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31. Day-Ahead Market

The DAM consists of the following functions performed in sequence: Bid submission and validation, the IFM MPM, IFM, RUC MPM, and RUC.

Scheduling Coordinators may submit Energy Bids, Ancillary Services Bids, RUC Availability Bids, and Imbalance Reserves Bids for an applicable Trading Day. The CAISO issues Schedules for all Supply and Demand, including Participating Load, Reliability Demand Response Resources, and Proxy Demand Resources, pursuant to their Bids as provided in this Section 31. The CAISO also issues RUC Awards and Imbalance Reserves Awards to Scheduling Coordinators pursuant to their RUC Availability Bids and Imbalance Reserves Bids, respectively, as provided in this Section 31.

31.1 Bid Submission and Validation in the Day-Ahead Market

Bids, including Self-Schedules and Ancillary Services Bids, and Submissions to Self-Provide an Ancillary Service shall be submitted pursuant to the submission rules specified in Section 30. There is a single Bid submission in which Scheduling Coordinators' Bids are used for purposes of the DAM, which includes the IFM MPM, the IFM, the RUC MPM, and RUC. Scheduling Coordinators may submit Bids for the DAM as early as seven (7) days prior to the applicable Trading Day up to Market Close of the DAM for the applicable Trading Day. The CAISO will validate all Bids submitted to the DAM pursuant to the procedures set forth in Section 30.7. Scheduling Coordinators must submit Bids for participation in the IFM for Resource Adequacy Capacity as required in Section 40.

31.2 IFM MPM Process

After the Market Close of the DAM, the CAISO has validated the Bids pursuant to Section 30.7, and after the CAISO conducts the EDAM RSE, the CAISO performs the IFM MPM process, which is a single market run that occurs prior to the IFM Market Clearing run. The IFM MPM process determines, pursuant to Section 31.2.3, which Energy Bids need to be mitigated to the applicable Default Energy Bids and which Imbalance Reserves Bids for IRU need to be mitigated to the IRU Default Availability Bid in the IFM. For Maximum Net Dependable Capacity of Legacy RMR Units, Energy Bids will be mitigated to the RMR Proxy Bids pursuant to Section 31.2.3. The IFM MPM process optimizes resources to meet Demand reflected in Demand Bids, including Export Bids and Virtual Demand Bids, targets procurement of one hundred (100) percent of Imbalance Reserves requirements based on Bids submitted to the DAM,

and procures one hundred (100) percent of Ancillary Services requirements based on Supply Bids submitted to the DAM. Virtual Bids and Bids from Demand Response Resources, Participating Load, and Hybrid Resources are considered in the MPM process, but are not subject to Bid mitigation. Energy storage resources whose PMax is less than five (5) MW are considered in the MPM process, but not subject to Bid mitigation. Bids from Participating Load resources that are not subject to Bid mitigation will also be considered in the IFM MPM process. The mitigated or unmitigated Bids and RMR Proxy Bids identified in the IFM MPM process for all resources that cleared in the IFM MPM are then passed to the IFM. The CAISO performs the IFM MPM process for the IFM for the twenty-four (24) hours of the targeted Trading Day.

31.2.1 Determining Competitive and Non-Competitive Congestion Components in the IFM

The IFM MPM process enforces all Transmission Constraints that are expected to be enforced in the relevant market, in the base case of meeting Demand and in the separate cases of modeling the dispatch of Energy from all capacity awarded IRU and IRD, and produces dispatch levels for all resources with submitted Bids and LMPs for all Locations. Bid mitigation is determined by decomposing the Congestion component of each LMP determined in the IFM MPM process into competitive Congestion and non-competitive Congestion components. The non-competitive Congestion component of each LMP is calculated as the sum of the product of the shift factor and the Shadow Price for all non-competitive Transmission Constraints. The non-competitive Congestion component of an LMP can be based on a Transmission Constraint deemed non-competitive in the base case of meeting Demand or in the separate case of modeling the dispatch for Energy of all capacity awarded IRU. The Reference Bus used in the MPM process will be either: (1) the Midway 500kV bus if Path 26 flow is from north to south; or (2) the Vincent 500kV bus if Path 26 flow is from south to north. The treatment of a particular Transmission Constraint as competitive or non-competitive for purposes of the IFM MPM process is determined pursuant to Section 39.7.2.

31.2.2 [Not Used]

31.2.3 IFM Bid Mitigation

31.2.3.1 Mitigation of Energy Bids

If the non-competitive Congestion component of an LMP calculated in an MPM process is greater than zero (0), then any resource at that Location that is dispatched in that MPM process is subject to Local Market Power Mitigation. Bids on behalf of any such resource, to the extent that they exceed the Competitive LMP plus the Competitive LMP Parameter at the resource's Location for the DAM or RTM process interval for which the MPM process applies, will be mitigated to the higher of the resource's Default Energy Bid (or RMR Proxy Bid for Legacy RMR Units), as specified in Section 39, or the Competitive LMP plus the Competitive LMP Parameter at the resource's Location for the DAM and RTM process interval for which the MPM process applies. To the extent a Multi-Stage Generating Resource is dispatched in the MPM process and the non-competitive Congestion component of the LMP calculated at the Multi-Stage Generating Resource's Location is greater than zero, for purposes of mitigation, all the MSG Configurations will be mitigated similarly and the CAISO will evaluate all submitted Energy Bids for all MSG Configurations based on the relevant Default Energy Bids for the applicable MSG Configuration. The CAISO will calculate the Default Energy Bids for Multi-Stage Generating Resources by submitted MSG Configuration. Any market Bids equal to or less than the Competitive LMP plus the Competitive LMP Parameter will be retained in the DAM and RTM process.

31.2.3.2 Mitigation of Bids for IRU

The CAISO applies Local Market Power Mitigation to Imbalance Reserves Bid for IRU if the resource for which that Bid was submitted could provide counter-flow to a Transmission Constraint deemed non-competitive pursuant to Section 39.7.2.2(B)(a) in the case of modeling the dispatch for Energy of the capacity awarded IRU. To the extent a Bid for IRU is subject to Local Market Power Mitigation and exceeds the Competitive Locational IRU Price plus the Competitive LMP Parameter, the CAISO mitigates the Bid to the higher of the: (i) resource's IRU Default Availability Bid; or (ii) Competitive Locational IRU Price plus the Competitive LMP Parameter.

