May 28, 2019

COMMENTS OF THE CITIES OF ANAHEIM, AZUSA, BANNING, COLTON, PASADENA, AND RIVERSIDE, CALIFORNIA ("SIX CITIES") ON COMMITMENT COSTS AND DEFAULT ENERGY BID ENHANCEMENTS – DRAFT TARIFF LANGUAGE POSTED MAY 10, 2019

> In response to the ISO's request, the Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California (the "Six Cities") submit the following comments on the Commitment Costs and Default Energy Bid Enhancements – Draft Tariff Language posted on May 10, 2019. The Cities have prepared their comments by copying the relevant portions of the ISO's draft tariff language into this document and adding the Cities' comments or suggested revisions. The Cities' suggested revisions to specific language are highlighted in yellow to distinguish them from the language revisions proposed by the ISO:

6.5.2.2.3   Advisory Day-Ahead Market Results

The CAISO will~~may~~ provide to the responsible Scheduling Coordinator its resource's hourly Energy schedules produced in the non-financially binding RUC process the CAISO conducts two (2) days prior to the Trading Day based on Bids and forecasts of system conditions as available in the CAISO Market systems at the time the CAISO conducts the non-financially binding RUC process. This information is advisory and is not financially binding.

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11.8   Bid Cost Recovery

For purposes of determining the Unrecovered Bid Cost Uplift Payments for each Bid Cost Recovery Eligible Resource as determined in Section 11.8.5 and the allocation of Unrecovered Bid Cost Uplift Payments for each Settlement Interval, the CAISO shall sequentially calculate the Bid Costs, which can be positive (IFM, RUC or RTM Bid Cost Shortfall) or negative (IFM, RUC or RTM Bid Cost Surplus) in the IFM, RUC and the Real-Time Market, as the algebraic difference between the respective IFM, RUC or RTM Bid Cost and the IFM, RUC or RTM Market Revenues as further described below in this Section 11.8. The RTM Energy Bid Costs and RTM Market Revenues include the FMM Energy Bid Costs. In any Settlement Interval a resource is eligible for Bid Cost Recovery payments pursuant to the rules described in the subsections of Section 11.8 and Section 11.17. Bid Cost Recovery Eligible Resources for

different MSS Operators are supply resources listed in the applicable MSS Agreement. All Bid Costs shall be based on Bids as mitigated pursuant to the requirements specified in Section 39.7. Virtual Awards are not eligible for Bid Cost Recovery. Virtual Awards are eligible for make-whole payments due to price corrections pursuant to Section 11.21.2. In order to be eligible for Bid Cost Recovery, Non-Dynamic Resource-Specific System Resources must provide to the CAISO SCADA data by telemetry to the CAISO's EMS in accordance with Section 4.12.3 demonstrating that they have performed in accordance with their CAISO commitments. Scheduling Coordinators for Non-Generator Resources are not eligible to recover Start-Up Bid Costs, Minimum ~~Bid~~ Load Bid Costs, Pumping Costs, Pump Shut-Down Costs, or Transition Bid Costs but are eligible to recover Energy Bid Costs, RUC Availability Payments and Ancillary Service Bid Costs.

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GENERAL COMMENT - - Throughout the draft tariff language, there appear to be inconsistencies in the terminology used to specify Start-Up Bid Costs *versus* Start-Up Costs, Minimum Load Bid Costs *versus* Minimum Load Costs, *etc.* For example, in the draft tariff language for Section 11.8.3.1, why is "Bid" inserted in lines 5 and 6 but not in lines 1, 2 and 3? It would be helpful to have an explanation for the principles the ISO applied in determining whether or not to insert "Bid" in a reference to Start-Up Costs or other types of Commitment Costs to facilitate a review for consistency of terminology.

