4.4.2 Use-Limited Resources**

For Use-Limited Resources using the Proxy Cost methodology, the CAISO will calculate a resource’s Default Commitment Cost Bids as the applicable Proxy Cost multiplied by one hundred and twenty-five percent (125%) plus the Start-Up Opportunity Cost, Transition Opportunity Cost, or Minimum Load Opportunity Cost as applicable.

**30.4.4.3 Registered Costs**

For Use-Limited Resources using the Registered Costs methodology, the CAISO will use the Registered Costs as registered in the Master File as the Default Commitment Cost Bids.

**30.4.4.4 Insufficient Information**

In the event that the Scheduling Coordinator for a resource other than a Multi-Stage Generating Resource or for a Multi-Stage Generating Resource in its lowest configuration in which it can be started does not provide sufficient data for the CAISO to determine the resource’s Default Commitment Cost Bids or one or more components of the resource’s Default Commitment Cost Bids, the CAISO will assume that the resource’s Default Commitment Cost Bids, or the indeterminable component(s) of the resource’s Default Commitment Cost Bids, are zero. In the event that the Scheduling Coordinator for a Multi-Stage Generating Resource does not provide such data for an MSG Configuration beyond its lowest configuration in which the resource can be started, Section 30.4.5.3 applies.

**30.4.4.5 Resources with Greenhouse Gas Compliance Obligations**

For each resource registered with the California Air Resources Board as having a greenhouse gas compliance obligation, the information provided to the CAISO by the Scheduling Coordinator must be consistent with the information submitted to the California Air Resources Board.

**30.4.4.6 Maximum Default Minimum Load Bid**

In no case shall a Default Minimum Load Bid exceed the Minimum Load Cost Hard Cap.

**\* \* \* \* \***

**30.6.2.1.2 Real-Time Dispatch Options**

For purposes of bidding and scheduling in the Real-Time Market, each Scheduling Coordinator for a Demand Response Provider representing a Reliability Demand Response Resource shall select either the Marginal Real-Time Dispatch Option or the Discrete Real-Time Dispatch Option prior to the start of the initial Reliability Demand Response Services Term applicable to the Reliability Demand Response Resource. The selection for each Reliability Demand Response Resource shall remain in effect until such time as the Scheduling Coordinator for the Reliability Demand Response Resource chooses to change its selection from the Marginal Real-Time Dispatch Option to the Discrete Real-Time Dispatch Option or vice versa, in which case the change in selection shall go into effect at the start of the next Reliability Demand Response Services Term applicable to the Reliability Demand Response Resource. A Reliability Demand Response Resource that is subject to either the Marginal Real-Time Dispatch Option or the Discrete Real-Time Dispatch Option shall have a Default Minimum Load Bid of zero (0) dollars registered in the Master File.

**30.6.2.1.2.1 Marginal Real-Time Dispatch Option**

A Reliability Demand Response Resource that is subject to the Marginal Real-Time Dispatch Option:

(a) May submit either a single-segment Bid or a multi-segment bid in the Real-Time Market that must be at least ninety-five percent (95%) of the applicable Soft Energy Bid Cap.

(b) Shall be dispatched as a marginal resource if it is dispatched by the CAISO.

**30.6.2.1.2.2 Discrete Real-Time Dispatch Option**

A Reliability Demand Response Resource that is subject to the Discrete Real-Time Dispatch Option:

(a) May submit only a single-segment Bid in the Real-Time Market that must be at least ninety-five percent (95%) of the applicable Soft Energy Bid Cap.

(b) Shall be dispatched as a discrete (non-marginal) resource if it is dispatched by the CAISO.

**\* \* \* \* \***

**30.7.12 Validation of Bids in Excess of Soft Energy Bid Cap or Hard Energy Bid Cap**

**30.7.12.1 Generally**

The validation rules in this Section 30.7.12 apply to all Energy Bids and Minimum Load Bids submitted by Scheduling Coordinators. The provisions of this Section 30.7.12 do not apply to Virtual Bids and Energy Bids submitted for Non-Resource-Specific System Resources.

**30.7.12.2 Energy Bids that Exceed the Soft Energy Bid Cap**

In addition to all other Bid validation rules that apply to Energy Bids, if a Scheduling Coordinator submits an Energy Bid price that exceeds the Soft Energy Bid Cap, the CAISO will modify the Energy Bid price for purposes of clearing the relevant CAISO Market Process to the higher of the Soft Energy Bid Cap or the resource’s Default Energy Bid as modified pursuant to a Reference Level Change Request pursuant to Section 30.11.

