California Independent System Operator Corporation



July 10, 2020

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

Re: California Independent System Operator Corporation Tariff Clarifications Amendment

Docket No. ER20-____-000

Dear Secretary Bose:

The California Independent System Operator Corporation (CAISO)¹ hereby submits a set of tariff amendments to clarify several areas of the CAISO tariff, including emergency procedures, day-ahead and real-time market rules, rules of conduct, and generator interconnection and deliverability allocation procedures.² As part of its regular business practice to improve its tariff, the CAISO has identified the need to clarify certain provisions and correct inadvertent errors that have accrued over time. The tariff revisions proposed in this filing are not intended to change established policies, nor materially affect the rights and obligations of the CAISO or its market participants. These revisions are intended solely to correct typographical errors, realign or remove erroneous cross-references, clarify the meaning of ambiguous tariff provisions, and ensure consistency throughout the tariff. The Commission accepted a similar filing regarding different tariff clarifications last year.³

The CAISO has discussed these proposed tariff changes with stakeholders.⁴ Although the CAISO submits these clarifications in the same filing, each change is just and reasonable on its own, is not dependent on any other change, and is completely severable. The CAISO respectfully requests that the Commission accept these revisions effective September 9, 2020, 61 days from this filing.

¹ Capitalized terms not otherwise defined herein have the meanings set forth in the Master Definitions Supplement, Appendix A to the currently effective CAISO tariff.

² The CAISO submits this filing under Section 205 of the Federal Power Act, 16 U.S.C. § 824d, Part 35 of the Commission's Regulations, 18 C.F.R. § 35, et seq., and rules 207 and 602 of the Commission's Rules of Practice and Procedure, 18 C.F.R. §§ 385.207 and 385.602.

³ California Independent System Operator Corp., 168 FERC ¶ 61,084 (2019).

⁴ The CAISO's stakeholder process is discussed further in Section III of this transmittal letter.

I. Proposed Tariff Modifications

Attachment A to this filing contains a matrix identifying each of the proposed tariff amendments. This attachment identifies each tariff section the CAISO proposes to change and a reason for the proposed change, many of which are self-explanatory. For example:

- In Section 39.7.1.7.2.2(b), the CAISO proposes to correct a tariff cross-reference that is incorrect due to a typographical error.
- In Section 4.6.9, the CASIO proposes to remove the defined term "Participating Intermittent Resource Export Fee," because the Commission approved its removal, but the CAISO inadvertently left a reference to the deleted term in Section 4.6.9.⁵
- In Sections 11.8.2.1.3, 11.8.2.1.4, 11.8.2.1.5, 11.8.2.2.1, 11.8.2.2.2, 11.8.2.4, and 11.8.2.5.1, the CAISO proposes to spell out acronyms for better readability.

Some tariff revisions also clarify existing practice and policy. The CAISO explains those revisions that require more explanation below:

Section 7.7.3(d)

The CAISO proposes to amend Section 7.7.3, regarding suspension of CAISO markets and administrative pricing. Section 7.7.3(d) currently anticipates that during a system emergency, the CAISO will determine the amount and location of load to be reduced. Section 7.7.3(d) also states that, to the extent practicable, the CAISO will curtail load across the balancing authority area based on the ratio of a utility distribution company or metered sub-system's demand at the time of the balancing authority area annual peak for the previous year. But curtailing load this way during a system emergency may not always stabilize the system. Although the tariff provides some latitude regarding whether the CAISO should utilize this load curtailment formula, the statement "to the extent practicable" is vague. This language could establish an expectation that the CAISO will implement the load curtailment formula anytime it needs to curtail load during a system emergency so long as it is practicable to do so. The CAISO's current approach to implementing Section 7.7.3(d), as specified in CAISO's Load Management Programs and Underfrequency Load Shedding Operating Procedure,⁶ uses the load curtailment allocation formula only when the CAISO needs to address a system wide issue, such as insufficient supply to meet system demand in the day-ahead timeframe.

⁵ California Independent System Operator Corp., 168 FERC ¶ 61,084, Docket No. ER19-1837-000.

⁶ Operating Procedure 4510: Load Management Programs and Underfrequency Load Shedding, available here: <u>http://www.caiso.com/rules/Pages/OperatingProcedures/Default.aspx</u>.

The CAISO proposes to eliminate the ambiguity in Section 7.7.3(d) by specifying that it will use this allocation only in those instances when the CAISO requires load-shedding assistance from the entire CAISO Balancing Authority Area to preserve or restore stable operation of the CAISO Controlled Grid. In other instances, the CAISO will adhere to the applicable provisions in the CAISO tariff.⁷

Section 19.7(c)(2)

The CAISO proposes to revise Section 19.7(c)(2), regarding billing invoices issued to Reliability Coordinator services customers ("RC customers"). Section 19.7(c)(2) provides that the CAISO invoices RC customers by the first business day of each year. Section 19.7(e)(1) provides that RC customers make timely payment for RC Services Invoices no later than 21 business days after an RC services invoice is issued. Section 19.7(e)(3) provides that the CAISO charge the RC customer a \$1,000 late payment fee on a supplemental invoice if payment is not received by *the last Business Day in January*. With multiple holidays in January, it is possible that the last business day in January occurs prior to the expiration of 21 business days after the first business day in January. This could require the CAISO proposes to align the late payment timeline with the payment timeline of 21 business days after it issues an RC services invoice.

Pricing at MSS Load Aggregation Points

In 2013, the CAISO amended its tariff to apply an enhanced pricing approach to aggregated pricing locations such as load aggregation points and trading hubs.⁸ The enhanced pricing approach enables the CAISO to price aggregations based on the effectiveness of the constituent pricing locations in relieving a constraint rather than based on an arithmetically derived price that calculates the weighted average prices of the constituent pricing locations. As the CAISO considered the implementation details of applying the pricing approach to metered subsystem load aggregation points, the CAISO became concerned there might be undue complications. Therefore, the CAISO delayed implementing the pricing enhancements to metered subsystem load aggregations points.

The CAISO has addressed the concerns and is now prepared to apply the

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⁷ See, e.g., CAISO Tariff Section 7.7.1(c)(5): "In response to a System Emergency, the CAISO may take any or all of the following actions as necessary to preserve or restore reliable, safe, and efficient service as quickly as reasonably practicable: [including] . . . action that it considers necessary to preserve or restore stable operation of the CAISO Controlled Grid, to the extent such actions are consistent with Good Utility Practice and Applicable Reliability Criteria and not inconsistent with the CAISO Tariff."

⁸ See California Independent System Operator Corp., Letter Order, Docket No. ER13-957-000 (April 3, 2013); see also <u>http://www.caiso.com/Documents/Feb19_2013TariffAmendment-EnhancePriceConsistency-DocketNoER13-957-000.pdf</u>.

optimization engine pricing for metered subsystem load aggregated points as it does to all other load aggregation points. To ensure transparency as the CAISO expands this practice, the CAISO proposes revise Sections 27.2.2.1 and 27.2.2 to expressly include metered subsystem load aggregation points.⁹ The CAISO also proposes changes to certain related defined terms to conform to the changes to these sections.

Section 31.5.3.1.4

The CAISO proposes to revise Section 31.5.3.1.4 to clarify the authority already contained in that tariff section for the CAISO to make supply-side adjustments to the expected output of an Eligible Intermittent Resource ("EIR") considered in the Residual Unit Commitment process. Schedule Coordinators for EIRs may submit bids, including self-schedules, in the day-ahead market. Based on the resource's schedules, the quantity ultimately scheduled for the EIR may differ from the CAISO's forecasted deliveries from the EIR, which are based on real-time meteorological data.¹⁰ Section 31.5.3.1.4 already allows the CAISO to make a supply-side adjustment when the EIR expected output is less than the CAISO's forecast of the EIR. However, the language can create confusion: If the scheduling coordinator did not submit a bid, the CAISO may still make the supply side adjustment because the lack of a bid will cause the IFM not to schedule the resource. The CAISO's proposed amendment clarifies that if the EIR's expected output from the day-ahead market 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 for that resource in the Residual Unit Commitment process.

Section 34.3.1

The CAISO proposes to revise section 34.3.1, which addresses the Real-Time Unit Commitment (RTUC) process. The revision pertains to the approximate time the RTUC is run. Actual experience shows the RTUC executes at approximately 12 minutes, rather than 7.5 minutes, prior to the first Trading Hour, to serve as the HASP run, for T-45 minutes to T+60 minutes. This RTUC run occurs after real-time market processes execute and, therefore, the timing referenced in the tariff has always intended to be an approximation. The CAISO proposes to revise section 34.3.1 to reflect the time more accurately.

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⁹ Note that this change does not impact the pricing because it applies to metered subsystems that have selected net or gross settlement as reflected in the defined terms IFM MSS Price, FMM MSS Price, or RTD MSS Price, to which the CAISO proposes no changes in this filing.

¹⁰ For example, cloud cover can substantially reduce expected solar output, resulting in significant differences between expected production and actual real-time capability.

Appendix A, Minimum Dispatchable Level

The CAISO introduced the definition of Minimum Dispatchable Level in a 2012 tariff revision to expand the mitigation of exceptional dispatches in circumstances where suppliers can exercise market power.¹¹ The 2012 amendment proposed to mitigate the exceptional dispatch energy settlement for resources that operate at a very low, unusable, ramp rate. The CAISO was exceptionally dispatching these resources to a higher level where the market could dispatch them: the Minimum Dispatchable Level. The current definition establishes this level as "the greater of (1) the lower limit of the fastest segment of a Generating Unit's Operational Ramp Rate, as adjusted for the Generating Unit's Forbidden Operating Regions, if any; and (2) if the resource is providing regulation, the lower limit of a Generating Unit's Regulating Range."

The CAISO proposes to update this definition in two ways. First, the CAISO proposes to revise clause one by removing the reference to Forbidden Operating Region. The CAISO has implemented modeling functionality for multi-stage generating ("MSG") resources modeling functionality, which manages Forbidden Operating Regions in the CAISO market software.¹² The CAISO thus proposes to define the Minimum Dispatchable Level for MSG resources as the "the minimum MW level of the fastest operational ramp rate across all configurations." The CAISO will essentially retain the current definition for non-MSG resources. Second, the CAISO proposes to delete the second clause, which refers to the regulation ramp rate for resources providing regulation. The CAISO uses the operational ramp rate when issuing exceptional dispatches, and therefore is removing the references to the regulation ramp rate.

Generator Interconnection Study Refunds

Throughout the CAISO's interconnection procedures, the CAISO proposes to add clarifying language regarding how it refunds any remaining deposit funds to interconnection customers.¹³ The tariff requires the CAISO to issue refunds within 30 days of the transmission owner's final accounting. The CAISO does *not* propose to alter these timelines; however, at times the CAISO is unable to meet this timeline because the interconnection customer does not provide routing information on a timely basis. Additionally, the CAISO—like most large organizations—issues refunds on a monthly basis. This monthly batch accounting process theoretically could cause the CAISO to miss its 30-day deadline (though within a week). The CAISO thus proposes

¹¹ See California Independent System Operator Corp., 141 FERC ¶ 61,069 (2012).

¹² Due to design, MSG resources must ramp their energy in steps rather than along smooth curves. Typically these are large combined-cycle generating units. *See* "Multi-Stage Generating Resources," Appendix A to the CAISO tariff.

¹³ The CAISO is adding a similar provision throughout appendices U, Y, and DD.

to clarify that it may toll the 30-day deadline to comply with its monthly batch refund process, or because the interconnection customer has not provided routing information to issue the refund. The CAISO also proposes to clarify it will not issue a refund for one study if the same interconnection customer has received a final invoice but has not paid owed funds for a different study. These clarifications align with generally accepted accounting principles, and will avoid confusion and non-compliance.

II. Stakeholder Process

The CAISO initiated a process to obtain stakeholder input concerning the proposed tariff changes in this filing on November 26, 2019. The CAISO received written comments on the proposed changes and held one conference call with stakeholders to discuss stakeholder concerns.¹⁴ The CAISO then reposted the proposed tariff changes for final stakeholder review. The CAISO appreciates stakeholders' ongoing efforts to help clarify the CAISO's tariff.

III. Effective Date

The CAISO respectfully requests an effective date of September 9, 2020, 61 days from this filing.

IV. Communications

In accordance with Rule 203(b)(3) of the Commission's Rules of Practice and Procedures,¹⁵ the CAISO requests that all communications regarding this filing should be addressed to the following individual, whose name should be put on the official service list established by the Commission with respect to this submittal:

William H. Weaver Senior Counsel California Independent System Operator Corporation 250 Outcropping Way Folsom, CA 95630 Tel: (916) 608-1225 Fax: (916) 608-7222 bweaver@caiso.com

¹⁴ A record of the CAISO's stakeholder process and comments received is available at <u>http://www.caiso.com/informed/Pages/StakeholderProcesses/TariffClariffcationsFiling.aspx</u>

¹⁵ 18 C.F.R. § 385..203(b)(3).

V. Service

The CAISO has served copies of this transmittal letter, and all attachments, on the California Public Utilities Commission, the California Energy Commission, and parties with effective scheduling coordinator service agreements under the CAISO tariff. In addition, the CAISO is posting this transmittal letter and all attachments on the CAISO Website.

VI. Materials Provided In This Filing

The following documents, in addition to this transmittal letter, support this filing:

Attachment A	Matrix describing proposed tariff changes;
Attachment B	Clean CAISO tariff sheets incorporating these requested tariff changes; and
Attachment C	Red-lined document showing the revisions proposed in this tariff amendment.

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VII. Conclusion

In this filing, the CAISO is proposing amendments to its tariff to clarify the meaning of existing tariff provisions, ensure consistency throughout the tariff, as well as consistency between the tariff and business practices, and to correct typographical and other inadvertent errors. The CAISO respectfully requests that the Commission accept these tariff amendments with an effective date of September 9, 2020.

Please do not hesitate to contact the undersigned if you have any questions.

Respectfully submitted,

<u>/s/ William H. Weaver</u> Roger E. Collanton General Counsel Sidney Mannheim Assistant General Counsel William H. Weaver Senior Counsel California Independent System Operator Corporation 250 Outcropping Way Folsom, CA 95630

Counsel for the California Independent System Operator Corporation Attachment A – Matrix of Tariff Changes Bucket Reconciliation Filing California Independent System Operator Corporation

July 10, 2020



Section	Proposed Changes	Reason for Change
4.5.1.1.1 First sentence	To become a Scheduling Coordinator, a Scheduling Coordinator Applicant must submit a completed application, as set forth in the applicable Business Practice Manual, to the CAISO by mail. <u>electronic submission</u> , or in person.	Adding electronic submission option.
4.5.1.1.6	INot Used]CAISO Review of Application Within ten (10) Business Days after receiving an application, the CAISO will provide electronic notification to the Scheduling Coordinator Applicant whether the Scheduling Coordinator Applicant has submitted all necessary information as set forth in Section 4.5.1, and the Scheduling Coordinator Application Form set forth in the applicable Business Practice Manual.	Removing text here as it is duplicative and not as specific as the language provided in 4.5.1.1.6.
4.5.1.1.10.1 (a)	The CAISO will not certify that a Scheduling Coordinator Applicant has become a Scheduling Coordinator until the Scheduling Coordinator Applicant has completed all of the following requirements: (a) provided the technical/operational information required to complete the Scheduling Coordinator Application Form as required in Tariff Section 4.5 and as set forth in the applicable Business Practice Manual, and to comply with Section 10.3;	Clarifying tariff language by adding specific tariff reference for Scheduling Coordinator requirements.
4.5.1.1.10.1, Last sentence	Additional instructions for completing the foregoing requirements will be set forth in a Business Practice Manual posted on the CAISO Website. <u>The Scheduling Coordinator</u> is also responsible for ongoing compliance	Clarifying tariff language to state that requirements to qualify as a scheduling coordinator are ongoing requirements.



	with all tariff requirements applicable to Scheduling Coordinators.	
4.5.1.2.1.2	The Scheduling Coordinator has an ongoing obligation to inform the CAISO within threefive (35) Business Days of any change to its credit ratings or any Material Change in Financial Condition.	Changing notification window from three (3) business days to five (5) business days to align with Section 12.
4.10.1.1 First Sentence	To become a Candidate CRR Holder, a Candidate CRR Holder applicant must submit a completed written application, as provided in the applicable form posted on the CAISO Website, to the CAISO by mail, <u>electronic</u> <u>submission</u> , or in person.	Adding electronic submission option.
4.10.1.5.1	The Candidate CRR Holder applicant mustcomplete all of the following requirements aspart of the application processsubmit with itsapplication processsubmit with itsapplication(a) the proposed date forcommencement of the CRRAllocation, CRR Auction orSecondary Registration Systemin which the applicant intendsto qualify to participate, whichmay not be less than sixty (60)days after the date theapplication was filed, unlesswaived by the CAISO;(b) financial and credit Securityinformation as set forth inSection 12;(c) proof of completion of CRRtraining or expected completionof CRR training;	Revising language for clarity and for consistency of terms