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11.8.4.3.2   MSS Elected Net Settlement

For MSS entities that have elected net Settlement regardless of other MSS optional elections (i.e., Load following or not, or RUC opt-in or out), unlike non-MSS resources, the RUC Bid Cost Shortfall or RUC Bid Cost Surplus and RTM Bid Cost Shortfall or RTM Bid Cost Surplus is treated at the MSS level and not at the resource specific level, and is calculated as the RUC Bid Cost Shortfall or RUC Bid Cost Surplus and RTM Bid Cost Shortfall or RTM Bid Cost Surplus of all BCR Eligible Resources within the MSS. In calculating the Energy RTM Market Revenue for all the resources within the MSS as provided in Section 11.8.4.2, the CAISO will use the FM-M MSS Price or the RTD MSS Price, as applicable. The RUC Bid Cost Shortfall, RUC Bid Cost Surplus, ~~and~~ RTM Bid Cost Shortfall, and RTM Bid Cost Surplus for Energy, RUC Availability and Ancillary Services are first calculated separately for the MSS for each Settlement Interval of

the Trading Day, with qualified Start-Up Bid Costs, qualified Minimum Load Bid Costs, and qualified Multi-Stage Generator tTransition Bid eCosts included into the RUC Bid Cost Shortfalls, RUC Bid Cost Surpluses, and RTM Bid Cost Shortfalls, and RTM Bid Cost Surpluses of Energy calculation. The MSS's overall RUC Bid Cost Shortfall or RUC Bid Cost Surplus, and RTM Bid Cost Shortfall or RTM Bid Cost Surplus is then calculated as the algebraic sum of the RUC Bid Cost Shortfall or RUC Bid Cost Surplus and RTM Bid Cost Shortfall or RTM Bid Cost Surplus for Energy and the RUC Bid Cost Shortfall or RUC Bid Cost Surplus and RTM Bid Cost Shortfall or RTM Bid Cost Surplus for AS for each Settlement Interval.

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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 startable configuration in which case it can be started does not provide sufficient data for the CAISO to determine the resource's Start-Up or Minimum Load Default Commitment Cost Bids or one or more components of the resource's Start-Up or Minimum Load Default Commitment Cost Bids, the CAISO will assume that the resource's Start-Up Costs or Minimum LoadDefault Commitment Cost Bids, or the indeterminable component(s) of the resource's Start-Up Costs or Minimum LoadDefault 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 startable configuration in which the resource can be started, Section 30.4.51.1.3 applies.

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30.7.9 Format and Validation of Start-Up CostBids and Shut-Down Costs

For a Generating Unit or a Resource-Specific System Resource, the submitted Start-Up Cost Bid expressed in dollars ($) as a function of down time expressed in minutes must be a staircase function with up to three (3) segments defined by a set of 1 to 4 down time and Start-Up Cost Bid pairs. The Start-Up Cost Bid is the cost incurred to start the resource if it is offline longer than the corresponding down time. The last segment of the Start-Up Bid will represent the cost to start the resource from cold Start-Up and will extend to infinity. The CAISO will validate the submitted Start-Up Cost Bid function shall be validated as follows:

(a)   The first down time must be zero (0) minutes.

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(b)   The down time entries must match exactly (in number, sequence, and value) the corresponding down time breakpoints of the Start-Up ~~Cost function~~ Time information, as registered in the Master File ~~for the relevant resource as either the Proxy Cost or Registered Cost~~.

(c)   The Start-Up Cost for each segment must not be negative ~~and must be equal to the Start-Up Cost of the corresponding segment of the Start-Up Cost function, as registered in the Master File for the relevant resource..~~

(d)   The Start-Up Cost Curve must be strictly monotonically increasing non-negative staircase curves, up to three segments, which represent a function of Start-Up Cost versus down time. ==[COMMENT - - The substance of this new subsection largely duplicates the substance of subsection (h) below. Six Cities suggest that subsections (d) and (h) be combined.]==

(e)   ~~In addition, i~~If the Proxy Cost methodology pursuant to Section 30.4 applies to the resource, the Scheduling Coordinator for that resource may submit a daily Start-Up Bid for which the included Start-Up Costs ~~that~~ must ~~not~~ be non-negative and ~~but~~ may be less than or equal to the resource's Default Start-Up Bid.~~sum of (i) one hundred twenty-five (125) percent of the Proxy Cost other than the portion of the Proxy Cost that consists of Start-Up Opportunity Costs, if any; and (ii) one hundred (100) percent of the portion of the Proxy Cost that consists of Start-Up Opportunity Costs; and if the resource is a Multi-Stage Generating Resource, the Scheduling Coordinator may submit a daily Bid for each MSG Configuration of the resource that must not be negative but may be less than or equal to the sum of (i) one hundred twenty-five (125) percent of the Start-Up Cost for the MSG Configuration other than the portion of the Start-Up Cost for the MSG Configuration that consists of Start-Up Opportunity Costs, if any; and (ii) one hundred (100) percent of the portion of the Start-Up Cost for the MSG Configuration that consists of Start-Up Opportunity Costs.~~