**30.7.12.3 Energy Bids and Minimum Load Bids that Exceed the Hard Energy Bid Cap**

All Energy Bid prices and Minimum Load Bid prices used in the CAISO Market Processes shall not exceed the Hard Energy Bid Cap or the Minimum Load Cost Hard Cap, respectively.

**30.7.12.4 After-Market Cost Recovery**

For any Energy Bid or Minimum Load Bid price submitted above the Energy Bid price or the Minimum Load Bid price the CAISO uses in the CAISO Market Processes, the Scheduling Coordinators may be eligible for after-market cost recovery pursuant to Section 30.12.

**30.7.12.5 Virtual Bids and Bids for Non-Resource-Specific System Resources**

The CAISO will reject Virtual Bid prices and Bids for Non-Resource-Specific System Resources that exceed the Hard Energy Bid Cap.

**\* \* \* \* \***

**30.11 Adjustments to Reference Levels Prior to CAISO Market Processes**

The CAISO will adjust Reference Levels prior to executing the applicable CAISO Market Process as described in this Section 30.11.

**30.11.1 Reasonableness Thresholds**

The CAISO will calculate the Reasonableness Thresholds for the purpose of evaluating increases to Reference Levels pursuant to this Section 30.11.1.

**30.11.1.1 General Applicability**

The CAISO will calculate the Reasonableness Thresholds for all resources except for Non-Resource-Specific System Resources. The CAISO will not calculate Reasonableness Thresholds for evaluating Reference Level Change Requests for Bids from resources other than Hydro Default Energy Bids or for Virtual Bids. In no case will Reasonableness Thresholds be lower than a resources’ Default Commitment Cost Bids or Default Energy Bids that were established prior to the submission of the Reference Level Change Request. For resources for which the CAISO does not calculate Default Energy Bids, the CAISO will set the Reasonableness Threshold at the Soft Energy Bid Cap. The Reasonableness Threshold for Default Energy Bid or Default Minimum Load Bid adjustments shall not exceed the Hard Energy Bid Cap or Minimum Load Cost Hard Cap, respectively.

**\* \* \* \* \***

**30.11.2 Reference Level Change Requests**

**30.11.2.1 Applicability**

A Scheduling Coordinator may submit a Reference Level Change Request for Default Start-Up Bids, Default Minimum Load Bids, and Default Energy Bids, as applicable. Scheduling Coordinators may not submit Reference Level Change Requests for Bids by Non-Resource-Specific System Resources. Resource. Resources under the Registered Cost option are not eligible for Reference Level Change Requests for Default Minimum Load Bids or Default Start-Up Bids.

**30.11.2.2 Requirements**

Scheduling Coordinators must calculate their Reference Level Change Requests amounts consistent with the methodology used to calculate the Proxy Cost-based Default Start-Up Bid and Default Minimum Load Bid, and the Variable Cost-based Default Energy Bid. All Reference Level Change Requests must be based on the Scheduling Coordinator’s reasonable expectation that its daily actual fuel costs or fuel-equivalent costs for a given Trading Day will exceed the costs used by the CAISO to calculate the resource’s Reference Levels, and must reflect reasonable and prudent procurement practices. All Reference Level Change Requests must be calculated using actual or expected fuel costs or fuel-equivalent costs supported by Documentation of Contemporaneously Available Information.

**30.11.2.3 Energy Bids above the Soft Energy Bid Cap**

A Scheduling Coordinator whose Default Energy Bid does not exceed the Soft Energy Bid Cap and intends to submit an Energy Bid that exceeds the Soft Energy Bid Cap must submit a Reference Level Change Request. The CAISO will further verify Energy Bids in excess of the Soft Energy Bid Cap pursuant to the applicable rules in Section 30.7.

**\* \* \* \* \***

**30.12 After-CAISO Market Process Cost Recovery**

**30.12.1 Applicability]**

Scheduling Coordinators may request additional uplift payment to cover a resource’s actual fuel costs or fuel-equivalent costs associated with Start-Up Bid Costs, Minimum Load Bid Costs, Transition Bid Costs, and Energy Bid Costs used in the Bid Cost Recovery mechanism, and that are for:

(a) amounts in a Reference Level Change Request that were not approved pursuant to Section 30.11; or

(b) amounts in a Reference Level Change Request for a Default Energy Bid or Default Minimum Load Bid that exceed the Hard Energy Bid Cap or the Minimum Load Cost Hard Cap, respectively.