	 (d) the prescribed non-refundable application fee; and (e) identity of the applicant's Affiliates, as described in Section 39.9. 	
4.10.1.8.1	If the CAISO accepts the application, the Candidate CRR Holder applicant must return an executed CRR Entity Agreement and any required-letter of credit, guaranty, escrow agreement or other form of Financial Security, as applicable financial and credit information pursuant to Section 12 of the CAISO tariff.	Updated reference to point to Section 12.
4.14.1.1	To become a Convergence Bidding Entity, a Convergence Bidding Entity applicant must submit a completed written application, as provided in the applicable form posted on the CAISO Website, to the CAISO by mail, <u>electronic submission</u> , or in person.	Adding electronic submission option.
5.1, last 3 sentences	Scheduling Coordinators shall notify the CAISO of their Load restoration time requirements for any Loads that provide emergency services. This notice shall include the MW amount of Load, required restoration time, and associated Node on the CAISO Controlled Grid. For purposes of preparing system restoration plans, the CAISO shall consult with applicable Participating Transmission Owners concerning any Load restoration information provided by Scheduling Coordinators.	This amendment proposes to delete language. The CAISO develops its system restoration plan to comply with North American Electric Reliability Corporation Reliability Standard EOP-005-03 by consulting with Participating Transmission Owners and reviewing the system restoration plans those PTOs develop. Scheduling coordinators do not actually provide the CAISO with additional information about load restoration times. Instead, load restoration information is generally collected by utility distribution companies who are the entities responsible for restoration of distribution circuits.
7.7.3(d), first and second sentences.	If a Load curtailment is required to manage System Emergencies, the CAISO will determine the amount and location of Load to	The CAISO proposes to eliminate ambiguity in Section 7.7.3(d) by specifying that it will use this allocation only in those instances when the CAISO requires load-shedding assistance



	be reduced. In those instances when the CAISO requires load-shedding assistance from the entire CAISO Balancing Authority Area to preserve or restore stable operation of the CAISO Controlled Grid and to the extent practicable, the CAISO will allocate a portion to each UDC or MSS Operator based on the ratio of its Demand (at the time of the Balancing Authority Area annual peak for the previous year) to total Balancing Authority Area annual peak Demand for the previous year taking into account system considerations and the UDC's or MSS Operator's curtailment rights under their tariffs.	from the entire CAISO Balancing Authority Area to preserve or restore stable operation of the CAISO Controlled Grid.
7.7.4(a)	Periodic Tests Of Emergency Procedures. The CAISO shall develop and administer periodic tests of System Emergency procedures designed to ensure that the Participating Transmission Owners and Scheduling Coordinators received the information required CAISO Market Participants are capable of promptly and efficiently to responding to operating conditions, including imminent or actual System Emergencies.	The CAISO proposes to refer to Participating Transmission Owners and Scheduling Coordinators instead of the overbroad term "Market Participants."
9.3.10.6.1, 1 st paragraph, 1 st sentence	The Scheduling Coordinator for a <u>N</u> non- Resource-Specific System Resource that provides Resource Adequacy Capacity shall report to the CAISO through the outage management system any Forced Outage of a Generating Unit or Forced Outage or Constraint of transmission facilities external to the CAISO Balancing Authority Area that directly results in the inability of the resource	The CAISO proposes to update this reference to align with the defined term.



	to deliver all or a portion of the Resource Adequacy Capacity identified in the resource's Supply Plan to the CAISO Balancing Authority Area.	
9.3.10.6.1, 1 st paragraph, 2nd sentence	The Scheduling Coordinator for a <u>N</u> non- Resource-Specific System Resource that provides Resource Adequacy Capacity is required to provide to the CAISO notice of the Forced Outage or Constraint within sixty (60) minutes after becoming aware of the circumstance.	The CAISO proposes to update this reference to align with the defined term.
9.3.10.6.1, 1 st paragraph, 3rd sentence	The Scheduling Coordinator for a <u>N</u> non- Resource-Specific System Resource that provides Resource Adequacy Capacity shall promptly provide information requested by the CAISO to enable the CAISO to review the Forced Outage or Constraint and its impact on the ability of the resource to deliver Resource Adequacy Capacity to the CAISO Balancing Authority Area.	The CAISO proposes to update this reference to align with the defined term.
9.4.3, header	Uncomplicated Wor <u>k</u> d	The CAISO proposes to correct a typographical error in the header.
9.4.3, first sentence	When line rearrangements and/or station equipment work is uncomplicated and easily understood, the CAISO Outage Coordination Office may determine that the work can be accomplished using Outages approved in accordance with Section 9.3.6.	This amendment proposes to remove language because the term "CAISO Outage Coordination Office" was eliminated as a defined term in the NERC Outages Reliability Standards tariff amendment. See letter order issued March 28, 2017 in Docket No.17-879. The CAISO is proposing to align the tariff with that change.
10.2.4.4, second paragraph	Subject to any exemption granted by the CAISO under the CAISO Tariff, the CAISO will not accept Revenue Quality Meter Data from a CAISO Metered Entity unless the Revenue Quality Meter Data is produced by Metering Entities that are certified in accordance with	The CAISO is proposing to relocate this language from Section 10.2.4.6 as it is more suitable to include this language with the contents of the Certificate of Compliance, as opposed to being counter-intuitively placed with the revocation of the Certificate of Compliance.



	the CAISO Tariff and the CAISO Metered Entity has a current Certificate of Compliance.	
10.2.4.6, last paragraph	Subject to any exemption granted by the CAISO under the CAISO Tariff, the CAISO will not accept Revenue Quality Meter Data from a CAISO Metered Entity unless the Revenue Quality Meter Data is produced by Metering Entities that are certified in accordance with the CAISO Tariff and the CAISO Metered Entity has a current Certificate of Compliance.	The CAISO is proposing to relocate this language to Section 10.2.4.4 as it is more suitable to include this language with the contents of the Certificate of Compliance, as opposed to being counter-intuitively placed with the revocation of the Certificate of Compliance.
10.2.7	CAISO Metered Entities shall make available to the CAISO's RMDAPS Revenue Quality Meter Data meeting the <u>format</u> requirements of this Section 10 <u>and in accordance with the</u> <u>Business Practice Manual standards</u> . The format of Meter Data to be submitted shall be identified by Transmission Owner, Distribution System, PNode, CAISO Controlled Grid interface point and other information reasonably required by the CAISO.	This amendment proposes to provide clarity and transparency on enforced standards for the format of meter data.
10.3.6.3(c), third sentence	The CAISO will follow the control process described in the BPM for Metering to monitor and identify the CAISO Estimated Settlement Quality Meter Data that was not timely replaced and will take proactive measures to obtain the Actual Settlement Quality Meter Data.	The CAISO proposes to delete this sentence as it may set out an impossible requirement. For example, if the Scheduling Coordinator has until T+48B to make the required correction, then it would be assumed that the CAISO should implement measures to proactively identify and perform outreach to parties that have not replaced estimated data.
10.3.6.4	Scheduling Coordinators may submit Actual Settlement Quality Meter Data for the Scheduling Coordinator Metered Entities they represent to the CAISO_, during the period from one-hundred and sixty-eight Business Days after the Trading Day (T+168B) to one- hundred and seventy-two Business Days after the Trading Day (T+172B) for use in	This edit proposes to remove the five business day submission window for meter data to be included on the T+9M recalculation settlement statement. At one point system limitations may have made a defined submission window necessary but that is no longer the case. The CAISO is capable of accepting the data at any point between T+48B and T+172B. There is no business need for the CAISO to reject meter data that is submitted, for example, at T+150B.



	Recalculation Settlement Statement T+9M up to one-hundred and seventy-two Business Days after the Trading Day (T+172B). Scheduling Coordinators submitting Actual Settlement Quality Meter Data after forty-eight Business Days after the Trading Day (T+48B) but during the period, from T+168B-up to T+172B, which is more than forty-eight (48) Business Days after the Trading Day (T+48B) have failed to provide complete and accurate Settlement Quality Meter Data as required by Section 37.5.2.1 and will be subject to monetary penalty pursuant to Section 37.5.2.2. Any Actual Settlement Quality Meter Data that is submitted by a Scheduling Coordinator after the T+48B meter data submittal deadline, and outside the period from T+168B to after T+172B, will be rejected by the CAISO and not used in settlement calculations.	
11.8.2.1.3 2 nd sentence	The IFM Pump Shut-Down Cost for an IFM Shut-Down period shall be zero if: (1) it is followed by an IFM <u>Self-Commitment Period</u> or R <u>T</u> FM Self-Commitment Period in generation mode; (2) the Shut-Down is due to an Outage reported through the CAISO's outage management system as described in Section 9; or (3) the Shut-Down is delayed by the RTM past the Integrated Forward Market Shut-Down period in question or cancelled by the Real-Time Market before the Shut-Down process has started.	This amendment proposes to correct a typographical error by changing "RFM" to "RTM" and clarify the reference to "IFM Self-Commitment Period."
11.8.2.5.1(a)	For Generation Unit and Resource-Specific- System Resource scheduled by CAISO in the Day-Ahead Market	The CAISO proposes to correct punctuation as "Resource- Specific-System Resource" is a defined term in the CAISO's tariff.



11.23(h)	The Uninstructed Deviation Penalty will be calculated and assessed for each resource individually , except as specified in Appendix R, which specifies when Uninstructed Deviations from individual resources may be aggregated.	The CAISO proposes to remove language pertaining to Appendix R since the CAISO is also proposing, in this filing, to mark Appendix R as Not Used.
11.29.10.5, first sentence	In the event of an emergency or a failure of any of the CAISO software or business systems, the CAISO may use estimated Settlement Statements and Invoices and Payment Advices and may implement any temporary variation of the timing requirements relating to the Settlement Statements and Invoices and Payment Advices to the Settlement and billing process contained in the CAISO Tariff.	The CAISO proposes to clarify the existing language to include the CAISO's tariff authority regarding extensions for invoices as well as settlement statements.
11.31(a), last sentence	The Decline Potential Charge will not apply if the decline is made after the applicable E- t_ag deadline, as defined in Section 30.6.2.	This amendment proposes to capitalize the "t" in E-Tag in order to be consistent with the defined term throughout the CAISO tariff.
11.31(b), second from last sentence	The Decline Potential Charge will not apply if the decline is made after the applicable E- ‡_ag deadline, as defined in Section 30.6.2.	This amendment proposes to capitalize the "t" in E-Tag in order to be consistent with the defined term throughout the CAISO tariff.
14.7.2.2	The CAISO will notify the <u>RC Customers(s) or</u> Market Participant(s) it believes contributed to the Reliability Standards violation(s) during the CMEP proceeding or, if applicable, during the enforcement proceeding directly instituted by FERC. This notification shall be in writing and shall: (i) inform the RC Customer(s) or Market Participant(s) that the CAISO intends to invoke the direct allocation provisions of this Section; (ii) detail the underlying factual basis for the CAISO's position; and (iii) inform the <u>RC Customer(s) or</u> Market Participant(s) that it may seek to participate in the CMEP	The proposed amendment proposes to correct an administrative error. This language should have been added via Docket No. ER18-2366 (<i>CAISO 165 FERC</i> ¶ <i>61,116</i>).



	proceeding or, if applicable, the enforcement proceeding directly instituted by FERC.	
19.7(e)(3)	If payment is not received by <u>21the last</u> Business Days <u>after an RC Services Invoice is</u> <u>issuedin January</u> , the RC Customer will be charged a \$1,000 late payment fee on a supplemental RC Services Invoice and will be considered to be in default, understanding that the CAISO reserves the right to terminate, consistent with the terms of the RCSA, such RC Customer's RC Services until such time as payment is received except as otherwise may be required to comply with Schedule 2 of the RCSA.	The CAISO proposes to align the late payment timeline with the payment timeline of 21 business days after an RC services invoice is issued. With multiple holidays in January, it is possible that the last business day in January occurs prior to the expiration of 21 business days after the first business day in January. This could require the CAISO to issue a penalty prior to the actual payment due date.
24.13, first sentence	Under the procedures set forth in Sections 24.3.3(d) and 24.4.3, the CAISO may consider potential interregional solutions to regional needs during Phase 2 of the Transmission Planning Process.	The CAISO proposes to correct a CAISO tariff cross-reference.
25.5.2	The Generating Unit owner will provide the CAISO a \$50,000 deposit for repowering requests, or a \$10,000 deposit for theall other modification assessments at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Generating Unit owner in writing, within forty- five (45) calendar days from the date the CAISO receives all of the following: the Generating Unit owner's written notice to modify the project, technical data required to assess the request, and payment of the \$50,000-applicable_deposit. If the modification assessment cannot be completed within that time period, the CAISO will notify the	Aligns the tariff revisions with the CAISO's stated intent, which was to increase the required deposit for repowering requests only; not other modifications.



	Generating Unit owner and provide an estimated completion date and an explanation of the reasons why additional time is required.	
27.1.1 Last two sentences	In the event that a Pricing Node becomes electrically disconnected from the market model during a CAISO Market run, the LMP, including the SMEC, MCC and MCL, at the closest electrically connected Pricing Node will be used as the LMP at the affected location. The CAISO will include the impact of the disconnected Pricing Node on any modeled Remedial Action Scheme in determining the LMP.	Moving to Section 27.1.1.4.
27.1.1.4, New Section	Disconnected Pricing Node or Aggregated Pricing NodeIn the event that a Pricing Node or Aggregated Pricing Node becomes electrically disconnected from the market model during a CAISO Market run, the LMP, including the System Marginal Energy Cost, Marginal Cost of Congestion and Marginal Cost of Losses, at the closest electrically connected Pricing Node will be used as the LMP at the affected Location. The CAISO will include the impact of the disconnected Pricing Node on any modeled Remedial Action Scheme in determining the LMP.	Moved from Section 27.1.1 and updated to reference aggregated pricing nodes.
27.2.2.1, 1 st sentence	The IFM LAP Price, except for IFM MSS Price, for Settlement of Demand at any LAP for a given Trading Hour is the price as produced by the IFM optimization run based on the distribution of system Load at the constituent Pricing Nodes within the	The CAISO will apply the optimization engine pricing for Metered Subsystem Load Aggregated Points as it does to all other Load Aggregation Points, which is also known as the Price Inconsistency Market Enhancements pricing methodology. (See <u>http://www.caiso.com/Documents/Feb19_2013TariffAmendment-</u> <u>EnhancePriceConsistency-DocketNoER13-957-000.pdf</u>)



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27.2.2.2	applicable LAP and is determined by the effectiveness of the Load within the LAP in relieving a Transmission Constraint within the effectiveness threshold as specified in Section 27.4.3.6.	Currently, the MSS LAP price is calculated using the weighted average price of the constituent Pnodes. This formulation results in inconsistency with settlement for CRRs under the CAISO's CRR Track 1B initiative (see Cal. Indep. Sys. Operator Corp.165 FERC ¶ 61,085 (2018)) that either source or sink at Metered Subsystem Load Aggregated Points. The CAISO will apply the optimization engine pricing for Metered
	except for the RTD MSS Price and FMM MSS Price, for a fifteen-minute FMM interval and five minute Dispatch Interval is the price as produced by the FMM and RTD optimization runs, respectively, based on the distribution of system Load at the constituent Pricing Nodes within the applicable LAP and is determined by the effectiveness of the Load within the LAP in relieving a Transmission Constraint within the effectiveness threshold as specified in Section 27.4.3.6. The Hourly Real-Time LAP Price is then determined for Settlement purposes as further described in Section 11.5.2.2.	Subsystem Load Aggregated Points as it does to all other Load Aggregation Points, which is also known as the Price Inconsistency Market Enhancements pricing methodology. (See http://www.caiso.com/Documents/Feb19_2013TariffAmendment- EnhancePriceConsistency-DocketNoER13-957-000.pdf) Currently, the MSS LAP price is calculated using the weighted average price of the constituent Pnodes. This formulation results in inconsistency with settlement for CRRs under the CAISO's CRR Track 1B initiative (see Cal. Indep. Sys. Operator Corp.165 FERC ¶ 61,085 (2018)) that either source or sink at Metered Subsystem Load Aggregated Points.
29.7(j)(2)(D)	in addition or as an alternative, use market results in the Real-Time Market in accordance with Section 7.7.9 or take any of the actions specified in Section 7.7.6 with respect to the Real-Time Market, except that if Section 7.7.69 calls for the use of Day-Ahead Market results, the CAISO will use:	The CAISO proposes to correct a CAISO tariff cross-reference.
29.34(f)(3)(C)	include approved, pending, and adjusted <u>Ee-</u> <u>+</u> ags for imports and exports.	This amendment proposes to capitalize the "e" and "t" in E-Tag in order to be consistent with the defined term throughout the CAISO tariff.
30.4.1.1.4, 1 st paragraph, 2 nd sentence	Scheduling Coordinators may propose adders for major maintenance expenses as a component of Proxy Start-Up Costs, Proxy Minimum Load Costs, or both. Such	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.