31.3 Integrated Forward Market

After the IFM MPM and prior to RUC, the CAISO shall perform the IFM. The IFM (1) performs Unit Commitment and Congestion Management (2) clears mitigated or unmitigated Bids for Energy and Imbalance Reserves cleared in the MPM as well as Bids for Energy and Imbalance Reserves that were not cleared in the MPM process against bid-in Demand, taking into account transmission limits and

honoring technical and inter-temporal operating constraints, such as Minimum Run Times (3) and procures Ancillary Services to meet one hundred (100) percent of the Ancillary Services requirements based on the CAISO Forecast of BAA Demand for the CAISO. The IFM utilizes a set of integrated programs that: (1) determine Day-Ahead Schedules, Imbalance Reserves Awards, and AS Awards, and related LMPs and ASMPs; and (2) optimally commits resources that are bid in to the DAM. The IFM utilizes a SCUC algorithm that optimizes Start-Up Costs, Minimum Load Costs as modified pursuant to Section 30.7.10.2, if applicable, Transition Costs, and Energy Bids along with any Bids for Ancillary Services or Imbalance Reserves as well as Self-Schedules submitted by Scheduling Coordinators. The IFM selects the optimal MSG Configuration from a maximum of ten MSG Configurations of each Multi-Stage Generating Resource as mutually exclusive resources. If a Scheduling Coordinator submits a Self-Schedule or a Submission to Self-Provide Ancillary Services for a given MSG Configuration in a given Trading Hour, the IFM will consider the Start-Up Cost, Minimum Load Cost as modified pursuant to Section 30.7.10.2, if applicable, and Transition Cost associated with any Economic Bids for other MSG Configurations as incremental costs between the other MSG Configurations and the self-scheduled MSG Configuration. In such cases, incremental costs are the additional costs incurred to transition or operate in an MSG Configuration in addition to the costs associated with the self-scheduled MSG Configuration. The IFM also provides for the optimal management of Use-Limited Resources. The ELS Resources committed through the ELC Process conducted two days before the day the IFM process is conducted for the next Trading Day as described in Section 31.7 are binding.

31.3.1 Market Clearing and Price Determination

31.3.1.1 Integrated Forward Market Output

The IFM produces: (1) a set of hourly Day-Ahead Schedules, Imbalance Reserves Awards, AS Awards, and AS Schedules for all participating Scheduling Coordinators that cover each Trading Hour of the next Trading Day; and (2) the hourly LMPs for Energy and Imbalance Reserves and the ASMPs for Ancillary Services to be used for settlement of the IFM. For a Multi-Stage Generating Resource, the IFM produces a Day-Ahead Schedule for no more than one MSG Configuration per Trading Hour. In addition, the IFM

will produce the MSG Transition and the MSG Configuration indicators for the Multi-Stage Generating Resource, which would establish the expected MSG Configuration in which the Multi-Stage Generating Resource will operate. During a transition, the committed MSG Configuration is considered to be the "from" MSG Configuration. The CAISO will publish the LMPs at each PNode as calculated in the IFM. In determining Day-Ahead Schedules, Imbalance Reserves Awards, AS Awards, and AS Schedules the IFM optimization will minimize total Bid Costs based on submitted and mitigated Bids while respecting the operating characteristics of resources, the operating limits of transmission facilities, and a set of scheduling priorities that are described in Section 31.4. In performing its optimization, the IFM first tries to complete its required functions utilizing Effective Economic Bids without adjusting Self-Schedules, and skips Ineffective Economic Bids and adjusts Self-Schedules only if it is not possible to balance Supply and Demand and manage Congestion in an operationally prudent manner with available Effective Economic Bids. The process and criteria by which the IFM adjusts Self-Schedules and other Non-priced Quantities are described in Sections 27.4.3, 31.3.1.3 and 31.4. The Day-Ahead Schedules are binding commitments, including the commitment to Start-Up, if necessary, to comply with the Day-Ahead Schedules. The CAISO will not issue separate Start-Up Instructions for Day-Ahead commitments. A resource's status, however, can be modified as a result of additional market processes occurring in the RTM.

31.3.1.2 Treatment of Ancillary Services Bids in IFM

In clearing the IFM, the CAISO co-optimizes awards from Energy Bids, Imbalance Reserves Bids, and Ancillary Services Bids. To the extent that capacity subject to an Ancillary Services Bid submitted in the Day-Ahead Market is not associated with an Energy Bid or Imbalance Reserves Bid, there is no co-optimization, and therefore, no opportunity cost associated with that resource for that Bid for the purposes of calculating the Ancillary Services Marginal Price as specified in Section 27.1.2.2. The capacity that will be considered when co-optimizing the procurement of Energy, Imbalance Reserves, and Ancillary Services from Bids in the IFM will consider capacity up to the total capacity of the resource as reflected in the Ancillary Services Bid as derated through the CAISO's outage management system pursuant to Section 9, if at all. In the case of Regulation, the capacity that will be considered is the lower of the capacity of the resource offered in the Ancillary Services Bid or the upper Regulation limit of the highest

Regulating Range as contained in the Master File. For any Trading Hour within the period in which the Multi-Stage Generating Resource is transitioning from one MSG Configuration to another, the IFM will not award Ancillary Services and any Submission to Self-Provide Ancillary Services will be disqualified. Any Ancillary Services Awards in the IFM to Multi-Stage Generating Resources will carry through to the Real-Time Market in the same MSG Configuration that the Multi-Stage Generating Resource is awarded in the IFM.

31.3.1.3 Reduction of Self-Scheduled LAP Demand

In the IFM, to the extent the market software cannot resolve a non-competitive Transmission Constraint utilizing Effective Economic Bids such that self-scheduled Load at the LAP level would otherwise be reduced to relieve the Transmission Constraint, the CAISO Market software will adjust Non-Priced Quantities in accordance with the process and criteria described in Section 27.4.3. For this purpose the priority sequence, starting with the first type of Non-Priced Quantity to be adjusted, will be:

(a) Schedule the Energy from Self-Provided Ancillary Service Bids from capacity that is obligated to offer an Energy Bid under a must-offer obligation such as from an RMR Resource or a Resource Adequacy Resource. Consistent with Section 8.6.2, the CAISO Market software could also utilize the Energy from Self-Provided Ancillary Service Bids from capacity that is not under a must-offer obligation such as from an RMR Resource or a Resource Adequacy Resource, to the extent the Scheduling Coordinator has submitted an Energy Bid for such capacity. The associated Energy Bid prices will be those resulting from the MPM process.

(b) Relax the constraint consistent with Section 27.4.3.1, and establish prices consistent with Section 27.4.3.2. No constraints, including Transmission Constraints, on Interties with adjacent Balancing Authority Areas will be relaxed in this procedure.

31.3.1.4 Eligibility to Set the Day-Ahead LMP

All Generating Units, Participating Loads, non-Participating Loads, Proxy Demand Resources, Reliability Demand Response Resources, System Resources, System Units, or Constrained Output Generators subject to the provisions in Section 27.7, with Bids, including Generated Bids, that are unconstrained due to Ramp Rates, MSG Transitions, Forbidden Operating Regions, or other temporal constraints are eligible

to set the LMP, provided that (a) the Schedule for the Generating Unit or Resource-Specific System Resource is between its Minimum Operating Limit and the highest MW value in its Economic Bid or Generated Bid; or (b) the Schedule for the Participating Load, non-Participating Load, Proxy Demand Resources, Reliability Demand Response Resources, Non-Resource-Specific System Resource, or System Unit is between zero (0) MW and the highest MW value in its Economic Bid or Generated Bid. If (a) a resource's Schedule is constrained by its Minimum Operating Limit or the highest MW value in its Economic Bid or Generated Bid; (b) the CAISO enforces a resource-specific constraint on the resource due to an RMR Dispatch of a Legacy RMR Unit or Exceptional Dispatch; (c) the resource is constrained by a boundary of a Forbidden Operating Region or is Ramping through a Forbidden Operating Region; or (d) the resource's full Ramping capability is constraining its inter-hour change in Schedule, the resource cannot be marginal and thus is not eligible to set the LMP. Resources identified as MSS Load following resources are not eligible to set the LMP. A Constrained Output Generator will be eligible to set the hourly LMP if any portion of its Energy is necessary to serve Demand.