**\* \* \* \* \***

**34.10 Dispatch of Energy from Ancillary Services**

The CAISO may issue Dispatch Instructions to Participating Generators, Participating Loads, Proxy Demand Resources, (via communication with the Scheduling Coordinators of Demand Response Providers) System Units and System Resources contracted to provide Ancillary Services (either procured through the CAISO Markets, Self-Provided by Scheduling Coordinators, *or through Exceptional Dispatch or* dispatched in accordance with *a Legacy RMR Contract*) for the Supply of Energy. During normal operating conditions, the CAISO may Dispatch those Participating Generators, Participating Loads, Proxy Demand Resources, System Units and System Resources that have contracted to provide Spinning Reserve and Non-Spinning Reserve, except for those reserves designated as Contingency Only, in conjunction with the normal Dispatch of Energy. Contingency Only reserves are Operating Reserve capacity that have been designated, either by the Scheduling Coordinator or the CAISO, as available to supply Energy in the Real-Time only in the event of the occurrence of an unplanned Outage, a Contingency or an imminent or actual System Emergency. During normal operating conditions, the CAISO may also elect to designate any reserve not previously identified as Contingency Only by Scheduling Coordinator as Contingency Only reserves. In the event of an unplanned Outage, a Contingency or a threatened or actual System Emergency, the CAISO may dispatch Contingency Only reserves. If Contingency Only reserves are dispatched through the Real-Time Contingency Dispatch, which as described in Section 34.5.2 only Dispatches in the event of a Contingency, such Dispatch and pricing will be based on the original Energy Bids. If Contingency Only reserves are dispatched in response to a System Emergency that has occurred because the CAISO has run out of Economic Bids when no Contingency event has occurred, the Real-Time Economic Dispatch will Dispatch such Contingency Only reserves using the Hard Energy Bid Cap as the Energy Bids for such reserves and will set prices accordingly. If a Participating Generator, Participating Load, System Unit, or System Resource that is supplying Operating Reserve is Dispatched to provide Energy, the CAISO shall replace the Operating Reserve as necessary to maintain NERC and WECC reliability standards, including any requirements of the NRC. If the CAISO uses Operating Reserve to meet Real-Time Energy requirements, and if the CAISO needs Operating Reserves to satisfy NERC and WECC reliability standards, including any requirements of the NRC, the CAISO shall restore the Operating Reserves to the extent necessary to meet NERC and WECC reliability standards, including any requirements of the NRC through either the procurement of additional Operating Reserve in the Real-Time Market or the Dispatch of other Energy Bids in Security Constrained Economic Dispatch to allow the resources that were providing Energy from the Operating Reserve to return to their Dispatch Operating Target. The Energy Bid Curve is not used by the AGC system when Dispatching Energy from Regulation. For Regulation Up capacity, the upper portion of the resource capacity from its Regulation Limit is allocated to Regulation regardless of its Energy Bid Curve. For a resource providing Regulation Up or Operating Reserves the remaining Energy Bid Curve shall be allocated to any RTM AS Awards in the following order from higher to lower capacity where applicable: (a) Spinning Reserve; and (b) Non-Spinning Reserve. For resources providing Regulation Up, the applicable upper Regulation Limit shall be used as the basis of allocation if it is lower than the upper portion of the Energy Bid Curve. The remaining portion of the Energy Bid Curve, if there is any, shall constitute a Bid for Real-Time Market Energy. For Regulation Down capacity, the lower portion of the resource capacity from its applicable Regulation Limit is allocated to Regulation regardless of its Energy Bid Curve.

**\* \* \* \* \***

**39.6.1 Maximum Bid Prices**

Notwithstanding any other provision of this CAISO Tariff, maximum Bid price provisions of this Section 39.6.1 shall apply to limit Energy Bids, RUC Availability Bids, and Ancillary Service Bids.

**39.6.1.1 Energy Bid Caps**

**39.6.1.1.1 Soft Energy Bid Cap**

All Energy Bids, except for Virtual Bids, Demand Bids, or Bids for Non-Resource-Specific System Resources, are subject to the Soft Energy Bid Cap. Scheduling Coordinators may submit Energy Bids that are subject to the Soft Energy Bid Cap in excess of the Soft Energy Bid Cap, which the CAISO will process pursuant to Section 30.11.

**39.6.1.1.2 Hard Energy Bid Cap**

All Energy Bids are subject to the Hard Energy Price Cap. Scheduling Coordinators may submit Energy Bid prices in excess of the Hard Energy Bid Cap, which the CAISO will cost-verify pursuant to the rules specified in Section 30.11.

**39.6.1.1.3 Minimum Load Costs Hard Cap**

All Minimum Load Bids must not exceed the Minimum Load Costs Hard Cap. Scheduling Coordinators may submit Minimum Load Bid prices in excess of the Minimum Load Cost Hard Cap, which the CAISO will cost-verify pursuant to the rules specified in Section 30.11.