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	proposed adders must be based solely on resource-specific information derived from actual maintenance costs, when available, or estimated maintenance costs provided by the Scheduling Coordinators to the CAISO-and the Independent Entity.	
30.4.1.1.4, 2 nd paragraph, 2 nd sentence	The CAISO-or Independent Entity will evaluate the information provided by Scheduling Coordinators, and may require Scheduling Coordinators to provide additional information, to enable the CAISO or Independent Entity to determine reasonable adders for major maintenance expenses or to conduct audits of major maintenance expenses.	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.
30.4.1.1.4, 2 nd paragraph, 3 rd sentence	Within fifteen (15) days of receipt of the information or any requested additional information, the CAISO or Independent Entity will notify the Scheduling Coordinator in writing whether it has sufficient and accurate information to determine reasonable major maintenance adders to be included in Start- Up or Minimum Load Cost calculations or both.	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.
30.4.1.1.4, 2 nd paragraph, 4 th sentence	Within ten (10) days after providing written notification to the Scheduling Coordinator that the information is sufficient and accurate, the CAISO or Independent Entity will determine the reasonable adder for major maintenance expenses to be included in Start-Up or Minimum Load Costs or both and will so inform the Scheduling Coordinator in writing.	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.
30.4.1.1.4, 2 nd paragraph, 5 th sentence	In the event of a dispute regarding the sufficiency or accuracy of the information provided by the Scheduling Coordinator, the	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.



	CAISO or Independent Entity and the Scheduling Coordinator will enter a period of good faith negotiations that terminates sixty (60) days after the date the dispute began.	
30.4.1.1.4, 2 nd paragraph, 6 th sentence	If the CAISO or Independent Entity and the Scheduling Coordinator resolve the dispute during the 60-day negotiation period, within ten (10) days of such agreement, the CAISO or Independent Entity will determine the reasonable adder for major maintenance expenses and will provide the adder to the Scheduling Coordinator in writing.	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.
30.4.1.1.4, 2 nd paragraph, 7 th sentence	If the CAISO or Independent Entity and the Scheduling Coordinator fail to agree upon the sufficiency or accuracy of the information during the 60-day negotiation period, the Scheduling Coordinator has the right to petition FERC to resolve the dispute as to the sufficiency or accuracy of its information.	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.
30.4.1.1.4, 3 rd paragraph, 1 st sentence	In the event of a dispute regarding the CAISO's or Independent Entity's determination of adders for major maintenance expenses, the CAISO or Independent Entity and the Scheduling Coordinator will enter a period of good faith negotiations that terminates sixty (60) days after the date the dispute began.	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.
30.4.1.1.4, 3 rd paragraph, 2 nd sentence	If the CAISO or Independent Entity and the Scheduling Coordinator resolve the dispute during the 60-day negotiation period, the agreed-upon values will be effective as of the first Business Day following the resolution date.	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.
30.4.1.1.4, 4 th paragraph	If the CAISO or Independent Entity and the Scheduling Coordinator fail to agree on the	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.



	major maintenance values for either Start-Up Costs or Minimum Load Costs following the 60-day negotiation period, the Scheduling Coordinator has the right to file proposed values and supporting information for major maintenance adders for the Proxy Start-Up Costs or Proxy Minimum Load Costs with FERC pursuant to Section 205 of the Federal Power Act.	
30.4.1.1.4, 5 th paragraph, 1 st sentence	In the event of a dispute regarding the reasonableness of the adder for major maintenance expenses determined by the CAISO-or Independent Entity, but not a dispute regarding the sufficiency or accuracy of the information provided by the Scheduling Coordinator, the CAISO or Independent Entity will determine a reasonable interim adder for major maintenance expenses until the adder for major maintenance expenses is determined by agreement between the CAISO or Independent Entity and the Scheduling Coordinator or by FERC.	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.
30.5.2.1, last sentence	Scheduling Coordinators submitting Bids for Scheduling Points must adhere to the <u>eE</u> - Tagging requirements outlined in Section 30. <u>5.7</u> 6.2.	This amendment proposes to capitalize the "e" in E-Tagging in order to be consistent with the defined term throughout the CAISO tariff. This amendment also proposes to correct a CAISO tariff cross- reference. Section 30.6.2 pertaining to E-Tagging was moved to Section 30.5.7 in Docket No. ER18-1787 (delegated letter order dated October 29, 2018).
30.5.7, first sentence	In addition to complying with all generally applicable E-Tagging requirements, Scheduling Coordinators must submit their E- tags consistent with the requirements specified in this Section 30.5.7.	This amendment proposes to capitalize the "t" in E-Tags in order to be consistent with the defined term throughout the CAISO tariff.



30.5.7, third sentence	Absent extenuating circumstances, the CAISO automatically updates Energy profiles on E- tTags for Energy Schedules that change from HASP to the FMM within a Trading Hour.	This amendment proposes to capitalize the "t" in E-Tag in order to be consistent with the defined term throughout the CAISO tariff.
30.5.7, fourth sentence	In performing this service for a Scheduling Coordinator, the CAISO does not assume any responsibility for compliance with any E- <u>T</u> tag requirements or obligations to which the Scheduling Coordinator is subject.	This amendment proposes to capitalize the "t" in E-Tag in order to be consistent with the defined term throughout the CAISO tariff.
31.5.3.1.4	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. To the extent the scheduled quantity for an Eligible Intermittent Resource in the IFM is less than the quantity forecasted by CAISO, the CAISO makes a Supply side adjustment in RUC by using the CAISO forecast of quantity for the Eligible Intermittent Resource as the expected delivered quantity. If on the other hand, the EIR's expected output participating in the Day-	This amendment proposes to clarify the CAISO tariff to provide more detail on how the supply-side adjustments for variable energy resources Forecasts in RUC are applied under this section of the tariff.



	Abond Market, an reflected in the EID's Did	
	Ahead Market, as reflected in the EIR's Bid, including a Self-Schedule, or lack thereof, To	
	the extent the scheduled quantity for an	
	Eligible Intermittent Resource in the IFM is	
	greater than the quantity forecasted by the	
	CAISO's forecast of the EIR, the CAISO may	
	makes 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.	
31.7, second to	The CAISO Commitment Period or Self-	The CAISO proposes to clarify this reference to match the
last sentence	Commitment Period determination for the ELS	defined term.
	Resources depends on the DAM results and	
	the Clean <u>Bids</u> and Generated Bids, following	
	the same rules that apply to other resources.	
34.1.3,	Scheduling Coordinators may not submit	The CAISO proposes to clarify this reference to match the
3 rd sentence	Virtual Bids to the Real-Time Market, although	defined term.
from the last	Virtual Awards from the DAM are settled for	
	their liquidated positions based on prices from	
	the FMM. In the case of Multi-Stage	
	Generating Resources, the RTM procedures	
	will optimize Transition Costs in addition to the	
	Start-Up <u>Costs</u> and Minimum Load Costs.	
34.3.1, 5 th	RTUC is run at the following time intervals: (1)	This amendment proposes to reflect a more accurate
sentence	at approximately <u>127.5</u> minutes prior to the	approximate time for the start of the HASP run.
	first Trading Hour, to serve as the HASP run,	
24.40 accord	for T-45 minutes to T+60 minutes;	The CAICO propage to clarify this reference to motch the
34.10, second sentence	During normal operating conditions, the	The CAISO proposes to clarify this reference to match the defined term.
Sentence	CAISO may Dispatch those Participating Generators, Participating Loads, Proxy	
	Demand Resources, System Units and	
	System Resources that have contracted to	
	provide Spinning <u>Reserve</u> and Non-Spinning	
	Reserve, except for those reserves	
	designated as Contingency Only, in	
L	l designated as contingency only, in	1



	conjunction with the normal Dispatch of Energy.	
34.10, 8 th sentence	If a Participating Generator, Participating Load, System Unit, or System Resource that is supplying Operating Reserve is dDispatched to provide Energy, the CAISO shall replace the Operating Reserve as necessary to maintain NERC and WECC reliability standards, including any requirements of the NRC.	The CAISO proposes to update this reference to match the defined term.
34.13.1, last paragraph	In any event, the CAISO may issue an Operating Target Instruction if necessary to maintain system reliability consistent with Sections 7.6 or 7.7. Upon receiving such an Operating Instruction, an Eligible Intermittent Resource must not generate in excess of its Dispatch Operating Target until the Operating Instruction expires, except when physically impossible. When such an Operating Instruction is in effect, Eligible Intermittent Resources should follow a linear ramp between Dispatch Operating Targets, except when physically impossible.	This amendment proposes to align terms as they are used in the Section.
37.1.5	The CAISO shall administer the following Rules of Conduct specified herein: Section 37.4.1, Section 37.4.2, Section 37.4.3, Section 37.5.2, Section 37.6.1, Section 37.6.2, and Section 37.6.3. FERC shall administer the following Rules of Conduct specified herein: Section 37.2.1, Section 37.2.3, Section 37.2.4, and Section 37.3.1.	The CAISO is proposing to remove cross-reference CAISO Tariff Section 37.4.3 as it is marked as "Not Used."
37.4.4	Except as otherwise specifically provided, penalty amounts shall be tripled for any violation of Section 37.4.1 or 37.4.2 through Section 37.4.3 that occurs during a CAISO	The CAISO is removing reference to CAISO tariff section 37.4.3 as it is marked as "Not Used." The CAISO also proposes to remove language that is not applicable as the CAISO does not have authority to assess



	System Emergency. Violations of the above rules that result in circumstances in which an Uninstructed Deviation Penalty under Section 11.23 is assessed shall not be subject to Sanction under this Section. 37.4.	Uninstructed Deviation Penalties.
37.8.8	Officer Representative [Not Used] Where an investigation results in a Sanction by the CAISO, the CAISO shall direct its notice of such result to a responsible representative of the Scheduling Coordinator and, as provided in Section 37.8.4, to the Market Participant(s) that are the subject(s) of the investigation at the officer level.	The requirement to notify an officer-level employee upon determining a sanction will apply is not necessary. The CAISO believes each scheduling coordinator can determine for itself how to communicate these issues internally. Additionally, the existing tariff provision requires the CAISO to maintain a current list of officer-level employees for each scheduling coordinator. There is no justification for maintaining this administrative burden.
37.8.10, first sentence	A <u>Market ParticipantScheduling Coordinator</u> that receives a Sanction, <u>or a Market</u> <u>Participant whose conduct gave rise to the</u> <u>Sanction</u> , -may obtain immediate review of the CAISO's determination by directly appealing to FERC, in accordance with FERC's rules and procedures.	The proposed amendment clarifies that the penalty has always been assessed against the scheduling coordinator so the general reference to a "Market Participant that receives a Sanction" has never been correct. The edits also clarify that the CAISO is not presuming to dictate that the market participant is barred from making a filing at FERC if they, rather than the scheduling coordinator, choose to do so.
37.8.10, fifth sentence	The disposition by FERC of such appeal shall be final, and no separate dispute of such Sanction may be initiated under Section 13, except as provided in Section 37.9.3.4.	This amendment proposes to remove an invalid CAISO tariff section cross-reference.
37.9.1	Penalty amounts for violation of these Rules of Conduct shall be calculated as specified in Section 37.4.1.2, Section 37.4.2.2, Section 37.4.3.2, Section 37.4.4, Section 37.5.2.2, Section 37.6.1.2, Section 37.6.2.2, and Section 37.6.3.2.	The CAISO is proposing to remove the contents of CAISO tariff section 37.4.1 and replace it with "Not Used." As such, the CAISO is proposing to remove any cross-reference to that Tariff Section in order to provide clarity. The CAISO is also proposing to remove reference to CAISO tariff section 37.4.3.2 as it is marked as "Not Used."
39.7.1, third sentence	The Scheduling Coordinator must provide the data necessary for determining the Variable Costs unless the Negotiated Rate Option precedes the Variable Cost Option in the rank	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.



	order, in which case the Scheduling Coordinator must have a negotiated rate established with the Independent Entity charged with calculating the Default Energy BidCAISO.	
39.7.1.1.2, Second sentence	Resource specific values may be negotiated with the CAISO or the Independent Entity charged with calculating the Default Energy Bid.	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.
39.7.1.3.1, 2 nd sentence of the first paragraph	Within ten (10) Business Days of receipt, the CAISO or an Independent Entity selected by the CAISO will provide a written response.	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.
39.7.1.3.1, 3 rd sentence of the first paragraph	If the CAISO or Independent Entity accepts the proposed Default Energy Bid, it will generally become effective within eleven (11) Business Days from the date of acceptance by the CAISO and remain in effect until: (1) the Default Energy Bid is modified by FERC; (2) the Default Energy Bid is modified by mutual agreement of the CAISO and the Scheduling Coordinator; or (3) the Default Energy Bid expires, is terminated or is modified pursuant to any agreed upon term or condition or pertinent FERC order.	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.
39.7.1.3.1, 1st sentence of the second paragraph	If the CAISO or Independent Entity selected by the CAISO does not accept the proposed Default Energy Bid, the CAISO or Independent Entity selected by the CAISO and the Scheduling Coordinator shall enter a period of good faith negotiations that terminates sixty (60) days following the date of submission of a proposed Default Energy Bid by a Scheduling Coordinator.	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.
39.7.1.3.1, 2nd sentence of the	If at any time during this period, the CAISO or Independent Entity selected by the CAISO	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.



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second paragraph	and the Scheduling Coordinator agree upon the Default Energy Bid, it will generally become effective within eleven (11) Business Days of the date of agreement and remain in effect until: (1) the Default Energy Bid is modified by FERC; (2) the Default Energy Bid is modified by mutual agreement of the CAISO and the Scheduling Coordinator; or (3) the Default Energy Bid expires, is terminated or is modified pursuant to any agreed upon term or condition or pertinent FERC order.	
39.7.1.3.1, 1 st sentence third paragraph	If by the end of the sixty (60)-day period the CAISO or Independent Entity selected by the CAISO and the Scheduling Coordinator fail to agree on the Default Energy Bid to be used under the Negotiated Rate Option, the Scheduling Coordinator has the right to file a proposed Default Energy Bid with FERC pursuant to Section 205 of the Federal Power Act.	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.
39.7.1.3.1, first sentence of the fourth paragraph	During the sixty (60)-day period following the submission of a proposed negotiated Default Energy Bid by a Scheduling Coordinator, and pending FERC's acceptance in cases where the CAISO or Independent Entity selected by the CAISO fails to agree on the Default Energy Bid for use under the Negotiated Rate Option and the Scheduling Coordinator filed a proposed Default Energy Bid with FERC pursuant to Section 205 of the Federal Power Act, the Scheduling Coordinator has the option of electing to use any of the other options available pursuant to Section 39.7.	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.
39.7.1.7.2.2(b)	Be supported by (1) a written attestation by a representative who has the authority to bind	This amendment proposes to correct a typographical error concerning a CAISO tariff cross-reference and a misspelling of



	the company stating that the value submitted to the CAISO as the maximum storage horizon is consistent with the requirements specified in Section 39.7.1.7.2.2(a); or (2) corroborating information submitted to the CAISO, which may include several years of historic reservoir levels for the specific hydroelectric resource and regulatory filings related to the operations of the hydroelectric resource.	the term "reservoir."
39.8.3, first sentence	The value of the Bid Adder will be either: (i) a unit-specific value determined in consultation with the CAISO or an independent entity selected by the CAISO; or (ii) a default Bid Adder of \$24/MWh.	The CAISO is proposing to eliminate a long-expired reference to the use of an independent entity.
40.1 last sentence	For purposes of Section 40, a Load Serving Entity shall not include any entity satisfying the terms of California Public Utilities Code Section 380(kj)(3).	This amendment correct a California Public Utilities Code Section cross-reference.
40.2.1(a)	The Scheduling Coordinator for a CPUC Load Serving Entity must provide the CAISO with all information or data to be provided to the CAISO as required by the CPUC and pursuant to the schedule adopted by the CPUC, except that the monthly Resource Adequacy Plans or the same information as required to be included in the monthly Resource Adequacy Plans, plus any other information the CAISO requires as identified in the Business Practice Manual, shall be submitted to the CAISO no less than 45 days in advance of the first day of the month covered by the plan, as provided in Section 40.2.1.4(e).	This amendment correct a tariff cross-reference.