31.3.1.5 Treatment of Imbalance Reserves Bids in IFM

In considering Imbalance Reserves Bids in the IFM, the CAISO applies the following rules.

31.3.1.5.1 Eligible Resource Types

The CAISO only considers Imbalance Reserves Bids from Generating Units, Participating Loads, Proxy Demand Resources, Reliability Demand Response Resources, System Units, System Resources with a Resource ID defined in the CAISO Master File, and Physical Scheduling Plants.

31.3.1.5.2 Fifteen-Minute Dispatchability and Start-up

The CAISO disregards Imbalance Reserves Bids submitted for a resource that is not 15-minute dispatchable.

The CAISO disregards Imbalance Reserves Bids submitted for a resource that otherwise would be Off during the relevant period unless it has a Start-Up Time of 15 minutes or less.

31.3.1.5.3 Energy Bid Submission Requirement

The CAISO only considers Imbalance Reserves Bids to the extent the resource submitted an Energy Bid in the Day-Ahead Market with Economic Bids for a quantity no less than the quantity of Imbalance Reserves Bid.

31.3.1.5.4 Ramp Capability as Limitation on Imbalance Reserves Awards

The CAISO disregards an Imbalance Reserves Bid to the extent it exceeds the resource's maximum 30-minute ramp capability as determined by the ramp rate defined in the CAISO Master File for the operating range covered by the Bid.

31.3.1.5.5 Simultaneous Bids and Awards for IRU and IRD

A Scheduling Coordinator may offer Bids for both IRU and IRD on distinct portions of capacity for the same interval for the same resource. The CAISO may award the resource both IRU and IRD based on those Bids if it is feasible to provide both.

31.3.1.6 Imbalance Reserves Procurement

Subject to the procurement curve described in Section 31.3.1.6.1, the CAISO procures Imbalance Reserves to meet the Imbalance Reserves Requirement for each hour and creates separate Locational IRU Prices and Locational IRD Prices at each Node based on that procurement.

31.3.1.6.1 Establishing the Imbalance Reserves Requirement

As further described in the Business Practice Manual, the CAISO sets each Balancing Authority Area's Upward Imbalance Reserves Requirement and Downward Imbalance Reserves Requirement to capture the anticipated levels of upward and downward Net Load Forecast deviations between the Day-Ahead Market and the Fifteen-Minute Market, respectively, within a specified confidence interval. The CAISO sets these values based on: (a) analysis of the differences between the load, wind, and solar forecasts utilized in the Day-Ahead Market and those used in the Fifteen-Minute Market, corresponding to the same time intervals; (b) production forecasts for EIRs in each Balancing Authority Area; and (c) the CAISO Forecast of BAA Demand. For each Balancing Authority Area participating in the Day-Ahead Market, the CAISO reduces the Balancing Authority Area's hourly Imbalance Reserves Requirement by its proportional allocation of the Diversity Benefit for EDAM.

31.3.1.6.2 Procurement Curve

In each run of the IFM, the CAISO procures IRU and IRD for each Balancing Authority Area participating in the Day-Ahead Market to meet their Upward Imbalance Reserves Requirement and Downward Imbalance Reserves Requirement, respectively, subject to a procurement curve. The procurement curves for IRU and IRD are calculated based on separate statistical analysis of the Upward Imbalance Reserve

Requirement and Downward Imbalance Reserve Requirement for each EDAM Entity Balancing Authority Area to ensure the total cost of Imbalance Reserves Awards for IRU or IRD does not exceed the expected cost of violating Operating Reserve requirements. Provided, however, the upper bound of the procurement curve for both IRU and IRD is $55 per MWh.

31.3.1.6.3 Imbalance Reserves Deliverability and Nodal Procurement

31.3.1.6.3.1 Nodal Procurement of Imbalance Reserves Awards

The CAISO optimizes procurement of Imbalance Reserves Awards such that, in the event modeled uncertainty arises fully for either the upward or downward directions, the Energy that would be dispatched from resource capacity corresponding to the Imbalance Reserves Awards, as adjusted by the applicable Deployment Factor, would not result in flows exceeding Transmission Constraints and scheduling limits, including EDAM Transfer limits, on categories of transmission facilities identified in the Business Practice Manual. In revising the Business Practice Manual to establish or update either the Deployment Factor or the categories of transmission facilities, the CAISO will consider the trade-off between the: (a) operational benefit of clearing reliably deliverable Imbalance Reserves; and (b) economic implications from imposing deliverability requirements on Imbalance Reserves procurement. In considering this trade-off, the CAISO will evaluate considerations such as the anticipated or observed impact of the Deployment Factor or identified transmission facilities on the: (1) deliverability of Energy procured from awarded Imbalance Reserves; (2) Marginal Cost of Congestion for Energy; (3) Locational IRU Prices and Locational IRD Prices; (4) performance of the IFM optimization, including solution time and solution quality; (5) need to manually intervene in RUC or engage in other out-of-market action; and (6) effect of other factors whose magnitude of impact on the basic trade-off is unforeseen on the effective date of this Section 31.3.1.6.3.1.

31.3.1.6.3.2 Nodal Distribution of Requirements

The CAISO distributes the Upward Imbalance Reserves Requirement and Downward Imbalance Reserves Requirement to the Demand and Variable Energy Resources Locations within each Balancing Authority Area participating in the Day-Ahead Market based on distribution factors derived from historical and/or forecasted information that reflect the relative contributions of Demand and Variable Energy Resources to the overall Imbalance Reserves Requirements.**31.3.1.6.4 Congestion Revenue from**

Procuring Imbalance Reserves

As further specified in the Business Practice Manual, the CAISO separately calculates Energy Congestion revenue displaced from meeting the Upward Imbalance Reserves Requirements and the Downward Imbalance Reserves Requirements as follows.

The CAISO calculates the Energy Congestion revenue displaced from meeting the Upward Imbalance Reserves Requirement by calculating for each resource for each Transmission Constraint binding in the case of modeling uncertainty in the upward direction the sum of the product of the: IRU award; Deployment Factor; Shift Factor from the resource location to the binding Transmission Constraint; and Shadow Price of the Transmission Constraint.

The CAISO calculates the Energy Congestion revenue displaced from meeting the Downward Imbalance Reserves Requirement by calculating for each resource for each Transmission Constraint binding in the case of modeling uncertainty in the downward direction the sum of the product of: IRD award; Deployment Factor; Shift Factor from the resource location to the binding Transmission Constraint; and Shadow Price of the Transmission Constraint.