**\* \* \* \* \***

**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 capacity of non-Multi-Stage Generating Resources that are eligible and elect to use the Registered Cost methodology in accordance with Section 30.4 cannot exceed the Minimum Load Cost Hard Cap and will be limited to one-hundred fifty percent (150%) of the Projected Proxy Cost. The maximum Start-Up Cost and Minimum Load Cost values registered in the Master File by Scheduling Coordinators for capacity of Multi-Stage Generating Resources that are eligible and elect to use the Registered Cost methodology in accordance with Section 30.4 will be limited to one-hundred fifty percent (150%) of the Projected Proxy Cost for each MSG Configuration of the resources. The Projected Proxy Cost for natural gas-fired resources will include a gas price component, a major maintenance expense component, if available, a volumetric Grid Management Charge component, and, if eligible, a projected Greenhouse Gas Allowance Price component calculated as set forth in this Section 39.6.1.6. The Projected Proxy Cost for non-natural gas-fired resources will be based on costs provided to the CAISO pursuant to Section 30.4.5.2, a major maintenance expense component, if available, a volumetric Grid Management Charge component, and, if eligible, a projected Greenhouse Gas Allowance Price component calculated as set forth in this Section 39.6.1.6.

**\* \* \* \* \***

**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. Default Energy Bids used for purposes other than for calculating the Reasonableness Thresholds will be subject to the Soft Energy Bid Cap, unless the CAISO has approved a Reference Level Change Request pursuant to Section 30.11 in support of an Energy Bid above the Soft Energy Bid Cap.

**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 volumetric Grid Management Charge adder plus a greenhouse gas cost adder if applicable) with variable operation and maintenance cost, adding ten percent (10%) to the sum, adding a Bid Adder if applicable for a Frequently Mitigated Unit, and adding Variable Energy Opportunity Costs, if any. For non-natural gas-fueled units, the Variable Cost Option will calculate the Default Energy Bid by summing incremental fuel or fuel-equivalent cost plus a volumetric Grid Management Charge plus a greenhouse gas cost adder if applicable, adding ten percent (10%) to the sum, adding a Bid Adder if applicable for a Frequently Mitigated Unit, and adding Variable Energy Opportunity Costs, if any. For any Default Energy Bids calculated under the Variable Cost Option that exceed $1,000 per MWh because of an approved Reference Level Change Request, any ten percent (10%) adder or Frequently Mitigated Unit adder shall not exceed $100 per MWh.

**\* \* \* \* \***

**Appendix A**

**Master Definitions Supplement**

**\* \* \* \* \***

**- CAISO IFM Curtailed Quantity**

In each Trading Hour for each Scheduling Coordinator (a) the maximum of zero or the submitted Day-Ahead Self-Schedule for Demand minus the Day-Ahead Schedule for Demand in each applicable LAP, or (b) in the event a LAP price equals the Hard Energy Bid Cap, the maximum of zero or the submitted Day-Ahead Self-Schedule for Demand plus the quantity of Demand Bid at the maximum price for Energy Bids specified in Section 39.6.1.1 minus the Day-Ahead Schedule for Demand in the relevant LAP.

**\* \* \* \* \* \***

**- Hard Energy Bid Cap**

The maximum Energy Bid Price the CAISO will use for purposes of clearing the CAISO Market Processes. The Hard Energy Bid Cap is $2,000 per MWh.

**\* \* \* \* \* \***

**- Minimum Load Cost Hard Cap**

The maximum Minimum Load Cost used in the CAISO Markets. The Minimum Load Cost Hard Cap is set at $2,000 per MWh. The CAISO will calculate this limit by dividing a resource’s Minimum Load Cost by its Minimum Load. Where a resource’s Minimum Load is less than 1 MW, the CAISO will set its Minimum Load to 1 MW for the purpose of this calculation.

**\* \* \* \* \* \***

**- Scarcity Reserve Demand Curve Values**

Fixed percentages of the Hard Energy Bid Cap reflected in the Scarcity Reserve Demand Curve that the CAISO uses to calculate Ancillary Service Shadow Prices for Regulation Up, Spinning Reserve, Non-Spinning Reserve and Regulation Down from which the CAISO determines Ancillary Service Marginal Prices when there is insufficient supply in an Ancillary Service Region or Sub-Region to meet an Ancillary Services minimum procurement requirement.

**\* \* \* \* \* \***

**- Soft Energy Bid Cap**

The maximum Energy Bid price submitted by Scheduling Coordinators for resources, except for Virtual Bids and Bids for Non-Resource-Specific System Resources, the CAISO will use for purposes of clearing the CAISO Market Processes without cost verification pursuant to Section 30.11. The Soft Energy Bid Cap is $1,000 per MWh.

**\* \* \* \* \* \***