40.2.1(b)	Where the information or data provided to the CAISO under Section 40.2.1.4(a) does not include Reserve Margin(s), then the provisions of Section 40.2.2.1(b) shall apply.	This amendment correct a tariff cross-reference.
40.2.1(c)	Where the information or data provided to the CAISO under Section 40.2.1.1(a) does not include criteria for determining qualifying resource types and their Qualifying Capacity, then the provisions of Section 40.8 shall apply.	This amendment correct a tariff cross-reference.
40.2.1(d)	Where the information or data provided to the CAISO under Section 40.2.1.4(a) does not include annual and monthly Demand Forecast requirements, then the provisions of Section 40.2.2.3 shall apply.	This amendment correct a tariff cross-reference.
40.2.1(e)	 Where the information or data provided to the CAISO under Section 40.2.1.1(a) does not include annual and monthly Resource Adequacy Plan requirements that include, at a minimum, identifying Local Capacity Area Resources and Listed Local RA Capacity, or where there is a requirement to submit monthly Resource Adequacy Plans but the submission date is less than 45 days in advance of the first day of the month covered by the plan, then Section 40.2.2.4 shall apply. 	This amendment correct a tariff cross-reference.
40.6.4.2	The following resource types providing Resource Adequacy Capacity are not required to submit RUC Availability Bids for that capacity, but any suc <u>h</u> k bids they do submit must be \$0/MW RUC Availability Bids: Hydroelectric Generating Units, Pumping Load, Reliability Demand Response Resources, Combined Heat and Power Resources, Regulatory Must-Take	The CAISO is proposing to correct a grammatical error.



	Generation, Non-Dispatchable Resources, Non-Generator Resources using Regulation Energy Management, Conditionally Available Resources, and Eligible Intermittent Resources.	
40.6.8.1.4, 2 nd sentence of the first paragraph	Within ten (10) Business Days of receipt, the CAISO or an Independent Entity selected by the CAISO will provide a written response.	The CAISO is proposing to remove the defined term "Independent Entity." An Independent Entity is a CAISO contractor carrying out tasks assigned by the CAISO. As such, the CAISO is proposing that there is no purpose in having the term Independent Entity distinguish between the CAISO and a CAISO contracted independent entity.
40.6.8.1.4, 3 rd sentence of the first paragraph	If the CAISO or Independent Entity accepts the proposed Generated Bid, it will become effective within three (3) Business Days from the date of acceptance by the CAISO and remain in effect until: (1) the Generated Bid is modified by FERC; (2) the Generated Bid is modified by mutual agreement of the CAISO and the Scheduling Coordinator; or (3) the Generated Bid expires, is terminated or is modified pursuant to any agreed upon term or condition or pertinent FERC order.	The CAISO is proposing to remove the defined term "Independent Entity." An Independent Entity is a CAISO contractor carrying out tasks assigned by the CAISO. As such, the CAISO is proposing that there is no purpose in having the term Independent Entity distinguish between the CAISO and a CAISO contracted independent entity.
40.6.8.1.4, first sentence of the second paragraph	If the CAISO or Independent Entity selected by the CAISO does not accept the proposed Generated Bid, the CAISO or Independent Entity selected by the CAISO and the Scheduling Coordinator shall enter a period of good faith negotiations that terminates sixty (60) days following the date of submission of a proposed Generated Bid by a Scheduling Coordinator.	The CAISO is proposing to remove the defined term "Independent Entity." An Independent Entity is a CAISO contractor carrying out tasks assigned by the CAISO. As such, the CAISO is proposing that there is no purpose in having the term Independent Entity distinguish between the CAISO and a CAISO contracted independent entity.
40.6.8.1.4, second sentence of the	If at any time during this period, the CAISO or Independent Entity selected by the CAISO and the Scheduling Coordinator agree upon	The CAISO is proposing to remove the defined term "Independent Entity." An Independent Entity is a CAISO contractor carrying out tasks assigned by the CAISO. As such,



second paragraph	the Generated Bid, it will be become effective within three (3) Business Days of the date of agreement and remain in effect until: (1) the Generated Bid is modified by FERC; (2) the Generated Bid is modified by mutual agreement of the CAISO and the Scheduling Coordinator; or (3) the Generated Bid expires, is terminated or is modified pursuant to any agreed upon term or condition or pertinent FERC order.	the CAISO is proposing that there is no purpose in having the term Independent Entity distinguish between the CAISO and a CAISO contracted independent entity.
40.6.8.1.4, third paragraph	If by the end of the sixty (60) day period the CAISO or Independent Entity selected by the CAISO and the Scheduling Coordinator fail to agree on the Generated Bid to be used under the negotiated price option, the Scheduling Coordinator has the right to file a proposed Generated Bid with FERC pursuant to Section 205 of the Federal Power Act	The CAISO is proposing to remove the defined term "Independent Entity." An Independent Entity is a CAISO contractor carrying out tasks assigned by the CAISO. As such, the CAISO is proposing that there is no purpose in having the term Independent Entity distinguish between the CAISO and a CAISO contracted independent entity.
40.6.8.1.4, fourth paragraph	During the sixty (60) day period following the submission of a proposed negotiated Generated Bid by a Scheduling Coordinator, and pending FERC's acceptance in cases where the CAISO or Independent Entity selected by the CAISO fails to agree on the Generated Bid for use under the negotiated price option and the Scheduling Coordinator filed a proposed Generated Bid with FERC pursuant to Section 205 of the Federal Power Act, the Scheduling Coordinator has the option of electing to use any of the other options available pursuant to this Section.	The CAISO is proposing to remove the defined term "Independent Entity." An Independent Entity is a CAISO contractor carrying out tasks assigned by the CAISO. As such, the CAISO is proposing that there is no purpose in having the term Independent Entity distinguish between the CAISO and a CAISO contracted independent entity.
Appendix A, - Day-Ahead Minimum Load Energy	- Day-Ahead Minimum Load Energy Day-Ahead Scheduled Energy below the registered Minimum Load, <u>or if applicable, as</u> <u>modified pursuant to Section 9.3.3,</u> which	This amendment proposes to align the tariff with changes the CAISO made in Docket No. ER16-1265 regarding PMin after rerate (see Commission Letter Order issued in Docket No. ER16-1265, dated May 6, 2016).



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Appendix A, - Extremely Long-Start Resource (ELS Resource)	applies to Generating Units with non-zero Minimum Load. Day-Ahead Minimum Load Energy is settled as provided in Section 11.2.1.1, and it is included in Bid Cost Recovery (BCR) at the relevant IFM Minimum Load Cost as described in Section 11.8.2.1.2. - Extremely Long-Start Resource (ELS Resource) A Generating Unit that has a Start-Up Time greater than 18 hours or a System Resource that is either: (1) a Nnon-Resource-Specific System Resource with contractual limitations that require the Energy be transacted (<i>i.e.</i> , committed) prior to the publishing time of the Day-Ahead Market results (1300 hours on the day before the Trading Day); or (2) a Resource-Specific System Resource that has a Start-Up Time greater than 18 hours.	The CAISO proposes to update this reference to match the defined term and address grammatical typos.
Appendix A, FMM LAP Price	<u>- FMM LAP Price</u> <u>The marginal price for a particular LAP</u> <u>calculated pursuant to Section 27.2.2.2.</u>	The CAISO will apply the optimization engine pricing for Metered Subsystem Load Aggregated Points as it does to all other Load Aggregation Points, which is also known as the Price Inconsistency Market Enhancements pricing methodology. (See <u>http://www.caiso.com/Documents/Feb19_2013TariffAmendment-</u> <u>EnhancePriceConsistency-DocketNoER13-957-000.pdf</u>) Currently, the MSS LAP price is calculated using the weighted average price of the constituent Pnodes. This formulation results in inconsistency with settlement for CRRs under the CAISO's CRR Track 1B initiative (<i>see Cal. Indep. Sys. Operator Corp.</i> 165 FERC ¶ 61,085 (2018)) that either source or sink at Metered Subsystem Load Aggregated Points.
Appendix A, IFM Lap Price	- IFM LAP Price The marginal price for a particular LAP calculated pursuant to Section 27.2.2.1.	The CAISO will apply the optimization engine pricing for Metered Subsystem Load Aggregated Points as it does to all other Load Aggregation Points, which is also known as the Price Inconsistency Market Enhancements pricing methodology. (See



		http://www.caiso.com/Documents/Feb19_2013TariffAmendment- EnhancePriceConsistency-DocketNoER13-957-000.pdf) Currently, the MSS LAP price is calculated using the weighted average price of the constituent Pnodes. This formulation results in inconsistency with settlement for CRRs under the CAISO's CRR Track 1B initiative (see Cal. Indep. Sys. Operator Corp.165 FERC ¶ 61,085 (2018)) that either source or sink at Metered Subsystem Load Aggregated Points.
Appendix A - Independent Entity	- <u>[Not Used]</u> Independent Entity The entity, not affiliated with the CAISO or any Market Participant, that assists the CAISO in the determination of values used in the CAISO's market processes.	The tariff refers to actions being taken by the CAISO or Independent Entity. Since the Independent Entity is really just a contractor carrying out tasks assigned by the CAISO, there is no purpose for having the tariff distinguish the two. The change would be to have the tariff refer only to the CAISO and strike all of the references to the independent entity. As such, the CAISO proposes to have the definition of "Independent Entity" be marked as "Not Used."
Appendix A Interconnection Facilities Study	A study conducted by the Participating TO(s), CAISO, or a third party consultant for the Interconnection Customer to determine a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility with the CAISO Controlled Grid. The scope of the study is defined in Section 8 of the Standard Large Generator Interconnection Procedures (Appendix U), Section 6 and 7 of the Generator Interconnection Procedures (Appendix Y) and Section 4.4 of the Generator Interconnection and Deliverability Allocation Procedures (Appendix DD).	The CAISO is proposing to update definitions relating to the interconnection process that were not updated when the CAISO amended the tariff to add Appendices U, Y and DD.



Appendix A Interconnection Request	An Interconnection Customer's request, in the form of Appendix 1 to the Large Generator Interconnection Procedures, or Attachment 2 to the Small Generator Interconnection Procedures, or Appendix 1 to the Generator Interconnection Deliverability Allocation Procedure (Appendix DD), in accordance with Section 25.1.	The CAISO is proposing to update definitions relating to the interconnection process that were not updated when the CAISO amended the tariff to add Appendices U, Y and DD.
Appendix A Interconnection Study	Any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Large Generator Interconnection Procedures set forth in Appendix U and in the Generator Interconnection Procedures set forth in Appendix Y or the Phase I Interconnection Study and the Phase II Interconnection Study described in the LGIP set forth in Appendix Y and Appendix DD.	The CAISO is proposing to update definitions relating to the interconnection process that were not updated when the CAISO amended the tariff to add Appendices U, Y and DD.
Appendix A, LAP Price	- LAP Price The marginal price for a particular LAP , except for the IFM MSS Price, FMM MSS Price and RTD MSS Price, calculated as specified in Section 27.2.2.	The CAISO will apply the optimization engine pricing for Metered Subsystem Load Aggregated Points as it does to all other Load Aggregation Points, which is also known as the Price Inconsistency Market Enhancements pricing methodology. (See <u>http://www.caiso.com/Documents/Feb19_2013TariffAmendment-</u> <u>EnhancePriceConsistency-DocketNoER13-957-000.pdf</u>) Currently, the MSS LAP price is calculated using the weighted average price of the constituent Pnodes. This formulation results in inconsistency with settlement for CRRs under the CAISO's CRR Track 1B initiative (see Cal. Indep. Sys. Operator Corp.165 FERC ¶ 61,085 (2018)) that either source or sink at Metered Subsystem Load Aggregated Points.
Appendix A Location	A reference to either a P <u>ricing</u> Node or an Aggregated Pricing Node.	The CAISO is proposing to spell out this term.
Appendix A; - Minimum	Either The greater of (1) for resources that are not Multi-Stage Generating Resources, the	These revisions update the tariff to (1) reflect that resources with Forbidding Operating Regions are modelled as MSG resources;


Dispatchable Level	lower limit of the fastest segment of a Generating Unit's Operational Ramp Rate, as adjusted for the Generating Unit's Forbidden Operating Regions, if any, <u>orand</u> (2) for Multi- <u>Stage Generating Resources, the minimum</u> <u>MW level of the fastest operational ramp rate</u>	and (2) the CAISO market uses the operational ramp rate and issues DPMIN EDs based on the operational ramp rate.
Appendix A - Negotiated	across all configurations. if the resource is providing regulation, the lower limit of a Generating Unit's Regulating Range. A method of calculating Default Energy Bids based on a negotiation with the CAISO or the	This amendment proposes to remove reference to the term "Independent Entity." Since an Independent Entity is a
Rate Option	Independent Entity.	contractor carrying out tasks assigned by the CAISO, there is no purpose for having the tariff distinguish between the CAISO and an independent entity.
Appendix A, - NRS-RA Resource	A <u>nN</u> on-Resource-Specific System Resource that provides Resource Adequacy Capacity.	The CAISO proposes to update this reference to match the defined term.
Appendix A - Planning Region	Means each of the following Order 1000 transmission planning regions insofar as they are within the Western Interconnection: CAISO, <u>NorthernGrid, ColumbiaGrid, Northern</u> <u>Tier Transmission Group,</u> and WestConnect.	This amendment acknowledges that NTTG and ColumbiaGrid are merging into a new planning region, NorthernGrid, beginning January 1, 2020. At that point in time there will be three Order 1000 planning regions: NorthernGrid, WestConnect, and CAISO. This change does not impact the CAISO and Appendix A is the only place where the planning regions are specifically mentioned in the CAISO tariff.
Appendix A - PMax	The maximum normal capability of the Generating Unit, as measured at the Point of Interconnection or Point of Delivery, as applicable. PMax may not exceed the Interconnection Service Capacity, as documented in the Interconnection Study or Generator Interconnection Agreement. should not be confused as an emergency rating of the Generating Unit.	The proposed change to the definition of "PMax" clarifies the current language in the CAISO Tariff.
Appendix A, RTD LAP Price	- RTD LAP Price	The CAISO will apply the optimization engine pricing for Metered Subsystem Load Aggregated Points as it does to all other Load



Appendix A	The marginal price for a particular LAP calculated pursuant to Section 27.2.2.2. A Leocation in the Base Market Model at which	Aggregation Points, which is also known as the Price Inconsistency Market Enhancements pricing methodology. (See http://www.caiso.com/Documents/Feb19_2013TariffAmendment- EnhancePriceConsistency-DocketNoER13-957-000.pdf) Currently, the MSS LAP price is calculated using the weighted average price of the constituent Pnodes. This formulation results in inconsistency with settlement for CRRs under the CAISO's CRR Track 1B initiative (see Cal. Indep. Sys. Operator Corp.165 FERC ¶ 61,085 (2018)) that either source or sink at Metered Subsystem Load Aggregated Points. Location is a defined term and is capitalized.
- Scheduling Point	Scheduling Coordinators may submit Intertie Bids in the CAISO Markets.	
Appendix B.3, Section 4.1.1	Identification of Net Scheduled Net Scheduled Generating Unit. The Participating Generator has identified the Net Scheduled Generating Unit that it owns, operates or has a contractual entitlement to, in Schedule 1, as required by Section 4.6.4 of the CAISO Tariff.	The CAISO proposes to correct a typographical error by deleting the repetitious "Net Scheduled."
Appendix B.3, Section 4.5	Dispatch and Curtailment. The CAISO shall only dispatch or curtail a Net Scheduled Generating Unit of the Participating Generator: (a) to the extent the Participating Generator bids Energy or Ancillary Services from the Net Scheduled Generating Unit into the CAISO's markets or the Energy is otherwise available to the CAISO under Section 40 or 43 <u>A</u> of the CAISO Tariff; or (b) if the CAISO must dispatch or curtail the Net Scheduled Generating Unit in order to respond to an existing or imminent System Emergency or condition that would compromise CAISO Balancing Authority Area	The CAISO is proposing to change the CAISO tariff cross- reference to Section 43A, as Section 43 was removed from the tariff in its entirety in Docket No. ER19-1837-000, letter order issued August 9, 2019.



	integrity or reliability as provided in Sections 7 and 7.6.1 of the CAISO Tariff.	
Appendix B.3, Section 6.1	The Participating Generator shall be responsible for all its costs incurred in connection with operating and maintaining the Net Scheduled QF-Generating Unit identified in Schedule 1 for the purpose of meeting its obligations under this Agreement.	This amendment clarifies a defined term in the CAISO tariff. The defined term "Net Scheduled QF" was changed to "Net Scheduled Generating Unit" and the CAISO is aligning this pro forma with that change.
Appendix B.3, Section 8.2	The Participating Generator represents that all necessary leases, approvals, permits, licenses, easements, rights of way or access to install, own and/or operate its Net Scheduled QF-Generating Unit have been or will be obtained by the Participating Generator prior to the effective date of this Agreement.	This amendment clarifies a defined term in the CAISO tariff. The defined term "Net Scheduled QF" was changed to "Net Scheduled Generating Unit" and the CAISO is aligning this pro forma with that change.
Appendix B.3, Section 8.3	The Participating Generator represents and warrants that: (1) the Net Scheduled Generating Unit listed in Schedule 1 is (a) a Qualifying Facility or is operated as an integral part of a Qualifying Facility, or (b) is a CHP Resource, and (2) (a) the Self-provided Load of the Participating Generator that is served by the Net Scheduling-Scheduled QF Generating Unit either has, and continues to have through the term of this Agreement, standby service from a UDC or MSS Operator under terms approved by the Local Regulatory Authority or the Federal Energy Regulatory Commission, as applicable, or (b) the Self- provided Load shall be curtailed concurrently with any Outage of the Generation serving that Self-provided Load in an amount sufficient to cover that Outage.	This amendment clarifies a defined term in the CAISO tariff. The defined term "Net Scheduled QF" was changed to "Net Scheduled Generating Unit" and the CAISO is aligning this <i>pro forma</i> with that change.
Appendix B.9, Section 7.2	The Host Balancing Authority must support associated e <u>E</u> -t <u>T</u> agging as described in the	This amendment proposes to capitalize the "e" and "t" in E- Tagging in order to be consistent with the defined term