31.3.1.6.5 Accounting for State of Charge in Awarding Ancillary Services and Imbalance Reserves to Non-Generator Resources

The IFM only awards an Ancillary Services Schedule or Imbalance Reserves Award to a storage resource using the Non-Generator Resource model to the extent its modeled State of Charge, as determined by a methodology defined in the Business Practice Manual, can support such schedule or award.

31.3.2 Congestion and Transmission Losses Cost Determination

Except for those transactions exempt from such charges as specified in Section 11.2.1.5, Scheduling Coordinators will be responsible for MCC and MCL as specified in Section 27.1. The CAISO will determine the Marginal Losses surplus it has collected and will allocate such revenues to Scheduling Coordinators as described in Section 11.2.1.6.

31.3.3 Metered Subsystems

In clearing the IFM, the CAISO will not enforce Transmission Constraints within each MSS. The Full Network Model (FNM) includes a full model of MSS transmission networks used for power flow calculations and Transmission Constraint management in the IFM and RTM. Transmission Constraints

(i.e. circuit ratings, thermal ratings, etc.) within the MSS, or at its boundaries, that are modeled in the FNM shall be monitored but not enforced in the operation of the CAISO Markets. If overloads are observed in the forward markets that are internal to the MSS or at the MSS boundaries and are attributable to MSS operations, the CAISO shall communicate such events to the Scheduling Coordinator for the MSS and coordinate any manual Re-dispatch required in Real-Time. If, independent of the CAISO, the Scheduling Coordinator for the MSS is unable to resolve Congestion internal to the MSS or at the MSS boundaries in Real-Time, the CAISO will use Exceptional Dispatch Instructions on resources that have been bid into the HASP and RTM to resolve the Congestion. Such costs will be allocated pursuant to the provisions specified in Section 11.5.6.2.5.2. The CAISO and MSS Operator shall develop specific procedures for each MSS to determine how Transmission Constraints will be handled. Costs associated with internal Congestion and Transmission Losses in the MSS will be the responsibility of the MSS Operator. The Scheduling Coordinator for the MSS shall be responsible for payment of Marginal Losses for transactions at any points of interconnection between the MSS and the CAISO Controlled Grid, and for the delivery of Energy to the MSS or from the MSS in accordance with the CAISO Tariff. For MSS Operators that elect Load following, the CAISO shall exclude the effect of Transmission Losses in the relevant MSS in the CAISO's calculation of loss sensitivity factors used to calculate LMPs.

31.3.4 RTM Bidding Obligations from Imbalance Reserves Awards

An Imbalance Reserves Award for an hour obligates the Scheduling Coordinator for the resource receiving the award to submit Economic Bids for Energy to the Real-Time Market for the full range of awarded Imbalance Reserves.

The portion of the resource's Day-Ahead Schedule for Energy below a IRD award may be Self-Scheduled in the Real-Time Market.

The Scheduling Coordinator for a resource receiving an Imbalance Reserves Award in an hour cannot submit a Self-Schedule for Energy in the Real-Time Market for a quantity in excess of its Day-Ahead Schedule for Energy minus any awards for IRD and RCD.

By forty minutes prior to the applicable Trading Hour, a System Resource receiving an Imbalance Reserves Award that has not submitted an E-Tag (or set of E-Tags) that passes CAISO E-Tag validation procedures, with the quantity (or sum of quantities) of the transmission profile no less than the sum of the

Imbalance Reserves Award and any Day-Ahead Schedule for Energy will result in the CAISO deeming the untagged portion of the Imbalance Reserves Award unavailable for purposes of Section 11.2.1.8.

31.4 CAISO Market Adjustments to Non-Priced Quantities in the IFM

All Self-Schedules are respected by SCUC to the maximum extent possible and are protected from curtailment in the Congestion Management process to the extent that there are Effective Economic Bids that can relieve Congestion. If all Effective Economic Bids in the IFM are exhausted, resource Self-Schedules between the resource's Minimum Load as defined in the Master File, or if applicable, as modified pursuant to Section 9.3.3, and the first Energy level of the first Energy Bid point will be subject to adjustments by the CAISO Market optimization based on the scheduling priorities listed below. This functionality of the optimization software is implemented through the setting of scheduling parameters as described in Section 27.4.3 and specified in Section 27.4.3.1 and the Business Practice Manuals. Through this process, imports and exports may be reduced to zero, Demand Bids may be reduced to zero, Price Taker Demand (LAP load) may be reduced, and Generation may be reduced to a lower operating limit (or Regulation Limit) (or to a lower Regulation Limit plus any qualified Regulation Down award or Self-Provided Ancillary Services, if applicable). Any Self-Schedules below the Minimum Load level are treated as fixed Self-Schedules and are not subject to these adjustments for Congestion Management. The provisions of this section shall apply only to the extent they do not conflict with any MSS Agreement. In accordance with Section 27.4.3.5, the resources submitted in valid TOR, ETC or Converted Rights Self-Schedules shall not be adjusted in the IFM in response to an insufficiency of Effective Economic Bids. Thus the adjustment sequence for the IFM from highest priority (last to be adjusted) to lowest priority (first to be adjusted), is as follows:

Scheduling Run Priority	**Scheduling Run Parameters Under Soft Energy Bid Cap (27.4.3.2)**	**Scheduling Run Parameters Under Hard Energy Bid Cap (27.4.3.3)**
Reliability Must Run (RMR) Generation pre-dispatch reduction	-$6000	-$12000
Day-Ahead TOR Self-Schedules reduction (balanced demand and supply reduction)	$5,900 (demand)/ -$5,900 (supply)	$11800 (demand)/ -$11800 (supply)
Day-Ahead ETC and Converted Rights Self-Schedules reduction; different ETC priority levels will be observed based upon global ETC priorities provided to the CAISO by the Responsible PTOs	$5100 to $5900 (demand)/ -$5100 to -$5900 (supply)	$10200 to $11800 (demand)/ -$10200 to -$11800 (supply)
Internal Transmission Constraint relaxation for	$5000	$10000

the IFM pursuant to Section 27.4.3.1		
The export Self-Schedule of a Priority Wheeling Through; Self-Schedules of CAISO Demand reduction subject to Section 31.3.1.3; exports explicitly identified in a Resource Adequacy Plan to be served by Resource Adequacy Capacity explicitly identified and linked in a Supply Plan to the exports; and Self-Schedules of exports at Scheduling Points explicitly sourced by non-Resource Adequacy Capacity	$1800	$3600
Self-Schedules of exports at Scheduling Points not explicitly sourced by non-Resource Adequacy Capacity, except those exports explicitly identified in a Resource Adequacy Plan to be served by Resource Adequacy Capacity explicitly identified and linked in a Supply Plan to the exports as set forth in Section 31.4(d), and the export Self-Schedule of a non-Priority Wheeling Through	$1050	$2100
Day-Ahead Regulatory Must-Run Generation and Regulatory Must-Take Generation reduction	-$1350	-$2700
Other Self-Schedules of Supply reduction, and the import Self-Schedule of a Priority Wheeling Through	-$1100	-$2200
The import Self-Schedule of a non-Priority Wheeling Through	$0	$0

31.4.1 Temporary Changes to Scheduling Run Parameter Values

If the CAISO determines it is necessary to modify the scheduling run parameter values in sections 31.4, 34.12.1, or 34.12.2 to address market solutions that do not align with scheduling priorities or avoid operational or reliability problems the resolution of which would otherwise require recurring operator intervention outside normal scheduling and market procedures, it may temporarily modify the value for a period up to ninety days. If circumstances reasonably allow, CAISO will consult with CAISO's Market Monitoring Unit before implementing such modification. In all circumstances, the CAISO will (i) consult with those entities as soon as reasonably possible after implementing a temporary modification, and (ii) notify Market Participants within one business day after the change of any temporary modification and explain the reasons for the change.