(f)   For a resource that is eligible and has elected to use the Registered Cost methodology pursuant to Section 30.4, if a Start-Up Cost value is submitted in a Start-Up Bid, ~~for the Start-Up Cost, it will be overwritten by~~ the CAISO will override that submitted Start-Up Cost with the Registered Cost reflected in the Master File.

(g)   If no ~~value for~~ Start-Up Cost is submitted in a Bid, the CAISO will insert the ~~Master File value, as either the~~ Proxy Start-Up Cost or the Master File Registered Cost based on the methodology elected pursuant to Section 30.4.

(h~~d~~)   The Start-Up Cost Curve~~function~~ must be strictly monotonically increasing, i.e., the Start-Up Cost must increase as down time increases. ==[COMMENT: See the comment on subsection (d) above.]==

(i)   The Start-Up ~~Cost~~ Bid for a Reliability Demand Response Resource shall be zero (0).

(j)   For Participating Loads and Proxy Demand Resources, a single Shut-Down Cost in dollars ($) is the cost incurred to Shut-Down the resource after receiving a Dispatch Instruction. The submitted Shut-Down Cost must ~~not~~ be non-negative.

(k)   For Multi-Stage Generating Resources, for any MSG Configuration for which a Bid is submitted, the Scheduling Coordinator must provide the Start-Up Bid~~Costs~~ for each MSG Configuration into which the resource can be started.

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30.7.10.1   In General

Scheduling Coordinators may submit a Minimum Load Bid ~~F~~for a Generating Unit or a Resource-Specific System Resource, Participating Load, Reliability Demand Response Resource, or Proxy Demand Resource, ~~the submitted Minimum Load Cost~~ expressed in dollars per hour ($/hr) ~~is~~ representing the cost incurred for operating the unit at Minimum Load as registered in the Master File or as modified pursuant to Section 30.7.10.2. The CAISO will validate the Minimum Load Bids as follows:

(a)   The submitted Minimum Load Cost must ~~not~~ be non-negative. ~~In addition, i~~If the Proxy Cost methodology pursuant to Section 30.4 applies to the resource, the Scheduling Coordinator for that resource may submit a daily Bid for the Minimum Load ~~Cost~~ Bid that must ~~not~~ be non-negative ~~but~~ and may be less than or equal to the ~~sum of (i) one hundred twenty-five (125) percent of the Proxy Cost value other than the portion of the Proxy Cost value that consists of Minimum Load Opportunity Costs, if any; and (ii) one hundred (100) percent of the portion of the Proxy Cost value that consists of Minimum Load Opportunity Costs~~Default Minimum Load Bid.

(b) For a resource that is eligible and has elected to use the Registered Cost methodology pursuant to Section 30.4, any submitted Minimum Load Cost must be equal to the Minimum Load Cost as registered in the Master File.

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30.7.11 Format and Validation of Transition Bids

The Scheduling Coordinator may submit Transition Bids for a Multi-Stage Generating Resource that must meet the following requirements:

(a) The Transition Bids are not negative.

(b) For resources under the Proxy Cost methodology, Transition Bids must be less than or equal to the Default Transition Bids calculated under Proxy Cost methodology.

(c) For resources under the Registered Costs method Transitions Bids must equal the Default Transition Bids registered in the Master File.

(d) If no Transition Cost is submitted in a Bid, the CAISO will insert the Proxy Transition Costs or the Master File Registered Cost based on the methodology elected pursuant to Section 30.4.