	CAISO Dynamic Scheduling Protocol and deemed to be consistent with NERC and/or WECC requirements.	throughout the CAISO tariff.
Appendix B.11 Whereas Clause	BA. The CRR Entity has completed the Candidate CRR Holder application process and is eligible to participate in the CRR Allocation or CRR Auction or register as a CRR Holder through the Secondary Registration System.	This amendment proposes to correct a typographical error in the alpha-numeric numbering sequence.
Appendix B.13 Section 4.3.3	4.3.3 Use of CAISO Forecast. For purposes of participating in the CAISO Markets, the System Resource Owner has the option of using a forecast of their output provided by CAISO, provided that: (1) they agree to provide the CAISO with the meteorological data specified in Appendix Q; and (2) they are certified to do so by the CAISO pursuant to the rules specified in the Business Practice Manuals. Once the election to use the output forecast provided by the CAISO is complete, the CAISO will specify the election status in the Master File. Any changes to this election will be subject to the timeline and rule changes that apply to the Master File as specified in Section 30.7.3.2.	The CAISO proposes to amend the <i>pro forma</i> Resources- Specific System Resource Agreement to extend to such units the option of using the CAISO forecast for scheduling purposes.
Appendix B.14 Section 4.3.2, first sentence	The Demand Response Provider shall notify the CAISO of any proposed change(s) to the registration ofto technical information.	This amendment proposes to correct a typographical error.
Appendix B.17, EIM Entity Agreement, Section 3.2.2 3 rd sentence	The filing of the notice of termination by the CAISO with FERC will be considered timely if (1) the request to file a notice of termination is made after the preconditions for termination have been met, and the CAISO files the notice of termination within thirty (<u>30</u> 420) days of receipt of such request; or (2) the CAISO files	This provision includes a typographical error. Thirty days, not 120 days, is the correct timeframe for the CAISO to file a notice of termination after all preconditions for termination have been met.



	the notice of termination in accordance with the requirements of FERC Order No. 2001.	
Appendix B.19, Section 3.2.2, first sentence	In the event that the EIM Participating Resource no longer wishes to submit Bids and transmit Energy over the CAISO Controlled Grid, it may terminate this Agreement, on giving the CAISO not less than ninety (90) days written notice, provided, however, that in accordance with Section <u>2.2.2</u> 3.3 , the EIM Participating Resource may modify Schedule 1 to remove EIM Resources which it no longer owns or no longer has contractual entitlement to and such modification shall be effective upon receipt by the CAISO.	This amendment proposes to correct a cross-reference to the EIM Participating Resource Agreement. The correct reference is Section 2.2.2.
Appendix C, Section I.1.2, middle of second paragraph	In addition, the Scheduling Coordinator must certify that the Schedules are subject to: (a) charges for losses by the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA; or (b) Transmission Agency of Northern California for the use of the California-Oregon Transmission Project. Schedules and Dispatches settled under such Resource IDs shall be subject to an LMP which has accounted for the Marginal Cost of Losses as if there were an actual physical generation facility at the Tracy Scheduling Point or at the applicable Scheduling Point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system as opposed to the Marginal Cost of Losses under the IBAA LMPs specified in Section GI.1.1 of this Appendix.	This amendment proposes to correct a cross-reference within Appendix C to the CAISO tariff.



Appendix C, Section I.1.2, first sentence of the 4 th paragraph	Schedules and Dispatches settled under such Resource IDs shall be subject to an LMP which has accounted for the Marginal Cost of Losses as if there were an actual physical generation facility at the Tracy Scheduling Point or at the applicable Scheduling Point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system as opposed to the Marginal Cost of Losses under the IBAA LMPs specified in Section <u>GI</u> .1.1 of this Appendix.	This amendment proposes to correct a cross-reference within Appendix C to the CAISO tariff.
Appendix L, Section L.2, last sentence	Actual ATC mathematical algorithms and other ATC calculation information are located in the CAISO's ATC Implementation Document (ATCID) posted <u>to the CAISO</u> <u>Websiteon OASIS</u> .	Appendix L to the CAISO tariff includes a footnote specifying that the CAISO's Available Transfer Capability Implementation Document (ATCID) is available on the CAISO's OASIS and the footnote provided a hyperlink to the document. Operations Engineer Services discovered that the link was not working for an undetermined time period. Though temporarily not available through the broken hyperlink, the CAISO's ATCID was always available on the public caiso.com website. Due to challenges with maintaining links on OASIS, the CAISO plans to amend Appendix L to refer to the CAISO's public website.
Appendix N, Section 1.2.1.6	All Energy transfers associated with a Pseudo-Tie Generating Unit must be electronically tagged (E-tTagged).	This amendment proposes to capitalize the "t" in E-Tagging in order to be consistent with the defined term throughout the CAISO tariff.
Appendix N, Section 2.2.1.4	All Energy transfers associated with a Pseudo-Tie generating unit must be electronically tagged (<u>eE-tT</u> agged).	This amendment proposes to capitalize the "e" and "t" in E- Tagging in order to be consistent with the defined term throughout the CAISO tariff.
Appendix Q, Section 2.2.5 (in its entirety)	2.2.5 [Not Used] Information Requirements for Participating Intermittent Resource Export Fee	This section is part of implementing a fee that was applied only to resources receiving participating intermittent resource program (PIRP) protective measures. PIRP Protective measures have expired. The defined term "Participating Intermittent Resource Export Fee" was deleted in Docket No. ER19-1837-000 (letter order issued October 10, 2019). Accordingly, these provisions need to be updated to reflect that



		the participating intermittent resource export fee no longer exists.
Appendix Q Section 2.4.4	Continuing Obligation A Participating Intermittent Resource or Eligible Intermittent Resource must meet all applicable obligations established for Participating Intermittent Resources or Eligible Intermittent Resources under the CAISO Tariff and this EIRP, and must fully cooperate in providing all data, other information, and authorizations the CAISO reasonably requests to fulfill its obligation to validate forecast models, and explain deviations, and implement the Participating Intermittent Resource Export Fees.	The defined term "Participating Intermittent Resource Export Fee" was deleted in Docket No. ER19-1837 (letter order issued October 10, 2019).
Appendix R	Appendix R [Not Used] UDP Aggregation Protocol	The CAISO is proposing to delete all contents of this Appendix R and notate it as "Not Used," as it contains outdated tariff language.
Appendix S, Section 1.3.1.4	Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. The Federal Energy Regulatory Commission expects all transmission providers, market participants, and Interconnection Customers interconnected with electric systems to comply with <u>Applicable Reliability Criteria-the</u> recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and	The CAISO is proposing this change because the President's Critical Infrastructure Protection Board requirements have been superseded by the Applicable Reliability Criteria which, as defined by the CAISO tariff, include NERC and WECC Reliability Standards as well as Local Reliability Criteria.



	cyber-security practices.	
Appendix T, Article 12.9	Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all transmission providers, market participants, and interconnection customers interconnected to electric systems to comply with <u>Applicable Reliability Criteria</u> the recommendations offered by the <u>President's Critical</u> Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.	The CAISO is proposing this change because the President's Critical Infrastructure Protection Board requirements have been superseded by the Applicable Reliability Criteria which, as defined by the CAISO tariff, include NERC and WECC Reliability Standards as well as Local Reliability Criteria.
Appendix U, Section 3.9.1, first sentence	If, at the time an Interconnection Customer achieves Commercial Operation, the actual MW capacity of its Generating Facility is reduced by no more than the greater of five percent (5%) of its MW capacity or 10 MW, but by no more than twenty-five percent (25%) of the MW capacity of the Generating Facility, such a <u>one-time</u> reduction shall not constitute a breach of the Interconnection Customer's obligations under the CAISO Tariff or its Generator Interconnection Agreement.	The CAISO is proposing to remove this language as it is confusing and at tension with the broader language, as well as with the CAISO's intent, in the rest of the provision.
Appendix U Section 4.4.6, Last paragraph	The CAISO will publish cost data regarding modification assessments in accordance with the terms set forth in a Business Practice Manual.	By adding this provision at the end of the section, the CAISO proposes to clarify that CAISO refund deadlines will be tolled to the extent the Interconnection Customer fails to provide accounting information to facilitate the refund, or where generally accepted accounting practices (such as monthly batch disbursements) require <i>de minimis</i> tolling.



	refunds pursuant to this Appendix U will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.	
Appendix U, Section 4.4.7,	The CAISO's <u>agreement</u> to modifications requested pursuant to Section 4.4.3 for an	This amendment proposes to correct an omission, the word "agreement" should be included, consistent with CAISO Tariff
first sentence	Interconnection Customer that has exceeded	Appendix DD, Section 6.7.4
	or will exceed ten (10) years from the date the	
	Interconnection Request is received by the CAISO with retention of Deliverability will be	
	predicated upon the Interconnection	
	Customer's ability to meet and maintain the	
	following commercial viability criteria:	
Appendix U,	If an Interconnection Customer satisfies all the	This amendment proposes to clarify the logic of the time frame in
Section 4.4.7,	commercial viability criteria except criterion	the beginning of the section.
2 nd to last	(b), the CAISO will postpone converting the	
paragraph	Generating Facility to Energy-Only Deliverability Status for one year from the day	
	the Interconnection Customer submits the	
	modification request, or <u>eleven eight</u> years	
	after the CAISO received the Interconnection	
	Request, whichever occurs later.	
	Interconnection Customers exercising this	
	provision must continue to meet all other	
Appendix	commercial viability criteria	This emendment prepage to clarify the legic of the time frame in
Appendix U,	For Interconnection Customers extending their	This amendment proposes to clarify the logic of the time frame in



I

Section 4.4.7.1,	Commercial Operation Date beyond the	the beginning of the section.
first sentence	tenseven-year threshold and retaining	
	Deliverability pursuant to Section 4.4.7, the	
	CAISO will perform an annual review of	
Appendix	commercial viability.	Dy adding this provision at the and of the section the CAICO
Appendix U Section 6.4	The Participating TO(s) will invoice the CAISO	By adding this provision at the end of the section, the CAISO
Section 6.4	for any assessment work within seventy-five	proposes to clarify that CAISO refund deadlines will be tolled to the extent the Interconnection Customer fails to provide
	(75) calendar days of completion of the	
	assessment, and, within thirty (30) days thereafter, the CAISO will issue an invoice or	accounting information to facilitate the refund, or where generally accepted accounting practices (such as monthly batch
	refund to the Interconnection Customer, as	disbursements) require <i>de minimis</i> tolling.
	applicable, based upon such submitted	
	Participating TO invoices and the CAISO's	
	own costs for the assessment. If the actual	
	costs of the re-study are greater than the	
	deposit provided by the Interconnection	
	Customer, the Interconnection Customer will	
	pay the balance within thirty (30) days of	
	being invoiced.	
	0	
	Notwithstanding any other provision, all	
	refunds pursuant to this Appendix U will be	
	processed in accordance with the CAISO's	
	generally accepted accounting practices,	
	including monthly batched deposit refund	
	disbursements. Any CAISO deadline will be	
	tolled to the extent the Interconnection	
	Customer has not provided the CAISO with	
	the appropriate documents to facilitate the	
	Interconnection Customer's refund, or if the	
	Interconnection Customer has any	
	outstanding invoice balance due to the CAISO	
	on another project owned by the same	
Appondix	Interconnection Customer.	By adding this provision at the and of the section, the CAISO
Appendix U	The Participating TO(s) will invoice the CAISO	By adding this provision at the end of the section, the CAISO



Section 7.6	for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO will issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment. If the actual costs of the re-study are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer will pay the balance within thirty (30) days of being invoiced.	proposes to clarify that CAISO refund deadlines will be tolled to the extent the Interconnection Customer fails to provide accounting information to facilitate the refund, or where generally accepted accounting practices (such as monthly batch disbursements) require <i>de minimis</i> tolling.
	Notwithstanding any other provision, all refunds pursuant to this Appendix U will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.	
Appendix U Section 10.1	The Participating TO(s) will invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO will issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted	By adding this provision at the end of the section, the CAISO proposes to clarify that CAISO refund deadlines will be tolled to the extent the Interconnection Customer fails to provide accounting information to facilitate the refund, or where generally accepted accounting practices (such as monthly batch disbursements) require <i>de minimis</i> tolling.



	Participating TO invoices and the CAISO's own costs for the assessment. If the actual costs of the study are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer will pay the balance within thirty (30) days of being invoiced. <u>Notwithstanding any other provision, all</u> refunds pursuant to this Appendix U will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same	
Appendix V, Appendix D	Interconnection Customer. Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with the recommendations offered by Applicable Reliability Criteria-the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to	The CAISO is proposing this change because the President's Critical Infrastructure Protection Board requirements have been superseded by the Applicable Reliability Criteria which, as defined by the CAISO tariff, include NERC and WECC Reliability Standards as well as Local Reliability Criteria.



	meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.	
Appendix X, Appendix C first paragraph	Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, and Approved Project Sponsor interconnected to the CAISO Controlled Grid to comply with <u>Applicable Reliability</u> <u>Criteria</u> the recommendations offered by the <u>President's Critical Infrastructure Protection</u> <u>Board and, eventually, best practice</u> <u>recommendations from the electric reliability</u> <u>authority</u> . All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.	The CAISO is proposing this change because the President's Critical Infrastructure Protection Board requirements have been superseded by the Applicable Reliability Criteria which, as defined by the CAISO tariff, include NERC and WECC Reliability Standards as well as Local Reliability Criteria.
Appendix Y, Section 3.10.1, first sentence	If, at the time an Interconnection Customer achieves Commercial Operation, the actual MW capacity of its Generating Facility is reduced by no more than the greater of five percent (5%) of its MW capacity or 10 MW, but by no more than twenty-five percent (25%) of the MW capacity of the Generating Facility, such a <u>one-time</u> reduction shall not constitute a breach of the Interconnection Customer's obligations under the CAISO Tariff or its Generator Interconnection Agreement	The CAISO is proposing to remove this language as it is confusing and at tension with the broader language, as well as with the CAISO's intent, in the rest of the provision.
Appendix Y Sections 6.9.2.3	The CAISO will publish cost data regarding modification assessments in accordance with the terms set forth in a Business Practice Manual.	By adding this provision at the end of the section, the CAISO proposes to clarify that CAISO refund deadlines will be tolled to the extent the Interconnection Customer fails to provide accounting information to facilitate the refund, or where generally accepted accounting practices (such as monthly batch



	Notwithstanding any other provision, all	disbursements) require <i>de minimi</i> s tolling.
	refunds pursuant to this Appendix Y will be	
	processed in accordance with the CAISO's	
	generally accepted accounting practices.	
	including monthly batched deposit refund	
	disbursements. Any CAISO deadline will be	
	tolled to the extent the Interconnection	
	Customer has not provided the CAISO with	
	the appropriate documents to facilitate the	
	Interconnection Customer's refund, or if the	
	Interconnection Customer has any	
	outstanding invoice balance due to the CAISO	
	on another project owned by the same	
	Interconnection Customer.	
Appendix Z,	3.4 Relationship Between this LGIA and the	"QF PGA" is no longer a defined term and has been replaced
Table of	Net ScheduledQF PGA	with "Net Scheduled PGA" as a defined term in the Regulatory
Contents		Must-Take Generation tariff amendment. The CAISO is
		proposing to align the tariff with that change.
Appendix Z,	QFNet Scheduled PGA shall mean a	"QF PGA" is no longer a defined term and has been replaced
Article 1,	Qualifying FacilityNet Scheduled Participating	with "Net Scheduled PGA" as a defined term in the Regulatory
Definition of QF	Generator Agreement specifying the special	Must-Take Generation tariff amendment. The CAISO is
PGA	provisions for the operating relationship	proposing to align the tariff with that change.
	between a Qualifying FacilityNet Scheduled	
	Generating Unit and the CAISO, a pro forma	
	version of which is set forth in Appendix B.3 of	
	the CAISO Tariff.	
Appendix Z,	3.4 Relationship Between this LGIA and	"QF PGA" is no longer a defined term and has been replaced
Article 3.4	the QFNet Scheduled PGA. With regard to	with "Net Scheduled PGA" as a defined term in the Regulatory
	the rights and obligations of a Qualifying	Must-Take Generation tariff amendment. The CAISO is
	FacilityNet Scheduled Generating Unit that	proposing to align the tariff with that change.
	has entered into a QENet Scheduled PGA	
	with the CAISO and has entered into this	
	LGIA, if and to the extent a matter is	
	specifically addressed by a provision of the	
	QENet Scheduled PGA that is inconsistent	
		1



	with this LGIA, the terms of the QF <u>Net</u> <u>Scheduled</u> PGA shall govern.	
Appendix Z, Appendix D	Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with <u>Applicable Reliability</u> <u>Criteria</u> the recommendations offered by the <u>President's Critical Infrastructure Protection</u> <u>Board and, eventually, best practice</u> recommendations from the electric reliability <u>authority</u> . All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.	The CAISO is proposing this change because the President's Critical Infrastructure Protection Board requirements have been superseded by the Applicable Reliability Criteria which, as defined by the CAISO tariff, include NERC and WECC Reliability Standards as well as Local Reliability Criteria.
Appendix BB, Appendix D	Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with <u>Applicable Reliability</u> <u>Criteria</u> the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical,	The CAISO is proposing this change because the President's Critical Infrastructure Protection Board requirements have been superseded by the Applicable Reliability Criteria which, as defined by the CAISO tariff, include NERC and WECC Reliability Standards as well as Local Reliability Criteria.



	operational, and cyber-security practices.	
Appendix CC, Appendix D	Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with <u>Applicable Reliability</u> <u>Criteria</u> the recommendations offered by the <u>President's Critical Infrastructure Protection</u> <u>Board and, eventually, best practice</u> <u>recommendations from the electric reliability</u> <u>authority</u> . All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.	The CAISO is proposing this change because the President's Critical Infrastructure Protection Board requirements have been superseded by the Applicable Reliability Criteria which, as defined by the CAISO tariff, include NERC and WECC Reliability Standards as well as Local Reliability Criteria.
Appendix DD 3.5.1.1 (b)	Should an Interconnection Request made under Section 3.5.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under Section 3.8 more than thirty (30) calendar days after the Scoping Meeting, but on or before thirty (30) calendar days following the Results Meeting (or the latest date permitted under this <u>GIDAP</u> for a Results Meeting if a customer elects not to have a Results Meeting) for the Phase I Interconnection Study or the system impact and facilities study for Generating Facilities processed under the Independent Study Process, the CAISO shall refund to the Interconnection Customer the difference between (i) the Interconnection Customer's	The CAISO proposes the amendment because when the CAISO changed the deposit to \$150,000, the maximum the Interconnection Customer can forfeit is \$75,000. (See Docket No. ER16-693, Cal. Indep. Sys. Operator Corp. 154 FERC ¶ 61,169).