This section does not authorize the CAISO to change the scheduling run parameter values in a manner that changes the relative scheduling run priorities specified in sections 31.4, 34.12.1, and 34.12.2.

31.5 Residual Unit Commitment

The CAISO shall perform the RUC process after the IFM. As further specified in this Section 31.5, RUC

procures RUC Capacity, which includes Reliability Capacity Up and Reliability Capacity Down, to address mismatches between the CAISO Forecast of BAA Demand and the physical capacity committed in the IFM.

RUC Capacity is selected by a SCUC optimization that uses the same Base Market Model used in the IFM adjusted as described in Section 27.5.1 and 27.5.6 to help ensure the deliverability of Energy from the RUC Capacity. That optimization procures RUC Capacity by Node and creates separate RUC Prices for RCU and RCD by Node. In the case of Multi-Stage Generating Resources, the RUC will optimize Transition Costs in addition to the Start-Up and Minimum Load Costs. If a Scheduling Coordinator submits a Self-Schedule or a Submission to Self-Provide Ancillary Services for a given MSG Configuration in a given Trading Hour, the RUC will consider the Start-Up Cost, Minimum Load Cost, and Transition Cost associated with any Economic Bids for other MSG Configurations as incremental costs between the other MSG Configurations and the self-scheduled MSG Configuration. In such cases, incremental costs are the additional costs incurred to transition or operate in an MSG Configuration in addition to the costs associated with the self-scheduled MSG Configuration.

31.5.1 RUC Participation

31.5.1.1 Capacity Eligible for RUC Participation

Scheduling Coordinators may make capacity available for participation in RUC by submitting a RUC Availability Bid, provided the Scheduling Coordinator has also submitted an Energy Bid (other than a Virtual Bid) for such capacity into the IFM. As part of the Bid validation procedures specified in Section 30.7.3, the CAISO disregards RUC Availability Bids from capacity that is not accompanied in the IFM by an Energy Bid that is not a Virtual Bid. Virtual Bids are not eligible to participate in RUC. Non-Participating Load and Reliability Demand Response Resources are not eligible to participate in RUC. RUC participation is required for Resource Adequacy Capacity. System Resources with a Resource ID defined in the CAISO Master File are eligible to participate in RUC and will be considered on an hourly basis; that is, RUC will not observe any multi-hour block constraints. A Long Start Unit is eligible to participate in RUC to the extent it has submitted an Energy Bid to the Day-Ahead Market above PMin. In RUC the CAISO may commit a Multi-Stage Generating Resource with a Resource Adequacy must-offer obligation at any MSG Configuration with capacity equal to or greater than the MSG Configuration

committed in the Integrated Forward Market. RUC will observe the Energy Limits that may have been submitted in conjunction with Energy Bids to the IFM. Legacy RMR Unit capacity will be considered in RUC in accordance with Section 31.5.1.3. MSS resources may participate in RUC in accordance with Section 31.5.2.3. COG resources are accounted for in RUC, but may not submit or be paid RUC Availability Payments. The ELS Resources committed through the ELC Process conducted two days before the day the RUC process is conducted for the next Trading Day as described in Section 31.7 are binding.

31.5.1.2 RUC Availability Bids

With the exception of capacity from Eligible Intermittent Resources, Scheduling Coordinators may only submit RUC Availability Bids for capacity (above the Minimum Load as registered in the Master File) for which they are also submitting an Economic Energy Bid (other than a Virtual Bid) to participate in the IFM. A Scheduling Coordinator representing an Eligible Intermittent Resource must submit RUC Availability Bids for RCU at a quantity equal to their forecasted output based on the forecast referenced in Section 4.8.2.1. An RMR Resource must submit a RUC Availability Bid for RCU in an amount that is the lowest of the resource's: (1) 60-minute ramp capability; (2) Upper Economic Limit; or (3) full RMR Capacity.

31.5.1.3 Legacy RMR Treatment

If a Legacy RMR Unit is determined to have a generation requirement for any Trading Hour of the next day, either by the MPM process or by the CAISO through a Manual RMR Dispatch, and if any portion of the generation requirement has not been cleared in the IFM, the entire portion of the generation requirement will be represented as a Legacy RMR Generation Self-Schedule in the RUC.

31.5.1.4 Eligibility to Set the RUC Price

All resources that are eligible for RUC participation as described in Section 31.5.1.1 with RUC Bids, other than resources with RUC Capacity resulting from RUC Availability Bids inserted pursuant to Section 31.5.1.5, that are unconstrained due to Ramp Rates or other temporal constraints, including MSG Transitions, are eligible to set the RUC Price, provided the Schedule for the eligible resource other than a Generating Unit or Resource-Specific System Resource is between zero (0) MW and the highest MW value in its Economic Bid or Generated Bid. If (a) a resource's Schedule is constrained by its Minimum Operating Limit or the highest MW value in its Economic Bid or Generated Bid, (b) the CAISO enforces a

resource-specific constraint on the resource due to an RMR Dispatch Notice or Exceptional Dispatch or (c) the resource's full Ramping capability is constraining its inter-hour change in Schedule, the resource cannot be marginal and thus is not eligible to set the RUC Price. Resources identified as MSS Load following resources are not eligible to set the RUC Price.

31.5.1.5 RCU Bid Insertion for Exports and Eligible Intermittent Resources

The CAISO inserts RUC Availability Bids for RCU: (a) if an Economic Bid to export Energy is awarded in the IFM and is not accompanied by a RUC Availability Bid for RCU of at least the same quantity as the Economic Bid for Energy; (b) for Self-Schedules of exports not explicitly sourced by non-Resource Adequacy Capacity awarded in the IFM; and (c) for a Scheduling Coordinator representing an Eligible Intermittent Resource that fails to submit a RUC Availability Bid for RCU as required by Section 31.5.1.2. For parts (a) and (b), the quantity of the inserted Bid is the quantity of the Day-Ahead Schedule for Energy and the price of the inserted Bid is formulated to maintain the merit order of the resource's Energy Bid in the IFM. For part (c), the quantity of the inserted Bid is the quantity not covered by a RUC Availability Bid for RCU as required by Section 31.5.1.2 and the price of the inserted Bid is at the price included in the RUC Availability Bid for RCU or, if the Scheduling Coordinator did not submit any such Bid, at a price above the Default Availability Bid and below the RUC power balance constraint penalty price parameter specified in the Business Practice Manual.