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30.7.12.4 After-Market Cost Recovery

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

30.7.12.5 Virtual Bids and Bids for Non-Resources-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.

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30.11 Pre-CAISO Market Processes 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. Filings to Recover Commitment-Related Fuel Costs

If a Scheduling Coordinator incurs but cannot recover through the Bid Cost Recovery process any actual marginal fuel procurement costs that exceed (i) the limit on Bids for Start-Up Costs set forth in Section 30.7.9, (ii) the limit on Bids for Minimum Load Costs set forth in Section 30.7.10, or (iii) the limit on Bids for Transition Costs set forth in Section 30.4.1.1.5, the Scheduling Coordinator for the resource may seek to recover those costs through a FERC filing made pursuant to Section 205 of the Federal Power Act. The Scheduling Coordinator must notify the CAISO within thirty (30) Business Days after the Operating Day on which the resource incurred the unrecovered costs, and must submit the filing to FERC within ninety (90) Business Days after that Trading Day. Within sixty (60) Business Days after the Trading Day for which the Scheduling Coordinator provides notice to the CAISO per this Section, the CAISO will provide the Scheduling Coordinator with a written explanation of any effect that events or circumstances in the CAISO Markets and fuel market conditions may have had on the resource's inability to recover the costs on the Trading Day.

Each filing the Scheduling Coordinator submits to FERC must include:

(1) Data supporting the Scheduling Coordinator's claim to the unrecovered costs it seeks, including Invoices for the unrecovered costs;

(2) A description of the resource's participation in any gas pooling arrangements;

(3) An explanation of why recovery of the costs is justified; and

(4) A copy of the written explanation from the CAISO to the Scheduling Coordinator described above in this Section.

To the extent that FERC authorizes the Scheduling Coordinator to recover any costs pursuant to the Scheduling Coordinator's filing, the CAISO will pay the Scheduling Coordinator any amounts the Commission deems recoverable and will allocate such amounts pursuant to Section 11.14.

30.11.1   Reasonableness Thresholds

The CAISO will calculate 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 Hydro Default Energy Bids or for Virtual Bids. In no case will the Reasonableness Threshold be lower than the 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. [QUESTION - - Why would there be any need for a reasonableness threshold if the CAISO does not calculate a Default Energy Bid?] Reasonableness Thresholds for Default Energy Bid or Default Minimum Load Bid adjustments cannot exceed the Hard Energy Bid Cap or Minimum Load Cost Hard Cap, respectively.

30.11.1.2   Calculations

30.11.1.2.1   Natural Gas Resources

For a natural gas-fired resource, the CAISO will calculate the Reasonableness Threshold to equal the Proxy Cost based on Default Start-Up Bid, Proxy Cost-based Default Minimum Load Bid, or the Variable Cost-based Default Energy Bid calculated for the specific resource, where the natural gas commodity price component determined pursuant to Section 39.7.1.1.1.3 is multiplied by: (i) one hundred twenty-five percent (125%) for days without a published daily gas price index consistent with the rules in Section 39.7.1.1.1.3, unless the CAISO has updated the natural gas commodity price used to calculate the Reasonableness Threshold pursuant to Section 30.11.1.3, in which case the CAISO will multiply by one hundred ten percent (110%); or (ii) one hundred ten percent (110%) for all other days.

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30.11.1.3   CAISO Updates for the Real-Time Market

After the deadline for submissions of manual Reference Level Change Requests specified in Section 30.11.4.2, the CAISO will review the same-day gas price information on trades occurring on the Intercontinental Exchange and will review the same-day gas price information submitted in the manual Reference Levels Change Requests applicable for each commodity gas region, to determine whether the same-day gas prices are greater than ten percent (10%) aboverelative to the gas price index the CAISO previously used to calculate the Reasonableness Thresholds. If the CAISO determines representative same-day gas prices are greater than ten percent (10%) aboveas compared to the index the CAISO previously used to calculate the Reasonableness Thresholds, the CAISO will use the higher of the volume-weighted average price of same-day gas trades occurring on the Intercontinental Exchange and the volume-weighted average of all relevant verified manual Reference Level Change Requests to update the Reasonableness Thresholds for all resources within the applicable fuel region(s). The CAISO will implement the changes to the Reasonableness Thresholds in the next available

Real-Time Market interval as soon as practicable. Any updates the CAISO makes to Reasonableness Thresholds through this process will apply to the Real-Time Market throughout the remainder of the Trading Day.