	Interconnection Study Deposit and (ii) the greater of the costs the CAISO and Participating TOs have incurred on the Interconnection Customer's behalf or one-half of the original Interconnection Study Deposit up to a maximum of \$10075,000, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal.	
Appendix DD, Section 3.5.1.1, last paragraph	All non-refundable portions of the Interconnection Study Deposit that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf, and any non-refundable interconnection study deposit funds that are received by the CAISO from a Participating TO, pursuant to a requirement in the Participating TO's wholesale distribution tariff for such funds to be distributed by the CAISO, shall be treated in accordance with Section 7.6. <u>Notwithstanding any other provision, all</u> refunds pursuant to this Appendix DD will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same	By adding this provision at the end of the section, the CAISO proposes to clarify that CAISO refund deadlines will be tolled to the extent the Interconnection Customer fails to provide accounting information to facilitate the refund, or where generally accepted accounting practices (such as monthly batch disbursements) require <i>de minimis</i> tolling.



	Interconnection Customer.	
Appendix DD, Section 3.8, 2 nd sentence	In addition, after confirmation by the CAISO of a valid Interconnection Request under Section 3.5.2, if the Interconnection Customer fails to adhere to all requirements of this GIDAP, except as provided in Section 1 <u>5</u> 4. <u>5</u> 3 (Disputes), the CAISO shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer within five (5) Business Days of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal.	This amendment proposes to correct a CAISO tariff cross- reference.
Appendix DD, Section 4.2, 1 st sentence second paragraph	Otherwise, an ach-Interconnection Request submitted under the Independent Study Process must pass all of the tests for determining electrical independence set forth in this Section 4.2 in order to qualify for the Independent Study Process.	This change clarifies the language to remove a typographical error.
Appendix DD, Section 4.2.1, title	4.2.1 Flow Impact Test/ Behind-the-Meter Expansion Criteria	The CAISO proposes to remove this portion of the title as it is no longer applicable to Appendix DD to the CAISO tariff.
Appendix DD, Section 4.5	4.5 Intentionally left blank.	This amendment proposes to add a Section 4.5 to Appendix DD as a means to keep consecutive numbering in the Generator Interconnection and Deliverability Allocation Procedures (Appendix DD to the CAISO Tariff).
Appendix DD, Section 6.7.2.3	The Participating TO(s) shall invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO shall issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment.	By adding this provision at the end of the section, the CAISO proposes to clarify that CAISO refund deadlines will be tolled to the extent the Interconnection Customer fails to provide accounting information to facilitate the refund, or where generally accepted accounting practices (such as monthly batch disbursements) require <i>de minimis</i> tolling.



	The CAISO will publish cost data regarding modification assessments in accordance with the terms set forth in a Business Practice Manual.	
	Notwithstanding any other provision, all refunds pursuant to this Appendix DD will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO	
	on another project owned by the same	
Appendix DD	Interconnection Customer. Once the initial and second Interconnection	This amendment proposes to correct a cross-reference.
Section 6.8.3, first paragraph,	Financial Security posting due dates as described in this section have passed, the	
second	error or omission provisions described in this	
sentence.	Section 6.8.3 no longer apply.	
Appendix DD	Specifically, beginning on the date of the	The CAISO proposes to clarify that where no study is required,
7.5.1	opening of the <u>annual first</u> Generator	the downsizing request is not subject to the requirements and
Second	Downsizing Request Window, all proposed	procedures of Section 7.5.
paragraph,	reductions of Interconnection Service	
second	Capacity by Interconnection Customers shall,	
sentence	regardless of the dates of the Interconnection	
	Customer's Interconnection Request(s), be	
	subject to the requirements and procedures of	
	the Generator Downsizing Process set forth in	
	Section 7.5, except for MW capacity	



	reductions made pursuant to the following: (1) the provisions of the CAISO's interconnection procedures that permit Interconnection Customers to reduce the size of their Generating Facilities between the Phase I and Phase II Interconnection Studies, as set forth in Section 6.7.2; (2) specific non-conforming provisions of an Interconnection Customer's Generator Interconnection Agreement that provide the Interconnection Customer with an explicit right to reduce the capacity of its Generating Facility through a partial termination of its Generator Interconnection Agreement; (3) the de minimis threshold set forth in Section 7.5.13.1; and-(4) the parking options set forth in Sections 8.9.4, 8.9.5, and 8.9.6; and (5) where the CAISO and Participating TO determine no study is required.	
Appendix DD, Section 7.5.13.1, first sentence	If, at the time an Interconnection Customer achieves Commercial Operation, the actual MW capacity of its Generating Facility is reduced by no more than the greater of five percent (5%) of its MW capacity or 10 MW, but not by more than twenty-five percent (25%) of the MW capacity of the Generating Facility, such a <u>one-time</u> reduction shall not constitute a breach of the Interconnection Customer's obligations under the CAISO Tariff or its Generator Interconnection Agreement.	The CAISO proposes to remove this language as it is confusing and at tension with the broader language, as well as with the CAISO's intent, in the rest of the provision.
Appendix DD, Section 8.9.2(3)	To Interconnection Customers in the current Queue Cluster with a completed Phase II Interconnection Study that have not parked, which are subject to Section 8.9.32.2 and elect to proceed without a power purchase	This amendment proposes to correct a cross-reference.



27	greement, or that parked before November 7, 2018 and attested to balance-sheet nancing upon the end of their parking period.	
Appendix DD, All Section 8.9.2, 8.9 last paragraph Int ha po De ne pu TF de po En the req De Int elip Section 8.9.2, 8.9 Int de po En the req De Int elip Section 8.9.2, 8.9 Int de po En the req De Int elip Int de po En the Int elip Int de De Int elip Int de De Int elip Int de De Int elip Int de De Int elip Int de De Int elip	Il power purchase agreements in this Section .9 must require Deliverability for the aterconnection Customer to represent that it as, is negotiating, or is shortlisted for a power purchase agreement. For all TP eliverability allocations based upon having, egotiating, or being shortlisted for power urchase agreements, the CAISO will allocate P Deliverability up to the amount of eliverable MW capacity procured by the power purchase agreement. All Load Serving ntities building Generating Facilities to serve heir own Load must be doing so to fulfill a egulatory requirement that warrants eliverability. Load Serving Entities acting as aterconnection Customers are otherwise ligible for all other attestations. otwithstanding any other provision, all efunds pursuant to this Appendix DD will be rocessed in accordance with the CAISO's enerally accepted accounting practices, icluding monthly batched deposit refund isbursements. Any CAISO deadline will be olled to the extent the Interconnection ustomer has not provided the CAISO with he appropriate documents to facilitate the interconnection Customer's refund, or if the iterconnection Customer has any utstanding invoice balance due to the CAISO in another project owned by the same interconnection Customer.	By adding this provision at the end of the section, the CAISO proposes to clarify that CAISO refund deadlines will be tolled to the extent the Interconnection Customer fails to provide accounting information to facilitate the refund, or where generally accepted accounting practices (such as monthly batch disbursements) require <i>de minimis</i> tolling.



Appendix DD Section 8.9.2.1 Second to last paragraph, second sentence Appendix DD, Section 8.9.3(5)	In a <u>Ss</u> ituation where the available amount of TP Deliverability can accommodate all Interconnection Customers with equal scores, the CAISO will allocate the TP Deliverability to the Interconnection Customers with the lowest LDNU cost estimates. The Interconnection Customer must maintain its Commercial Operation Date set forth in the GIA unless an extension is required for reasons beyond the control of the	The CAISO proposes to correct a typographical error. This amendment proposes to remove this language as this particular detail in the TP Deliverability retention criteria is now superfluous with the implementation of commercial viability criteria.
	Interconnection Customer or such extension results in no Material Modification or delay in the construction schedule for Network Upgrades common to multiple Generating Facilities; or unless the extension is occasioned by a material delay in the Participating TO's construction of any Network Upgrades or Participating TO's Interconnection Facilities	
Appendix DD, Section 8.9.9, first paragraph, third sentence	Deliverability may not be assigned or otherwise transferred except as expressly provided by the CAISO Tariff. An Interconnection Customer may reallocate its Generating Facility's Deliverability among its own Generating Units or Resource IDs at the Generating Facility. The Generating Units must be located at the same Point of Interconnection-and operate under the same GIA.	The CAISO is proposing to remove language from this Section because requiring the same GIA is overly restrictive. Generating units can elect to have separate GIAs, which should not prevent deliverability transfers among them.
Appendix DD, Section 14.2.4.2	If the limited operation study cannot be completed within that time period, the CAISO will notify the Generating Unit owner and provide an estimated completion date and an explanation of the reasons why additional time is required.	By adding this provision at the end of the section, the CAISO proposes to clarify that CAISO refund deadlines will be tolled to the extent the Interconnection Customer fails to provide accounting information to facilitate the refund, or where generally accepted accounting practices (such as monthly batch disbursements) require <i>de minimis</i> tolling.



Annendiu DD	Notwithstanding any other provision, all refunds pursuant to this Appendix DD will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.	
Appendix DD, Appendix 3, Section 13.10	[Not Used] Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.	CAISO proposes to remove language in the generator interconnection study process agreement to clarify that GISPAs will only be executed by the interconnection customer upon submission to the CAISO, consistent with the CAISO's filing in Docket No. ER18-2498-000 (<i>Cal. Indep. Sys. Operator Corp.</i> , 166 FERC P 61,113 (2019))
Appendix DD, Appendix 3, Last Paragraph	IN WITNESS THEREOF, the Part <u>vies hasve</u> caused this Agreement to be duly executed by <u>itstheir</u> duly authorized officers or agents on the day and year first above written. California Independent System Operator Corporation By: Printed Name:	CAISO proposes to remove the CAISO signature line in the generator interconnection study process agreement to clarify that GISPAs will only be executed by the interconnection customer upon submission to the CAISO, consistent with the CAISO's filing in Docket No. ER18-2498-000 (<i>Cal. Indep. Sys. Operator Corp., 166 FERC P 61,113 (2019)</i>).



	Title:	
	Date:	
Appendix DD, Appendix 4, Section 3.4.1, 1 st sentence	For any tasks specifically assigned to the PTO pursuant to Attachment A or otherwise mutually agreed upon by the CAISO and the PTO, the CAISO reserves the right, on a case-by-case basis, to perform or reassign to a mutually agreed upon and pre-qualified contractor such task only where: (a) the quality and accuracy of prior PTO Interconnection Study work product resulting from assigned tasks has been deemed deficient by the CAISO, the CAISO has notified the PTO pursuant to the notice provision of Section 4.1 <u>56</u> of this Agreement in writing of the deficiency, and the deficiency has not been cured pursuant to Section 3.4.2 of this Agreement;	This amendment proposes to correct a cross-reference to the appropriate section in Appendix 4 to Appendix DD to the CAISO tariff.
Appendix EE, Table of Contents	ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION 5.1 Options 5.1.1 Standard Option 5.1.2 Alternate Option 5.1.3 Option to Build 5.1.4 Negotiated Option 5.1.5 Merchant Option	This amendment corrects the table of contents to be consistent with the tariff record.
Appendix EE, Appendix D, First Paragraph	Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability	The CAISO is proposing this change because the President's Critical Infrastructure Protection Board requirements have been superseded by the Applicable Reliability Criteria which, as defined by the CAISO tariff, include NERC and WECC Reliability



	and operational security. FERC will expect the CAISO, all Participating TOs, market	Standards as well as Local Reliability Criteria.
	participants, and Interconnection Customers	
	interconnected to the CAISO Controlled Grid	
	to comply with Applicable Reliability	
	Criteriathe recommendations offered by the	
	President's Critical Infrastructure Protection	
	Board and, eventually, best practice	
	recommendations from the electric reliability	
	authority. All public utilities will be expected to	
	meet basic standards for system infrastructure	
	and operational security, including physical,	
	operational, and cyber-security practices.	
Appendix EE,	Status of plan <u>t</u> controller	The CAISO proposes to correct a typographical error.
Appendix H,		
Section A.vi(4)		
Appendix FF,	Notwithstanding Section 7.5 of Appendix DD,	This amendment proposes to correct a typographical error to a
Article 3.4.5,	at any time after achieving its Commercial	cross-reference in Appendix DD to the CAISO tariff.
last paragraph	Operation Date, the Interconnection Customer	
	may reduce the megawatt generating	
	capacities of its Generating Facilities, subject	
	to Section 25.1(c) of the CAISO Tariff.	
	Section 7.5. <u>11</u> 44 of Appendix DD will still	
	apply to such requests to reduce capacity.	This amondment proposes to correct a CAISO toriff areas
Appendix FF,	The Interconnection Customer is obligated to	This amendment proposes to correct a CAISO tariff cross- reference.
Article 6.4.1, first sentence	provide all necessary Interconnection	
mst sentence	Financial Security required under Section <u>119</u> of the GIDAP in a manner acceptable under	
	Section 119 of the GIDAP.	
Appendix FF,	Infrastructure security of electric system	The CAISO is proposing this change because the President's
Article 12.9	equipment and operations and control	Critical Infrastructure Protection Board requirements have been
	hardware and software is essential to ensure	superseded by the Applicable Reliability Criteria which, as
	day-to-day reliability and operational security.	defined by the CAISO tariff, include NERC and WECC Reliability
	FERC expects all transmission providers,	Standards as well as Local Reliability Criteria.
	market participants, and interconnection	Standards as well as Ebbar Kellability Officia.
	market participanto, and interconnection	L



	customers interconnected to electric systems to comply with <u>Applicable Reliability</u> <u>Criteriathe recommendations offered by the</u> <u>President's Critical Infrastructure Protection</u> <u>Board and, eventually, best practice</u> <u>recommendations from the electric reliability</u> <u>authority</u> . All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical,	
	operational, and cyber-security practices.	
Appendix GG	Appendix GG [Not Used] One-Time Interconnecting Generator Downsizing Opportunity	This CAISO is proposing to delete the contents of this Appendix GG and notate it as "Not Used" as it consists of outdated tariff language.

Attachment B – Clean Tariff

Bucket Reconciliation Filing

California Independent System Operator Corporation

July 10, 2020

Section 4

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Section 4.5.1 Scheduling Coordination Certification

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4.5.1.1.1 Scheduling Coordinator Application

To become a Scheduling Coordinator, a Scheduling Coordinator Applicant must submit a completed application, as set forth in the applicable Business Practice Manual, to the CAISO by mail, electronic submission, or in person. A Scheduling Coordinator Applicant may retrieve the application and necessary information from the CAISO Website.