31.5.2 [Not Used]

31.5.2.1 [Not Used]

31.5.2.2 [Not Used]

31.5.2.2.1 [Not Used]

31.5.2.2.2 [Not Used]

31.5.2.3 [Not Used]

31.5.3 RUC Procurement Target

Subject to Sections 31.5.3.1 and 31.5.4, the RUC Procurement Target for each Balancing Authority Area participating in the Day-Ahead Market is based on the relationship between the CAISO Forecast of BAA Demand for that BAA and the Supply cleared in the IFM for that Trading Hour (excluding Virtual Supply).

If the CAISO Forecast of BAA Demand exceeds the Supply cleared in the IFM for a Trading Hour (excluding Virtual Supply), then the RUC Procurement Target for that Balancing Authority Area is RCU in the amount of the excess Demand.

If the Supply (excluding Virtual Supply) cleared in the IFM for a Trading Hour exceeds the CAISO Forecast of BAA Demand, then the RUC Procurement Target for that Balancing Authority Area is RCD in the amount of the excess Supply.

If the Supply (excluding Virtual Supply) cleared in the IFM for a Trading Hour equals the CAISO Forecast of BAA Demand, then the RUC Procurement Target for that Balancing Authority Area is zero RCU and zero RCD.

The adjustments listed in Sections 31.5.3.1 to 31.5.3.1.6 will be made to the CAISO Forecast of BAA Demand to account for the conditions as provided therein. The RUC Procurement Target setting procedure is designed to meet the requirements of reliable grid operation without unnecessary over-procurement of RUC Capacity or over-commitment of resources. Additional detail on the process for setting the RUC Procurement Target is specified in the Business Practice Manuals.

31.5.3.1 CAISO Operator Review & Adjustment

The CAISO Operator reviews the CAISO Forecast of BAA Demand and all calculated adjustments as provided in Sections 31.5.3.1.1 through 31.5.3.1.6. The CAISO Operator may accept, modify, or reject such adjustments based on Good Utility Practice. If the CAISO Operator determines it must modify the CAISO Forecast of BAA Demand, the CAISO Operator shall log sufficient information as to reason, Operating Hour, and specific modification(s) made to the CAISO Forecast of BAA Demand.

31.5.3.1.1 RUC Net Short Conditions

The CAISO Operator may conform the CAISO Forecast of BAA Demand in the event the CAISO Operator has determined that additional capacity may need to be procured in RUC to meet anticipated Real-Time system conditions. The CAISO Operator will consider factors such as: CAISO Forecast of BAA Demand error; weather pattern that is expected to continue or change within the next Trading Day; generator outage resulting in different Supply availability than was bid into the Day-Ahead Market; fire that threatens transmission lines and/or corridors; the expectation that the amount of Generation committed in the IFM will not be sufficient to meet the anticipated Demand; and Reliability Coordinator next-day analysis of

system conditions.

31.5.3.1.2 Demand Response Adjustments.

The CAISO may adjust the CAISO Forecast of CAISO Demand to account for Demand response that is clearly communicated to the CAISO as certain to be curtailed for the next Trading Day. Such adjustments may be made only for the two following types of Demand response: (1) Demand response triggered by a staged System Emergency event; and (2) Demand response that is triggered by a price or an event known in advance.

31.5.3.1.3 [Not Used]

31.5.3.1.4 Eligible Intermittent Resource Adjustment

Scheduling Coordinators for Eligible Intermittent Resources may submit Bids, including Self-Schedules, in the Day-Ahead Market and the quantity ultimately scheduled from Eligible Intermittent Resources may differ from the CAISO forecasted deliveries from the Eligible Intermittent Resources. The CAISO may adjust the forecasted Demand either up or down for such differences by RUC Zone in which the Eligible Intermittent Resource resides. If the EIR's expected output participating in the Day-Ahead Market, as reflected in the EIR's Bid, including a Self-Schedule, or lack thereof, is less than CAISO's forecast of the EIR, the CAISO may make a Supply-side adjustment to the resource's expected output by using the CAISO's forecast of the EIR. If on the other hand, the EIR's expected output participating in the Day-Ahead Market, as reflected in the EIR's Bid, including a Self-Schedule, or lack thereof, is greater than the CAISO's forecast of the EIR, the CAISO may make a Demand side adjustment to the RUC Zone Demand equal to the difference between the EIR's Day-Ahead Schedule and the CAISO forecasted quantity.

31.5.3.1.5 Real-Time Expected Incremental Supply Self-Schedule Adjustment

In order to avoid over procurement of RUC, the CAISO may, using a similar-day approach, estimate the RTM Self-Schedules for resources that usually submit RTM Self-Schedules that are greater than their Day-Ahead Schedules. The CAISO Operator may set the length of the Self-Schedule moving average window. Initially this moving average window shall be set by default to seven (7) days; in which case the weekday estimate is based on the average of five (5) most recent weekdays and the weekend estimate is based on the average of the two (2) most recent weekend days. To the extent weather conditions differ significantly from the historical days, additional adjustment may be necessary. After determining the

estimate of Real-Time Self-Schedules, using a similar day forecasting approach, the CAISO may adjust the CAISO Forecast of BAA Demand of a RUC Zone based on the forecasted quantity changes in Supply as a result of Self-Schedules submitted in the RTM. This adjustment for forecasted Real-Time Self-Schedules may result in positive or negative adjustments. Demand adjustments to the CAISO Forecast of BAA Demand result when there is a net forecast decrease in Real-Time Self-Schedule Supply relative to the Day-Ahead Schedule Supply. Supply adjustments to the individual resources occur when there is a net forecast increase in Real-Time Self-Schedule Supply relative to the Day-Ahead Schedule Supply of the individual resource.

31.5.3.1.6 Day-Ahead Ancillary Service Procurement Deficiency Adjustment

While the CAISO intends to procure one hundred percent (100%) of its forecasted Operating Reserve requirement in the IFM based on the CAISO Forecast of BAA Demand as specified in Section 8.3.1, the CAISO may make adjustments to the CAISO Forecast of BAA Demand used in RUC to ensure sufficient capacity is available or resources committed in cases that the CAISO is unable to procure one hundred percent (100%) of its forecasted Operating Reserve requirement in the IFM; provided, however, that the CAISO shall not procure specific Ancillary Services products in RUC, nor will the RUC optimization consider AS-related performance requirements of available capacity.

31.5.3.2 RUC Zones

31.5.3.2.1 Use of RUC Zones

The CAISO shall adjust the CAISO Forecast of BAA Demand by RUC Zone for the conditions described in Sections 31.5.3.2 through 31.5.3.6. If any adjustments are made throughout the affected RUC Zone, such adjustments will be made consistent with the subset of system LDFs for the Nodes that define the RUC Zone(s). The CAISO will adjust the CAISO Forecast of BAA Demand of each affected RUC Zone, preserving the LDFs within each RUC Zone, but the relative weighting of the LDFs across the system will deviate from the original LDFs.