30.11.1.4 CAISO Adjustments for Persistent Conditions

The CAISO may adjust the Reasonableness Thresholds for a specific resource in the event ~~of~~ a resource's actual fuel or fuel-equivalent costs~~,~~ observed by the CAISO in the after-CAISO Market Processes review pursuant to Section 30.12 are systematically greater than the gas price indices or fuel-equivalent costs used by the CAISO in calculating the resource's corresponding Reference Levels. [COMMENT - - This section requires more specificity. For how long must "greater than" prices persist? How much greater must the prices be - - more than one hundred ten percent (110%)? How long does such an adjustment remain in effect?]

30.11.2 Reference Level Change Requests

30.11.2.1 Applicability

A Scheduling Coordinator may submit a Reference Level Change Request for all resources, except for Non-Resource-Specific System Resources, for Default Start-Up Bids, Default Minimum Load Bids, and Default Energy Bids, as applicable.

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 ~~calculated~~. All Reference Level Change Requests must be based on the Scheduling Coordinator's reasonable expectation that its daily actual fuel cost 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 or fuel equivalent costs supported by Documentation of Contemporaneously Available Information.

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30.11.3.4 CAISO Audit and Penalties

(a) **Audit Process.**

The CAISO may audit a Scheduling Coordinator that submits an automated Reference Level Change Request at any time and may request the Documentation of Contemporaneously Available Information. In response to a

CAISO audit request, the Scheduling Coordinator must submit its cost calculations, including Documentation of Contemporaneously Available Information, within five (5) Business Days of the CAISO request. The CAISO will evaluate the submitted information and determine whether it supports the Scheduling Coordinator's automated Reference Level Change Request within ten (10) Business Days. In the event the CAISO determines the submitted information does not support the Reference Level Change Request, the Scheduling Coordinator may request ~~for~~ CAISO Dispute Resolution as specified in Section 13 of the CAISO Tariff within five (5) Business Days. If the Scheduling Coordinator requests ~~for~~ CAISO ADR Procedures, the penalties specified in subpart (b) of this section will not apply until the resolution of the CAISO ADR. ~~Any further changes in determination of non-compliance after the~~ If the CAISO ADR Procedures confirm that the Documentation of Contemporaneously Available Information did not support the Scheduling Coordinator's automated Reference Level Change Request, the penalties specified in subpart (b) of this section ~~are complete~~ will apply prospectively from the date the CAISO ADR Procedures decision is finalized.

(b)   **Penalties for Failure to Comply with CAISO Requirements**

If the CAISO determines that the information submitted by the Scheduling Coordinator does not support a conclusion that the Scheduling Coordinator's actual or expected fuel costs or fuel-equivalent costs as calculated in Section 30.13.2.2 were higher than those the CAISO used to determine their Reference Levels, the CAISO will penalize the Scheduling Coordinator as follows:

(1)   The determination of non-compliance will result in the CAISO prohibiting the Scheduling Coordinator from making any Reference Level Change Requests for sixty (60) days from the time the CAISO informs the Scheduling Coordinator of the non-compliance.

(2)   Any subsequent determination of non-compliance will result in the CAISO prohibiting the Scheduling Coordinator from making any Reference Level Change Requests for one-hundred and eighty (180) days, from the time the CAISO informs the Scheduling Coordinator of the subsequent non-compliance.

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30.11.4.2   Requirements

Scheduling Coordinators may request a manual Reference Level Change Request when ~~its~~ actual or expected fuel cost or fuel-equivalent cost exceeds the fuel or fuel equivalent cost the CAISO used to calculate a resource's Reference Level by the greater of 10% or $0.50/MMBTu, as applicable. Scheduling Coordinators must submit any manual Reference Level Change Requests by 8:00 a.m. of the Business Day on which the applicable CAISO Market is executed. [QUESTIONS - - Does this time deadline make sense in light of availability of gas price information? Is it necessary to have a time cut-off for manual Reference Level Change Requests, or would it be feasible to process such requests on a rolling, intra-day basis based on first-in/first-out?] Upon submission of a manual Reference Level Change Request, the Scheduling Coordinator must submit Documentation of Contemporaneously Available Information that shows their resource's actual or expected costs exceed the fuel or fuel equivalent cost used to calculate a resource's Reference Level.