* * * * *

4.5.1.1.6 [Not Used]

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4.5.1.1.10.1 Scheduling Coordinator's Administrative, Financial and Technical Requirements The CAISO will not certify that a Scheduling Coordinator Applicant has become a Scheduling Coordinator until the Scheduling Coordinator Applicant has completed all of the following requirements:

(a) provided the technical/operational information required in Tariff Section 4.5 as

set forth in the applicable Business Practice Manual, and to comply with Section 10.3;

- (b) executed a network connectivity security agreement for access to the CAISO's software used in conducting business with the CAISO and compliance with the CAISO's system security requirements in a form approved by the CAISO, if applicable;
- (c) obtained and installed any required software for functional interface for Validation, Estimation and Editing meter values (VEE), if applicable;
- (d) undertaken required training and testing regarding the use of the CAISO's market, operating, and technical systems, as specified in the applicable Business Practice Manual;
- (e) provided its bank account information and arranged for Fedwire transfers, with the Scheduling Coordinator being obligated to maintain at all times an account with a bank capable of Fedwire transfer and being permitted, at its option, to arrange for ACH payment service;
- (f) provided an emergency plan specifying the procedures by which Scheduling
 Coordinator operations and contacts with the CAISO will be maintained during an emergency, containing information specified in the applicable Business Practice Manual; and
- (g) obtained and installed a computer link and any necessary software in order to communicate with the CAISO, as specified in the applicable Business Practice Manual.

Additional instructions for completing the foregoing requirements will be set forth in a Business Practice Manual posted on the CAISO Website. The Scheduling Coordinator is also responsible for ongoing compliance with all tariff requirements applicable to Scheduling Coordinators.

* * * * *

4.5.1.2.1.2 Obligation to Report a Change in Credit Rating or Material Change in Financial Condition

The Scheduling Coordinator has an ongoing obligation to inform the CAISO within five (5) Business Days of any change to its credit ratings or any Material Change in Financial Condition.

* * * * *

4.10.1.1 Candidate CRR Holder Application

To become a Candidate CRR Holder, a Candidate CRR Holder applicant must submit a completed written application, as provided in the applicable form posted on the CAISO Website, to the CAISO by mail, electronic submission, or in person. A Candidate CRR Holder applicant may retrieve the application and necessary information from the CAISO Website.

* * * * *

4.10.1.5.1 Information Requirements

The Candidate CRR Holder applicant must complete all of the following requirements as part of the application process:

- (a) the proposed date for commencement of the CRR Allocation, CRR Auction or Secondary Registration System in which the applicant intends to qualify to participate, which may not be less than sixty (60) days after the date the application was filed, unless waived by the CAISO;
- (b) financial and credit information as set forth in Section 12;
- (c) proof of completion of CRR training or expected completion of CRR training;
- (d) the prescribed non-refundable application fee; and

(e) identity of the applicant's Affiliates, as described in Section 39.9.

* * * * *

4.10.1.8.1 Candidate CRR Holder Applicant's Acceptance

If the CAISO accepts the application, the Candidate CRR Holder applicant must return an executed CRR Entity Agreement and any required financial and credit information pursuant to Section 12 of the CAISO tariff.

* * * * *

4.14.1.1 Convergence Bidding Entity Application

To become a Convergence Bidding Entity, a Convergence Bidding Entity applicant must submit a completed written application, as provided in the applicable form posted on the CAISO Website, to the CAISO by mail, electronic submission, or in person.

* * * * *

Section 5

5.1 Black Start Capability

The CAISO shall determine the amount and location of Black Start Generation it requires through a system restoration plan that meets the requirements of Applicable Reliability Criteria. In making this determination, the CAISO shall consult with Participating Transmission Owners.

Participating Transmission Owners with their own system restoration plans that include transmission lines and associated facilities that are part of the CAISO Controlled Grid shall upon the request of the CAISO provide the CAISO with these system restoration plans. The CAISO shall consider Participating Transmission Owners' system restoration plans in developing a system restoration plan for the CAISO Balancing Authority Area and may identify Black Start Generation needs for the CAISO Balancing Authority Area not identified in Participating Transmission Owner's system restoration plans.

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Section 7

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7.7.3 Suspension of CAISO Markets and Application of Administrative Price.

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(d) If a Load curtailment is required to manage System Emergencies, the CAISO will determine the amount and location of Load to be reduced. In those instances when the CAISO requires load-shedding assistance from the entire CAISO Balancing Authority Area to preserve or restore stable operation of the CAISO Controlled Grid and to the extent practicable, the CAISO will allocate a portion to each UDC or MSS Operator based on the ratio of its Demand (at the time of the Balancing Authority Area annual peak for the previous year) to total Balancing Authority Area annual peak Demand for the previous year taking into account system considerations and the UDC's or MSS Operator's curtailment rights under their tariffs. Each UDC or MSS Operator shall be responsible for notifying its customers and Generators connected to its system of curtailments and service interruption.

* * * * *

7.7.4 Preparatory Actions for a System Emergency

Periodic Tests Of Emergency Procedures. The CAISO shall develop and administer periodic tests of System Emergency procedures designed to ensure that Participating Transmission Owners and Scheduling Coordinators received the information required to respond to operating conditions, including System Emergencies.

* * * * *

Section 9

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9.3.10.6.1 Outage Reporting By NRS-RA Resources

The Scheduling Coordinator for a Non-Resource-Specific System Resource that provides Resource

Adequacy Capacity shall report to the CAISO through the outage management system any Forced Outage of a Generating Unit or Forced Outage or Constraint of transmission facilities external to the CAISO Balancing Authority Area that directly results in the inability of the resource to deliver all or a portion of the Resource Adequacy Capacity identified in the resource's Supply Plan to the CAISO Balancing Authority Area. The Scheduling Coordinator for a Non-Resource-Specific System Resource that provides Resource Adequacy Capacity is required to provide to the CAISO notice of the Forced Outage or Constraint within sixty (60) minutes after becoming aware of the circumstance. The Scheduling Coordinator for a Non-Resource-Specific System Resource Adequacy Capacity shall promptly provide information requested by the CAISO to enable the CAISO to review the Forced Outage or Constraint and its impact on the ability of the resource to deliver Resource Adequacy Capacity to the CAISO Balancing Authority Area.

DMM shall identify and notify FERC's Office of Enforcement staff of instances in which the reporting of the Forced Outage or Constraint may require investigation. DMM is to make a non-public referral to FERC in all instances where DMM has reason to believe that the reporting of the Forced Outage or Constraint constitutes a Market Violation other than those Market Violations identified in Section 11.1.13 of Appendix P. While DMM need not be able to prove that a Market Violation has occurred, DMM is to provide sufficient credible information to warrant further investigation by FERC. Once DMM has obtained sufficient credible information to warrant referral to the Commission, DMM is to immediately refer the matter to FERC and desist from independent action related to the alleged Market Violation. This does not preclude DMM from continuing to monitor for any repeated instances of the activity by the same or other entities, which would constitute new Market Violations. DMM is to respond to requests from FERC for any additional information in connection with the alleged Market Violation it has referred.

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9.4.3 Uncomplicated Work

When line rearrangements and/or station equipment work is uncomplicated and easily understood, the CAISO may determine that the work can be accomplished using Outages approved in accordance with Section 9.3.6. The CAISO will make this determination in coordination with the respective requesting

Operator or Connected Entity.

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Section 10

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10.2.4 Certification Of Meters

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10.2.4.4 Certificate of Compliance

If the Metering Facilities satisfy the certification criteria as specified in this CAISO Tariff and in the Business Practice Manuals (after taking into account any exemptions to the certification criteria granted by the CAISO), the CAISO will issue a Certificate of Compliance of those Metering Facilities to the CAISO Metered Entity.

Subject to any exemption granted by the CAISO under this CAISO Tariff, the CAISO will not accept Revenue Quality Meter Data from a CAISO Metered Entity unless that Revenue Quality Meter Data is produced by Metering Facilities that are certified in accordance with this CAISO Tariff and the CAISO Metered Entity has a current Certificate of Compliance.

* * * * *

10.2.4.6 Revocation of Certification

The CAISO may revoke in full or in part any Certificate of Compliance if:

(a) it has reasonable grounds to believe that all or some of the Metering Facilities covered by that Certificate of Compliance no longer meet the certification criteria for Metering Facilities contained in the CAISO Tariff and the Business Practice Manuals; and (b) it has given written notice to the relevant CAISO Metered Entity stating that it does not believe that the identified Metering Facilities meet the certification criteria (including the reasons for that belief) and that CAISO Metered Entity fails to satisfy the CAISO, within the time period specified in the CAISO's notice, that the Metering Facilities meet the certification criteria.

If the CAISO revokes in full or part a Certificate of Compliance, the relevant CAISO Metered Entity may seek recertification of the relevant Metering Facilities by requesting certification. Such request must indicate that it relates to Metering Facilities in respect of which the CAISO has previously revoked a Certificate of Compliance.

* * * * *

10.2.7 Format of Meter Data

CAISO Metered Entities shall make available to the CAISO's RMDAPS Revenue Quality Meter Data meeting the format requirements of this Section 10 and in accordance with the Business Practice Manual standards and other information reasonably required by the CAISO.

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10.3.6 Settlement Quality Meter Data Submission

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10.3.6.3 Timing of SQMD Submission for Recalculation Settlement Statement T+55B

Scheduling Coordinators must submit Actual Settlement Quality Meter Data for the Scheduling Coordinator Metered Entities they represent to the CAISO no later than midnight on the forty-eighth (48) Business Day after the Trading Day (T+48B) for the Recalculation Settlement Statement T+55B calculation. A Scheduling Coordinator that timely submits Actual Settlement Quality Meter Data for the Recalculation Settlement Statement T+12B pursuant to Section 10.3.6.2 may submit revised Actual Settlement Quality Meter Data for the Recalculation Settlement T+55B no later than the forty-
eighth (48) Business Day after the Trading Day pursuant to this Section.

- (a) When Actual Settlement Quality Meter Data is not received by the CAISO for a Scheduling Coordinator Metered Entity by forty-eight (48) Business Days after the Trading Day (T+48B), the Scheduling Coordinator has failed to submit complete and accurate meter data as required by Section 37.5.2.1 and will be subject to monetary penalty pursuant to Section 37.5.2.2.
- (b) Any Scheduling Coordinator Estimated Settlement Quality Meter Data submitted by a Scheduling Coordinator on behalf of the Scheduling Coordinator Metered Entities it represents that is not replaced with Actual Settlement Quality Meter Data by forty-eight (48) Business Days after the Trading Day (T+48B) has failed to submit complete and accurate meter data as required by Section 37.5.2.1 and will be subject to monetary penalty pursuant to Section 37.5.2.2. In the absence of Actual Settlement Quality Meter Data, Scheduling Coordinator Estimated Settlement Quality Meter Data will be used in the Recalculation Settlement Statements.
- (c) The CAISO will not estimate a Scheduling Coordinator Metered Entity's Settlement Quality Meter Data for any outstanding metered Demand and/or Generation for use in a Recalculation Settlement Statement T+55B calculation. Any previous CAISO Estimated Settlement Quality Meter Data that the Scheduling Coordinator does not replace with Actual Settlement Quality Meter Data by forty-eight (48) Business Days after the Trading Day (T+48B) will be set to zero. A Scheduling Coordinator that fails to replace CAISO Estimated Settlement Quality Meter Data with Actual Settlement Quality Meter Data by forty-eight (48) Business Days after the Trading Day (T+48B) has failed to provide complete and accurate Settlement Quality Meter Data as required by Section 37.5.2.1 and will be subject to monetary penalty pursuant to Section 37.5.2.2.

10.3.6.4 Timing of SQMD Submission for Recalculation Settlement Statement T+9M

Scheduling Coordinators may submit Actual Settlement Quality Meter Data for the Scheduling Coordinator Metered Entities they represent to the CAISO for use in Recalculation Settlement Statement T+9M up to one hundred and seventy-two Business Days after the Trading Day (T+172B). Scheduling Coordinators submitting Actual Settlement Quality Meter Data after forty-eight Business Days after the Trading Day (T+48B) but up to T+172B have failed to provide complete and accurate Settlement Quality Meter Data as required by Section 37.5.2.1 and will be subject to monetary penalty pursuant to Section 37.5.2.2. Any Actual Settlement Quality Meter Data that is submitted by a Scheduling Coordinator after T+172B, will be rejected by the CAISO and not used in settlement calculations.

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Section 11

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11.8.2 IFM Bid Cost Recovery Amount

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11.8.2.1.3 IFM Pump Shut-Down Cost

For Pumped-Storage Hydro Units and Participating Load only, the IFM Pump Shut-Down Costs for each Settlement Interval shall be equal to the relevant Pump Shut-Down Cost submitted to CAISO in the IFM divided by the number of Settlement Intervals in a Trading Hour that is preceded by a previous commitment by the IFM to pump, in which actual shut down occurs if the unit is committed by the IFM not to pump and actually does not operate in pumping mode in that Settlement Interval (as detected through Meter Data). The IFM Pump Shut-Down Cost for an IFM Shut-Down period shall be zero if: (1) it is followed by an IFM Self-Commitment Period or RTM Self-Commitment Period in generation mode; (2) the Shut-Down is due to an Outage reported through the CAISO's outage management system as described in Section 9; or (3) the Shut-Down is delayed by the RTM past the IFM Shut-Down period in question or cancelled by the RTM before the Shut-Down process has started.

11.8.2.5.1 Calculation of Day-Ahead Metered Energy Adjustment Factor

The CAISO will calculate the Day-Ahead Metered Energy Adjustment Factor for each BCR Eligible Resource through the following steps:

 a) For Generation Unit and Resource-Specific-System Resource scheduled by CAISO in the Day-Ahead Market

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11.23 Penalties for Uninstructed Imbalance Energy

Effective December 1, 2004, the CAISO shall not charge any Uninstructed Deviation Penalties pursuant to this Section 11.23 until FERC issues an order authorizing the CAISO to charge Uninstructed Deviation Penalties pursuant to this section. Beginning with Settlement Statements for the first Trading Day for which FERC authorizes the CAISO to charge Uninstructed Deviation Penalties pursuant to this section, the CAISO shall charge Scheduling Coordinators Uninstructed Deviation Penalties for Uninstructed Imbalance Energy resulting from resource deviations outside a Tolerance Band from their Dispatch Operating Point, for dispatched resources, or their Day-Ahead Schedule otherwise. Publishing of Uninstructed Deviation Penalty results will not occur on the Initial Settlement Statement T+3B but rather will occur on the Recalculation Settlement Statement T+12B. The Uninstructed Deviation Penalty will be applied as follows:

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(h) The Uninstructed Deviation Penalty will be calculated and assessed for each resource individually.

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11.29.10 Billing And Payment

11.29.10.5 Use of Estimated Data

In the event of an emergency or a failure of any of the CAISO software or business systems, the CAISO may use estimated Settlement Statements and Invoices and Payment Advices and may implement any temporary variation of the timing requirements relating to the Settlement Statements and Invoices and Payment Advices. Details of the variation and the method chosen to produce estimated data, Settlement Statements and Invoices and Payment Advices will be published on the CAISO Website.

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11.31 Intertie Schedules Decline Charges

The Decline Potential Charge shall apply to Intertie transactions as discussed below. The Decline Potential Charge does not apply to FMM Schedules of Economic Bids, dynamic transfers, and Variable Energy Resources located outside the CAISO Balancing Authority Area that have been qualified to use the forecast of their output produced by the CAISO as specified in Section 4.8.2.1.2.

- (a) HASP Block Intertie Schedules: Any HASP Block Intertie Schedule for an Energy import when the HASP Block Intertie Schedule is not delivered for any reason (with no exceptions based on the circumstances of a particular failure to deliver), to the extent the decline is made prior to the start of the applicable FMM interval. The Decline Potential Charge Exports shall apply to any HASP Block Intertie Schedule for an Energy export when the HASP Block Intertie Schedule is not delivered for any reason (with no exceptions based on the circumstances of a particular failure to deliver), to the extent the decline is made prior to the start of the applicable FMM interval. The Decline FMM interval. The Decline FMM interval. The Decline for any reason (with no exceptions based on the circumstances of a particular failure to deliver), to the extent the decline is made prior to the start of the applicable FMM interval. The Decline Potential Charge will not apply if the decline is made after the applicable E-Tag deadline, as defined in Section 30.6.2.
- (b) Economic Hourly Block Bid with Intra-Hour Option: Imports and exports accepted in an HASP Block Intertie Schedule that are incremental to Day-Ahead Schedules are subject to the Decline Potential Charge to the extent the decline is

made prior to the start of the applicable FMM interval. The Decline Potential Charge will not apply if the decline is made after the applicable E-Tag deadline, as defined in Section 30.6.2. To the extent the incremental import or export schedule in HASP is curtailed through the FMM, for the 15-minute FMM interval in which the resource follows the CAISO Dispatch Instructions will not be subject to the Decline Potential Charge.