31.5.3.2.2 Designation of RUC Zones

The CAISO shall define RUC Zones as areas that represent UDC or MSS Service Areas, Local Capacity Areas, or any other collection of Nodes. RUC Zones will be designated by the CAISO as necessary and to the extent that the CAISO has developed sufficient data on historical Demand in a BAA and weather

conditions to allow it to perform Demand Forecasts. Once the CAISO has established RUC zones, the mapping of RUC Zones to Nodes shall be static data and shall be maintained in the Master File. The CAISO may add new Nodes to a RUC Zone if new Nodes are added to the FNM. The status of each RUC Zone shall remain active for as long as the CAISO maintains regional forecasting capabilities, but once a RUC Zone is designated the CAISO will only adjust the CAISO Forecast of BAA Demand as necessary to address RUC procurement constraints and not as a normal course for all CAISO Market functions. The actual RUC Zones used by the CAISO in its operation of RUC are posted on the CAISO Website.

31.5.4 RUC Procurement Constraints

In addition to the resource constraints and Transmission Constraints employed by SCUC as discussed in Section 27.4.1, the CAISO shall employ the following constraints in RUC:

(a) To ensure that sufficient RUC Capacity is procured to meet the CAISO Forecast of BAA Demand, the CAISO will enforce the power balance between the total Supply, which includes Day-Ahead Schedules and RUC Capacity, and the total Demand, which includes the CAISO Forecast of BAA Demand and IFM export Schedules. The CAISO may adjust the CAISO Forecast of BAA Demand to increase the RUC procurement target if there is AS Bid insufficiency in the IFM.

31.5.5 Selection and Commitment of RUC Capacity

Capacity that is not already scheduled in the IFM may be selected as RUC Capacity to meet a RUC Procurement Target.

31.5.5.1 Nodal Procurement and Deliverability of Reliability Capacity

RUC optimizes procurement of Reliability Capacity such that, in the event the Real-Time Market awards the incremental or decremental Energy Bids corresponding to the Reliability Capacity Awards, the dispatch of Energy from the Reliability Capacity in the market would not result in flows exceeding Transmission Constraints and scheduling limits, including EDAM Transfer limits.

The RUC optimization distributes an EDAM Entity’s RUC procurement target to the Demand Locations within each EDAM Entity based on distribution factors derived from historical and/or forecasted information that reflect the relative contributions of Demand to the RUC procurement targets.

31.5.5.2 The RUC Optimization

The RUC optimization will select RUC Capacity and produce nodal RUC Prices by minimizing total Bid cost based on RUC Availability Bids and Start-Up, Minimum Load Bids and Transition Costs. RUC will not consider Start-Up, Minimum Load Bids, or Transition Costs for resources already committed in the IFM. The CAISO will only issue RUC Start-Up Instructions to resources committed in RUC that must receive a Start-Up Instruction in the Day-Ahead in order to be available to meet Real-Time Demand. RUC Schedules will be provided to Scheduling Coordinators even if a RUC Start-Up Instruction is not issued at that time. RUC shall not Shut Down resources scheduled through the IFM but RUC may commit a Multi-Stage Generating Resource to a lower MSG Configuration. If the RUC process cannot find a feasible solution given the resources committed in the IFM, the RUC process will adjust constraints as described in Section 31.5.4 to arrive at a feasible solution that accommodates all the resources committed in the IFM.

31.5.5.3 Limitations on RUC Awards

A RUC Award to a specific resource only can consist of RCU or RCD, and not both. RUC shall not Shut Down resources scheduled through the IFM. RUC shall not provide a RUC Award to a Multi-Stage Generating Resource that would require it to make an infeasible transition from the MSG Configuration applicable to its Day-Ahead Schedule to the MSG Configuration applicable to meeting the requirements of the potential RUC Award.

The RUC optimization applies a constraint such that the sum of awards for Energy, upward Ancillary Services, Imbalance Reserves, and Reliability Capacity is feasible given the resource's capacity, operating and economic limitations.

The RUC optimization only awards a RUC Award to a storage resource using the Non-Generator Resource model to the extent its modeled State of Charge can support such schedule or award.

31.5.6 Eligibility for RUC Compensation

All RUC Capacity is eligible for the RUC Availability Payment except for: (i) RMR Capacity from RMR Resources; (ii) RUC Capacity resulting from RUC Availability Bids for exports inserted pursuant to Section 31.5.1.5; and (iii) RUC Capacity that corresponds to the resource's Minimum Load, which is compensated through the Bid Cost Recovery as described in Section 11.8. Resources not committed in the IFM that

are committed in RUC, including Condition 1 Legacy RMR Units that were not designated for RMR Dispatches and Resource Adequacy Resources, are also eligible for RUC Cost Compensation, which includes Start-Up, Transition Costs, and Minimum Load Cost compensation, and Bid Cost Recovery, subject to the resource actually following its Dispatch Instructions as verified by the CAISO pursuant to procedures set forth in the Business Practice Manuals.

31.5.7 Rescission of Payments for RUC Capacity

If capacity committed in RUC provided from a Generating Unit, Participating Load, Proxy Demand Resource, System Unit or System Resource is Undispatchable Capacity during the relevant Settlement Interval, then the CAISO rescinds the payments as described in this Section 31.5.7 and settled in accordance with Section 11.2.2.2. If the CAISO determines that non-compliance of a Participating Load, Proxy Demand Resource, Generating Unit, System Unit or System Resource with an Operating Instruction or Dispatch Instruction from the CAISO, or with any other applicable technical standard under the CAISO Tariff, causes or exacerbates system conditions for which the WECC imposes a penalty on the CAISO, then the Scheduling Coordinator of such Participating Load, Proxy Demand Resource, Generating Unit, System Unit or System Resource shall be assigned that portion of the WECC penalty which the CAISO reasonably determines is attributable to such non-compliance, in addition to any other penalties or sanctions applicable under the CAISO Tariff. The rescission of payments in this Section 31.5.7 shall not apply to a capacity payment for any particular RUC Capacity if the RUC Availability Payment is less than or equal to zero (0).

31.5.8 RTM Bidding Obligations from RUC Awards

A RUC Availability Award in an hour obligates the Scheduling Coordinator for the resource receiving the award to submit Economic Bids to the Real-Time Market for the full range of awarded Reliability Capacity. The portion of the resource’s Day-Ahead Schedule for Energy below a RCD award may be Self-Scheduled in the Real-Time Market.

A resource receiving a RUC Availability Award in an hour cannot submit a Self-Schedule for Energy in the Real-Time Market for a quantity in excess of its Day-Ahead Schedule for Energy minus any awards for IRD and RCD.

Resources receiving a RUC Availability Award for RCU for which their Scheduling Coordinator has submitted an Energy Bid in the Day-Ahead Market to export outside the EDAM Area must provide a decremental Energy Bid to dispatch down the export schedule in the FMM if needed.

By forty minutes prior to the applicable Trading Hour, the Scheduling Coordinator for a System Resource receiving a RUC Award must submit an E-Tag (or set of E-Tags) that passes CAISO E-Tag validation procedures, with the quantity (or sum of quantities) of the transmission profile no less than the sum of the RUC Award and any Day-Ahead Schedule for Energy. Failure to meet this deadline results in the CAISO deeming the entire quantity of the RUC Award as Undispatchable Capacity for RUC for purposes of Section 11.2.2.2.1.