30.11.4.3   Evaluation of Manual Reference Level Change Requests

The CAISO will evaluate manual Reference Level Change Requests based on information submitted by the Scheduling Coordinator and any other available evidence of current costs that applies to the Reference Level Change Request: (1) as practicable prior to the execution of the applicable Day-Ahead Market; and (2) as soon as practicable after submission of the manual Reference Level Change Request for the Real-Time Market. This evaluation will consist of whether the submitted information supports a change in the Reference Level. If the Reference Level submitted in the manual Reference Level Change Request is accepted, the accepted Reference Level will become the revised Reference Level for use in the CAISO Market Processes and for Settlement purposes as specified in Section 30.11.5. If the CAISO does not approve a manual Reference Level Change Request, the CAISO will make no changes to the Reference Level.

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30.11.6   Hydro Default Energy Bids

In the event a Scheduling Coordinator that controls both a hydro resource and gas-fired resource in the same gas region submits a manual Reference Level Change Request ~~for~~to both the hydro resource's Hydro Default Energy Bid and the gas resource's Reference Level, and the CAISO accepts the manual Reference Level Change Request for the natural gas resource, the CAISO may also update the natural gas price used in the calculation of a resource's Hydro

Default Energy Bid when the CAISO adjusts the gas price used in the Reasonableness Thresholds for the entire gas fuel region in which the hydro resource is located pursuant to Section 30.11.3. [QUESTION - - Does use of the word "may" in the last sentence of the section imply that the CAISO may not make such an adjustment? If so, the section should include criteria for making the determination to adjust or not.]

30.12   After-CAISO Market Process Cost Recovery [Not Used]

30.12.1   Applicability [Not Used]

TheA Scheduling Coordinator 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.

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30.12.3   Supporting Documentation [Not Used]

Scheduling Coordinators must submit supporting documentation that demonstrates that submitted costs represent actually procured daily fuel or fuel-equivalent costs for a given Trading Day that exceed the fuel costs or fuel-equivalent costs the CAISO used to calculate the resource's Reference Levels. These costs must be reasonable and reflect prudent procurement practices. Permissible supporting documents include invoices for fuel purchased, or other appropriate documentation demonstrating fuel or fuel-equivalent costs actually incurredprocured that exceed the fuel or fuel-equivalent costs the CAISO used to calculate the resource's Reference Levels for the applicable Trading Days.

30.12.4   CAISO After-Market Evaluation of Fuel Costs [Not Used]

30.12.4.1   Process

If the Scheduling Coordinator requests that the CAISO evaluate the costs specified in Section 30.12.1, within sixty (60) Business Days after the Trading Day for which the Scheduling Coordinator provides notice to the CAISO per this Section, the CAISO will:

(a)	provide the Scheduling Coordinator with a written explanation of any effect that events or circumstances in the CAISO Markets and fuel market conditions may have had on the resource's inability to recover the costs on the applicable Trading Day; and

(b)	notify the Scheduling Coordinator whether the costs are eligible for evaluation pursuant to this Section 30.12.42.

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**30.12.4.3	Settlement of Recoverable Amounts**

To the extent the CAISO's evaluation results in verification that the resource's actually incurredprocured costs claimed by the Scheduling Coordinator were not recovered through the Bid Cost Recovery process, the CAISO will resettle Bid Cost Recovery using revised Bid Costs for the resource and will issue Recalculation Settlement Statement(s) within the normal Recalculation Settlement Statements timelines specified in Section 11.29.

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**30.12.5	FERC Fuel Cost Recovery Filings**

**30.12.5.1	Process**

If the Scheduling Coordinator provides notice of its intent to file for fuel cost recovery with FERC, or if the CAISO has determined that the Scheduling Coordinator is not eligible to recovery fuel costs through Section 30.12.4, the Scheduling Coordinator will have ninety (90) Business Days after the applicable Trading Day, or after the date the CAISO informs the Scheduling Coordinator that it is not eligible to recover its fuel costs through Section 30.12.4, whichever is applicable, to submit its filing to FERC.

**30.12.5.2	Settlement of FERC-Approved Amounts**

To the extent the FERC issues an order finding the resource actually incurredprocured costs claimed by the Scheduling Coordinator that were not recovered through the Bid Cost Recovery process, the CAISO will resettle Bid Cost Recovery using revised Bid Costs for the resource so these costs can be recovered and issue Recalculation Settlement Statement(s) within the normal Recalculation Settlement Statements timelines specified in Section 11.29.

30.12.6 Documentation Required with Notices

Scheduling Coordinators must submit supporting documentation that demonstrates that submitted costs represent actually incurredprocured daily fuel oref fuel-equivalent equivalent costs for a given Trading Day that exceed the fuel costs or fuel equivalent costs the CAISO used to calculate the resource's Reference Levels. These costs must be reasonable and reflect prudent procurement practices. Permissible supporting documents include invoices for fuel purchased or other appropriate documentation demonstrating fuel or fuel-equivalent costs actually incurredprocured exceed the fuel or fuel-equivalent costs the CAISO used into develop the resource's Reference Levels.

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34.11 Exceptional Dispatch

The CAISO may issue Exceptional Dispatches for the circumstances described in this Section 34.11, which may require the issuance of forced Shut-Downs, forced Start-Ups, or forced MSG Transitions and shall be consistent with Good Utility Practice. Dispatch Instructions issued pursuant to Exceptional Dispatches shall be entered manually by the CAISO Operator into the Day-Ahead or RTM optimization software so that they will be accounted for and included in the communication of Day-Ahead Schedules and Dispatch Instructions to Scheduling Coordinators. Exceptional Dispatches are not used to establish the LMP at the applicable PNode. The CAISO will record the circumstances that have led to the Exceptional Dispatch. When considering the issuance of an Exceptional Dispatch to RA Capacity, the CAISO shall consider the effectiveness of the resource from which the capacity is being provided, along with Start-Up CostBids, Transition Cost Bids, and Minimum Load CostBids, as adjusted pursuant to Section 30.7.10.2, if applicable, when issuing Exceptional Dispatches to commit a resource to operate at Minimum Load. When the CAISO issues Exceptional Dispatches for Energy to RA Capacity, the CAISO shall also consider Energy Bids, if available and as appropriate. Additionally, where the Exceptional Dispatch results in a CPM designation, the CAISO shall make CPM designations of Eligible Capacity for an Exceptional Dispatch by applying the criteria and procedures specified in Section 43A.4.

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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 as specified below.

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39.6.1.6.1 Gas Price Component of Projected Proxy Cost

For natural gas-fired resources, the CAISO will calculate a gas price to be used in establishing maximum Default Start-Up CostBids and Default Minimum Load CostBids 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 for natural gas-fired Use-Limited Resources electing to use the Registered Cost methodology 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 points, 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 Default Start-Up Bids and Default Minimum Load CostBids for Use-Limited Resources electing to use the Registered Cost methodology. The most geographically appropriate prices 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 Use-Limited Resource that elects to use the Registered Cost methodology to create a final gas price for calculating the caps forDefault Start-Up Bids and Default Minimum Load CostBids for each such resource.

For non-natural gas-fired resources, the Projected Proxy Costs for Default Start-Up CostBids and Default Minimum Load CostBids 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.

<div align="center">* * * * * *</div>

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 ~~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 Default Minimum Load ~~Cost~~Bids pursuant to Section 30.4.

* * * * * *

- Documentation of Contemporaneously Available Information

Documents that exist when a Reference Level Change Request is submitted, that show the price of fuel is based on next-day procurement for the Day-Ahead Market, and for the Real-Time Market is based on same-day or next-day procurement; except for non-standard gas trading days, in which case the documents must show the price of fuel is for procurement no sooner than the most recent standard gas trading day. Such documentation may include: quotes from natural gas suppliers; gas purchased invoices; evidence of a bid price that was part of an unsuccessful good faith effort to purchase fuel; or other appropriate documentation demonstrating fuel or fuel-equivalent costs.

* * * * * *

- IFM Minimum Load Cost

The Minimum Load Bid Costs a Scheduling Coordinator may be eligible to recover through the Bid Cost Recovery Process calculated pursuant to Section 11.8.2.1.2.