31.6 Timing of Day-Ahead Scheduling

31.6.1 Criteria for Temporary Waiver of Timing Requirements

The CAISO may at its sole discretion implement any temporary variation or waiver of the timing requirements of this Section 31 and Section 6.5.3 (including the omission of any step) if any of the following criteria are met:

(i) such waiver or variation of timing requirements is reasonably necessary to preserve System Reliability, prevent an imminent or threatened System Emergency or to retain Operational Control over the CAISO Controlled Grid during an actual System Emergency.

(ii) because of error or delay, the CAISO requires additional time to fulfill its responsibilities;

(iii) problems with data or the processing of data cause a delay in receiving or issuing Bids or publishing information on the CAISO's secure communication system;

(iv) problems with telecommunications or computing infrastructure cause a delay in receiving or issuing Day-Ahead Schedules or publishing information on the CAISO's secure communication system; or

(v) additional time is needed to allow for the submission of Bids in the event that the conditions specified in Section 30.5.8 change prior to the Market Close, and may require the resubmission of Bids consistent with the changed bidding requirements.

31.6.2 Information to be Published on Secure Communication System

If the CAISO temporarily implements a waiver or variation of such timing requirements, the CAISO will

publish the following information on the CAISO's secure communication system as soon as practicable:

(i) the exact timing requirements affected;

(ii) details of any substituted timing requirements;

(iii) an estimate of the period for which this waiver or variation will apply; and

(iv) reasons for the temporary waiver or variation.

31.6.3 Conditions Permitting CAISO to Abort Day-Ahead Market

If, despite the variation of any time requirement or the omission of any step, the CAISO either fails to receive sufficient Bids or fails to clear the Day-Ahead Market, the CAISO may abort the Day-Ahead Market and require all Bids to be submitted in the RTM.

31.6.4 [Not Used]

31.7 Extremely Long-Start Commitment Process

The CAISO shall perform the Extremely Long-Start Commitment Process (ELC Process) after the regular DAM results are posted. ELS Resources are flagged in the Master File and are the only resources eligible to be committed in the ELC Process. Each day after the DAM results are posted, the CAISO shall conduct the ELC Process to determine commitment of ELS Resources to be available to the CAISO Markets in the second day out. The CAISO will use the latest CAISO Forecast of CAISO Demand available to the CAISO for the Trading Day two days ahead of the current day that the ELC Process is executed. For commitment purposes for a resource whose Start-Up Time would exceed the definition of an ELS Resource based on the resource's initial condition and cooling time, the CAISO will consider DAM Bids from ELS Resources as Bids for the Trading Day two days ahead of the current day that the ELC Process is executed. The CAISO Operator shall use its operator judgment consistent with Good Utility Practice to determine whether ELS Resources for the second day in the 48-hour time period should be committed. The ELC Process does not dispatch Energy for the 48-hour time period and therefore the commitment instructions will not include megawatts schedules greater than the Minimum Load. ELS Resources receiving a commitment instruction are obligated to resubmit the same Bid in the next day's Day-Ahead Market. The CAISO Commitment Period or Self-Commitment Period determination for the ELS Resources depends on the DAM results and the Clean Bids and Generated Bids, following the same rules that apply to other resources. All Commitment Intervals for the ELS Resources will be classified as

CAISO Commitment Periods, unless there is a Self-Schedule or Self-Provided AS for that interval.

31.8 Constraints Enforced at Interties

31.8.1 Scheduling Constraints

Within the IFM and RTM optimizations, the CAISO enforces a constraint at each CAISO Intertie such that physical imports net of physical exports must be less than or equal to the scheduling limit at the Scheduling Point in the applicable direction. The CAISO incorporates the Shadow Price of this IFM constraint into the CAISO Market runs used to establish LMPs for both physical and virtual awards. Within the RUC process, the CAISO enforces a constraint at each Intertie such that physical imports net of physical exports must be less than or equal to the scheduling limit at the Scheduling Point in the applicable direction. Through this RUC constraint the CAISO determines what Day-Ahead Schedules can have an E-Tag submitted Day-Ahead. Day-Ahead Schedules precluded from submitting an E-Tag in the Day-Ahead on this basis are exempt from the charges described in Section 11.32.

31.8.2 Physical Flow Constraints

The CAISO may enforce a physical flow constraint limit at each internal and Intertie location in the IFM taking into account the total power flow contributions, which include internal schedules, which can be physical or virtual, import/export schedules, and the CAISO's estimates of unscheduled flow at the Interties. The physical flow constraint limit at each Intertie is less than or equal to the Transmission Constraints, including Nomograms and Contingencies, affecting the Intertie. At each Intertie the scheduling and physical flow constraint limits may differ. In the RUC and RTM processes, the same physical flow constraint limit is applied and internal schedules and import/export schedules, which can only be physical, are considered along with the CAISO's estimates of unscheduled flow at the Interties. The CAISO will not enforce physical flow constraints at Interties for which the CAISO (1) is subject to contractual arrangements that provide for the management of unscheduled flows using other procedures; (2) has determined it cannot enforce the power flow constraints due to modeling inaccuracies, including inaccuracies in available data; or (3) has otherwise determined that enforcing the power flow constraints could result in adverse reliability impacts.

31.9 RUC MPM Process

After the IFM and prior to RUC, the CAISO performs the RUC MPM.

31.9.1 Determining Competitive and Non-Competitive Congestion Components in RUC

The RUC MPM process produces potential RUC Availability Awards by enforcing all Transmission Constraints that are expected to be enforced in procuring Reliability Capacity to meet the CAISO Forecast of BAA Demand, with that forecast distributed to Demand Locations based on Load Distribution Factors, and based on unmitigated RUC Availability Bids. The RUC MPM uses as the Reference Bus either: (1) the Midway 500kV bus if Path 26 flow is from north to south; or (2) the Vincent 500kV bus if Path 26 flow is from south to north. The treatment of a particular Transmission Constraint as competitive or non-competitive for purposes of the RUC MPM process is determined pursuant to Section 39.7.2.

31.9.2 RUC Bid Mitigation

The CAISO applies Local Market Power Mitigation to Bids for RCU if the resource for which that Bid was submitted could provide counter-flow to a Transmission Constraint deemed non-competitive pursuant to the methodology outlined in Section 39.7.2.2(B)(a) in the case of modeling the dispatch of Energy from the capacity corresponding to RCU Awards. To the extent a Bid for RCU is subject to Local Market Power Mitigation and exceeds the Competitive RCU LMP plus the Competitive LMP Parameter, the CAISO mitigates the Bid to the higher of the: (i) resource's RCU Default Availability Bid; or (ii) Competitive RUC Price for RCU plus the Competitive LMP Parameter.

The CAISO does not mitigate RUC Availability Bids for RCD and does not mitigate RUC Availability Bids for RCU submitted on behalf of imports from outside the EDAM Area.