* * * * * *

- Minimum Load Bid

The Bid component that indicates the Minimum Load Cost for the Generating Unit, Participating Load, Reliability Demand Response Resource, or Proxy Demand Resource specified by a non-negative number in dollars per hour, which applies for the entire Trading Day for which it is submitted. Minimum Load Bids are subject to modification pursuant to the rules specified in Sections XX and XX. [QUESTION - - Has the ISO identified the appropriate section numbers to be referenced in the last line of the definition?]

* * * * * *

- Minimum Load Bid Cost

The Minimum Load Costs submitted in a Minimum Load Bid as modified pursuant to Sections 30.7.10, 30.7.12 and 30.11 used for purposes of clearing the applicable CAISO Market Process and for the determination of a Bid Cost Recovery.

* * * * * *

- Minimum Load Costs

The costs a Generating Unit, Resource-Specific System Resources, Participating Load, Reliability Demand Response Resource, or Proxy Demand Resource incurs operating at Minimum Load, which in the case of Participating Load, Reliability Demand Response Resource, or Proxy Demand Resource may not must be non-negative and may be adjusted pursuant to Section 30.7.10.2, if applicable.

* * * * * *

- Non-Resources-Specific System Resource

A System Resource that is not a Resource-Specific System Resource.

* * * * * *

- RTM AS Bid Cost

The Bid Cost of a Scheduling Coordinator BCR Eligible Resource for Ancillary Service capacity in the RTM. a Scheduling Coordinator may be eligible to recover pursuant to Section 11.8.4.1.6.

* * * * * *

- RTM Minimum Load Cost

The Minimum Load Bid Costs a Scheduling Coordinator may be eligible to recover through the Bid Cost Recovery Process calculated pursuant to Section 11.8.4.1.2.

* * * * * *

- RUC Minimum Load Cost

The Minimum Load Bid Costs a Scheduling Coordinator may be eligible to recover through the Bid Cost Recovery Process calculated pursuant to Section 11.8.4.1.2.

* * * * * *

- Soft Energy Bid Cap

The maximum Energy Bid Price submitted by Scheduling Coordinators submitted 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.

* * * * * *

- Start-Up Bid

The Bid component that indicates the Start-Up Time and Start-Up Cost curves for the Generating Unit, which applies for the entire Trading Day for which it is submitted. Start-Up Bids~~Cost curves~~ are subject to modification pursuant to the rules set forth in Section 30.7.8 and 30.11. ~~strictly monotonically increasing non-negative staircase curves, up to three segments, which represent a function of Start-Up Cost versus down time.~~

* * * * * *

- Start-Up Bid Cost

The Start-Up Costs submitted in a Start-Up Bid as modified pursuant to Section 30.7.8 and 30.11 used for purposes of the determination of a Bid Cost Recovery. **[QUESTION - - Why is the format for this definition different from the format used in other related definitions, *e.g.*, the definition for RUC Start-up Bid Cost?]**

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From Appendix II

B.   Conditional Market-Based Rate Authority

Separate and apart from~~form~~ Part A of this Appendix, Part B provides the rates, terms and conditions that apply to Scheduling Coordinators that submit Bids into the CAISO Markets for resources for which the Federal Energy Regulatory Commission has determined the resource is eligible for market-based rate authority, issued pursuant to Section 35, Subpart H of the Federal Energy Regulatory Commission's Rules of Practice and Procedure (18 C.F.R §§ 35.36 to 35.42) on the condition that the resource participate in the CAISO Market at or below its Default Energy Bid.

* * * * * *

1.2.   Prior to the Market Close of the applicable CAISO Market, the CAISO will validate the Bids submitted by such Scheduling Coordinator based on the Resource ID. If the Scheduling Coordinator submits a Bid that is not at or below the resource's~~their~~ Default Energy Bid, the CAISO will reject the Bid.

1.3.   Prior to the execution of the applicable CAISO Market run, the CAISO will replace all the resource's Economic Bid segments with the resource's Default Energy Bid.

* * * * * *

3.1.   The Scheduling Coordinator responsible for the Default Commitment Costs for the resources of Market Participants subject to Part B of this Appendix may be

~~eligible to~~ select any of the options available under Section 30.4 of the CAISO Tariff for their Default Commitment Costs provided the resource otherwise qualifies for the requirements specified therein.

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