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Section 14

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14.7.2 Direction Allocation of Reliability Standards Penalties

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14.7.2.2 Notice to Affected RC Customer or Market Participant

The CAISO will notify the RC Customer(s) or Market Participant(s) it believes contributed to the Reliability Standards violation(s) during the CMEP proceeding or, if applicable, during the enforcement proceeding directly instituted by FERC. This notification shall be in writing and shall: (i) inform the RC Customer(s) or Market Participant(s) that the CAISO intends to invoke the direct allocation provisions of this Section; (ii) detail the underlying factual basis for the CAISO's position; and (iii) inform the RC Customer(s) or Market Participant(s) that it may seek to participate in the CMEP proceeding or, if applicable, the enforcement proceeding directly instituted by FERC.

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Section 19

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19.7 Settlements and Billing for RC Customers

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(e) **Payment by RC Customers.**

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(3) Late Payment and Default. If payment is not received by 21 Business Days after an RC Services Invoice is issued, the RC Customer will be charged a \$1,000 late payment fee on a supplemental RC Services Invoice and will be considered to be in default, understanding that the CAISO reserves the right to terminate, consistent with the terms of the RCSA, such RC Customer's RC Services until such time as payment is received except as otherwise may be required to comply with Schedule 2 of the RCSA.

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Section 24

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24.13 Interregional Transmission Proposals in the Regional Process

Under the procedures set forth in Sections 24.3.3 and 24.4.3, the CAISO may consider potential interregional solutions to regional needs during Phase 2 of the Transmission Planning Process. Potential interregional solutions submitted to the CAISO pursuant to these sections will be evaluated on the basis of the need for the entire proposed facility as a CAISO regional solution, the costs of which would be recovered through the Transmission Access Charge if approved as part of the comprehensive

Transmission Plan. A potential interregional solution found by the CAISO to meet identified regional needs will be submitted to the CAISO Board for approval in the Transmission Plan and, if approved and applicable, the Project Sponsor will be selected in accordance with the competitive solicitation process described in Section 24.5. Subsequently, the Project Sponsor may elect to have the project studied by Relevant Planning Regions other than the CAISO pursuant to section 24.18.3 and may elect to seek Interregional Cost Allocation per section 24.18.4. The Project Sponsor must comply with the submission requirements contained in sections 24.18.3.1 and 24.18.4.1, respectively. The CAISO may also identify an interregional solution to the Relevant Planning Regions if the CAISO believes such conceptual solution could provide benefits to the other Planning Regions.

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Section 25

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25.5 Modifications to Generating Facilities

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25.5.2

The Generating Unit owner will provide the CAISO a \$50,000 deposit for repowering requests, or a \$10,000 deposit for all other modification assessments at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Generating Unit owner in writing, within forty-five (45) calendar days from the date the CAISO receives all of the following: the Generating Unit owner's written notice to modify the project, technical data required to assess the request, and payment of the applicable deposit. If the modification assessment cannot be completed within that time period, the CAISO will notify the Generating Unit owner and provide an estimated completion date and an explanation of the reasons why additional time is required.

Section 27

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27.1.1 Locational Marginal Prices for Energy

As further described in Appendix C, the LMP for Energy at any PNode is the marginal cost of serving the next increment of Demand at that PNode calculated by the CAISO through the operations of the CAISO Markets considering, as described further in the CAISO Tariff, among other things, modeled Transmission Constraints (including Remedial Action Schemes), transmission losses, the performance characteristics of resources, and Bids submitted by Scheduling Coordinators and as modified through the Locational Market Power Mitigation process. The LMP at any given PNode is comprised of three marginal cost components: the System Marginal Energy Cost (SMEC); Marginal Cost of Losses (MCL); and Marginal Cost of Congestion (MCC). Through the IFM the CAISO calculates LMPs for each Trading Hour of the next Trading Day. Through the FMM the CAISO calculates distinct financially binding fifteen-minute LMPs for each of the four fifteen-minute intervals within a Trading Hour. Through the Real-Time Dispatch, the CAISO calculates five-minute LMPs for each of the twelve (12) five (5) minute Dispatch Intervals of each Trading Hour. The CAISO uses the FMM or RTD LMPs for Settlements of the Real-Time Market.

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27.1.1.3 Marginal Cost of Congestion

The Marginal Cost of Congestion at a PNode reflects a linear combination of the Shadow Prices of the binding Transmission Constraints (including Remedial Action Schemes) in the network, multiplied by the corresponding Power Transfer Distribution Factor (PTDF) and coefficient relevant to the transmission

segment within that constraint, which is described in Appendix C. The Marginal Cost of Congestion for a Transmission Constraint may be positive or negative depending on whether a power injection at that Location marginally increases or decreases Congestion.

27.1.1.4 Disconnected Pricing Node or Aggregated Pricing Node

In the event that a Pricing Node or Aggregated Pricing Node becomes electrically disconnected from the market model during a CAISO Market run, the LMP, including the System Marginal Energy Cost, Marginal Cost of Congestion and Marginal Cost of Losses, at the closest electrically connected Pricing Node will be used as the LMP at the affected location. The CAISO will include the impact of the disconnected Pricing Node on any modeled Remedial Action Scheme in determining the LMP.

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22.7.2 Determination of LAP Prices

27.2.2.1 IFM LAP Prices

The IFM LAP Price for Settlement of Demand at any LAP for a given Trading Hour is the price as produced by the IFM optimization run based on the distribution of system Load at the constituent Pricing Nodes within the applicable LAP and is determined by the effectiveness of the Load within the LAP in relieving a Transmission Constraint within the effectiveness threshold as specified in Section 27.4.3.6.

27.2.2.2 Real-Time Market LAP Prices

The FMM LAP Price and RTD LAP Price for a fifteen-minute FMM interval and five minute Dispatch Interval is the price as produced by the FMM and RTD optimization runs, respectively, based on the distribution of system Load at the constituent Pricing Nodes within the applicable LAP and is determined by the effectiveness of the Load within the LAP in relieving a Transmission Constraint within the effectiveness threshold as specified in Section 27.4.3.6. The Hourly Real-Time LAP Price is then determined for Settlement purposes as further described in Section 11.5.2.2.

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Section 29

29.7 EIM Operations Under Normal And Emergency Conditions.

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(j) **EIM Disruption.**

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- (2) CAISO Response to EIM Disruption. If the CAISO declares an interruption of EIM Entity participation in the Real-Time Market, the CAISO may in its judgment, among other things-
 - (A) separate the affected EIM Entity Balancing Authority Area from the EIM
 Area and maintain the Real-Time Market for other Balancing Authority
 Areas in the EIM Area by enforcing a net transfer constraint for the
 affected Balancing Authority Area to separate it from the remainder of the
 EIM Area;
 - (B) reduce or suspend EIM Transfers between one or more Balancing Authority Areas in the EIM Area;
 - (C) instruct one or more EIM Entities to maintain system balance within their Balancing Authority Area without RTM Dispatch; or
 - (D) in addition or as an alternative, use market results in the Real-Time Market in accordance with Section 7.7.9 or take any of the actions specified in Section 7.7.6 with respect to the Real-Time Market, except that if Section 7.7.6 calls for the use of Day-Ahead Market results, the

CAISO will use:

- the price specified in the EIM Entity's open access transmission tariff as the LMP;
- (ii) the EIM Entity's EIM Base Schedule as the schedule;
- (iii) the EIM Bid Adder from the most recent corresponding interval that is available as the EIM Bid Adder; and
- (iv) the emissions rate set by the California Air Resources Board for an unspecified source multiplied by the daily Greenhouse Gas Allowance Price.

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29.34 EIM Operations

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(f) Real-Time EIM Base Schedules.

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- (3) **EIM Base Schedule for Imports and Exports.** EIM Base Schedules must-
 - (A) disaggregate Day-Ahead import/export schedules between the EIM
 Entity Balancing Authority Area and the CAISO Balancing Authority Area;
 - (B) identify the relevant EIM Interties for imports and exports to an EIM
 Entity Balancing Authority Area from Balancing Authority Areas other
 than the CAISO Balancing Authority Area; and
 - (C) include approved, pending, and adjusted E-Tags for imports and exports.

Section 30

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30.4.1 Start-Up and Minimum Load Costs

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30.4.1.1.4 Adders for Major Maintenance Expenses

Scheduling Coordinators may propose adders for major maintenance expenses as a component of Start-Up Costs, Minimum Load Costs, or both. Such proposed adders must be based solely on resourcespecific information derived from actual maintenance costs, when available, or estimated maintenance costs provided by the Scheduling Coordinators to the CAISO. Scheduling Coordinators may submit updated resource-specific major maintenance information for purposes of seeking a change to any major maintenance adder, no sooner than thirty (30) days after a major maintenance adder has been determined. The CAISO will evaluate the information provided by Scheduling Coordinators, and may require Scheduling Coordinators to provide additional information, to enable the CAISO to determine reasonable adders for major maintenance expenses or to conduct audits of major maintenance expenses. Within fifteen (15) days of receipt of the information or any requested additional information, the CAISO will notify the Scheduling Coordinator in writing whether it has sufficient and accurate information to determine reasonable major maintenance adders to be included in Start-Up or Minimum Load Cost calculations or both. Within ten (10) days after providing written notification to the Scheduling Coordinator that the information is sufficient and accurate, the CAISO will determine the reasonable adder for major maintenance expenses to be included in Start-Up or Minimum Load Costs or both and will so inform the Scheduling Coordinator in writing.

In the event of a dispute regarding the sufficiency or accuracy of the information provided by the Scheduling Coordinator, the CAISO and the Scheduling Coordinator will enter a period of good faith negotiations that terminates sixty (60) days after the date the dispute began. If the CAISO and the Scheduling Coordinator resolve the dispute during the 60-day negotiation period, within ten (10) days of such agreement, the CAISO will determine the reasonable adder for major maintenance expenses and will provide the adder to the Scheduling Coordinator in writing. If the CAISO and the Scheduling Coordinator fail to agree upon the sufficiency or accuracy of the information during the 60-day negotiation period, the Scheduling Coordinator has the right to petition FERC to resolve the dispute as to the sufficiency or accuracy of its information.

In the event of a dispute regarding the CAISO's determination of adders for major maintenance expenses, the CAISO and the Scheduling Coordinator will enter a period of good faith negotiations that terminates sixty (60) days after the date the dispute began. If the CAISO and the Scheduling Coordinator resolve the dispute during the 60-day negotiation period, the agreed-upon values will be effective as of the first Business Day following the resolution date. If the CAISO and the Scheduling Coordinator fail to agree on the major maintenance values for either Start-Up or Minimum Load Costs following the 60-day negotiation has the right to file proposed values and supporting information for major maintenance adders for Start-Up or Minimum Load Costs with FERC pursuant to Section 205 of the Federal Power Act.

In the event of a dispute regarding the reasonableness of the adder for major maintenance expenses determined by the CAISO, but not a dispute regarding the sufficiency or accuracy of the information provided by the Scheduling Coordinator, the CAISO will determine a reasonable interim adder for major maintenance expenses until the adder for major maintenance expenses is determined by agreement between the CAISO and the Scheduling Coordinator or by FERC. Any subsequent agreement or FERC order determining the adder for major maintenance expenses will be reflected in an adjustment to the interim adder for major maintenance expenses in the next applicable Settlement Statement.

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30.5.2 Supply Bids

30.5.2.1 Common Elements for Supply Bids

In addition to the resource-specific Bid requirements of this Section, all Supply Bids must contain the following components: Scheduling Coordinator ID Code; Resource Location or Resource ID, as appropriate; MSG Configuration ID, as applicable; PNode or Aggregated Pricing Node as applicable; Energy Bid Curve; Self-Schedule component; Ancillary Services Bid; RUC Availability Bid as applicable, the CAISO Market to which the Bid applies; Trading Day to which the Bid applies; Priority Type (if any), and a Transaction ID as created by the CAISO. Supply Bids offered in the CAISO Markets must be monotonically increasing. Energy Bids in the RTM must also contain a Bid for Ancillary Services to the extent the resource is certified and capable of providing Ancillary Service in the RTM up to the registered certified capacity for that Ancillary Service less any Day-Ahead Ancillary Services Awards. Scheduling Coordinators must submit the applicable Supply Bid components, including Self-Schedules, for the submitted MSG Configuration.

Scheduling Coordinators submitting Bids for Scheduling Points must adhere to the E-Tagging requirements outlined in Section 30.5.7.

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30.5.7 E-Tag Rules and Treatment of Intertie Schedules

In addition to complying with all generally applicable E-Tagging requirements, Scheduling Coordinators must submit their E-Tags consistent with the requirements specified in this Section 30.5.7. If a Scheduling Coordinator receives an intra-hour Schedule change, then the Scheduling Coordinator must, by twenty minutes before the start of the FMM interval to which the Schedule change applies, ensure that an updated energy profile reflects the change. Absent extenuating circumstances, the CAISO automatically updates Energy profiles on E-Tags for Energy Schedules that change from HASP to the FMM within a Trading Hour. In performing this service for a Scheduling Coordinator, the CAISO does not assume any responsibility for compliance with any E-Tag requirements or obligations to which the

Scheduling Coordinator is subject. The changed energy profile will apply for the balance of the operating hour unless it is subsequently changed by a further updated energy profile.

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Section 31

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31.5.3 RUC Procurement Target

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31.5.3.1 CAISO Operator Review & Adjustment

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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. 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.

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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.

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Section 34

34.1.3 Bids in the Real-Time Market

Scheduling Coordinators may submit Bids, including Self-Schedules, for Supply that the CAISO shall use for the Real-Time Market, starting from the time Day-Ahead Schedules are posted, which is approximately 1:00 p.m., unless the posting of the Day-Ahead Market results are delayed for reasons specified in Section 31.6, until seventy-five (75) minutes prior to each applicable Trading Hour in the Real-Time. Scheduling Coordinators can submit Bids in the form of: (1) an Economic Bid for a Schedule in the RTM; (2) a Self-Schedule for acceptance to the RTM; (3) a Self-Schedule Hourly Block for acceptance in the HASP; (4) a Variable Energy Resource Self-Schedule for the RTM; (5) an Economic Hourly Block Bid for acceptance in the HASP; or (6) an Economic Hourly Block Bid with Intra-Hour Option for acceptance in the HASP and the FMM. This includes Self-Schedules by Participating Load that is modeled using the Pumped-Storage Hydro Unit. Scheduling Coordinators may not submit Bids, including Self-Schedules, for CAISO Demand in the RTM. Scheduling Coordinators may submit Bids, including Self-Schedules, for exports at Scheduling Points in the RTM. The rules for submitted Bids specified in Section 30 apply to Bids submitted to the RTM. Scheduling Coordinators may not submit Virtual Bids to the Real-Time Market, although Virtual Awards from the DAM are settled for their liquidated positions based on prices from the FMM. In the case of Multi-Stage Generating Resources, the RTM procedures will optimize Transition Costs in addition to the Start-Up Costs 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, all of the RTM processes 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.

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34.3.1 RTUC Optimization

The Real-Time Unit Commitment (RTUC) process uses SCUC and is run every fifteen (15) minutes to

make commitment decisions for Fast Start and Short Start Units having Start-Up Times within the applicable time periods described below in this section for the next four to seven subsequent fifteenminute intervals, depending on when during the hour the run occurs. For Multi-Stage Generating Resources the RTUC will issue a binding Transition Instruction separately from the binding Start-Up or Shut Down instructions. The RTUC can also be run with the Contingency Flag activated, in which case the RTUC can commit Contingency Only Operating Reserves. If RTUC is run without the Contingency Flag activated, it cannot commit Contingency Only Operating Reserves. RTUC is run at the following time intervals: (1) at approximately 12 minutes prior to the first Trading Hour, to serve as the HASP run, for T-45 minutes to T+60 minutes; (2) at approximately 7.5 minutes into the current hour for T-30 minutes to T+60 minutes; (3) at approximately 22.5 minutes into the current hour for T-15 minutes to T+60 minutes; and (4) at approximately 37.5 minutes into the current hour for T to T+60 minutes, where T is the beginning of the next Trading Hour. The HASP is a special RTUC run that is performed at approximately 67.5 minutes before each Trading Hour and has the additional responsibility of pre-dispatching Energy and awarding Ancillary Services for HASP Block Intertie Schedules. A Day-Ahead Schedule or RUC Schedule for an MSG Configuration that is later impacted by the resource's derate or outages, will be reconsidered in the RTUC and the FMM taking into consideration the impacts of the derate or outage on the available MSG Configurations. Not all resources identified as needed in a given RTUC run will necessarily receive CAISO commitment instructions immediately, because during the Trading Day the CAISO may issue a commitment instruction to a resource only at the latest possible time that allows the resource to be ready to provide Energy when it is expected to be needed.

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34.10 Dispatch of Energy from Ancillary Services

The CAISO may issue Dispatch Instructions to Participating Generators, Participating Loads, Proxy Demand Resources, (via communication with the Scheduling Coordinators of Demand Response Providers) System Units and System Resources contracted to provide Ancillary Services (either procured through the CAISO Markets, Self-Provided by Scheduling Coordinators, or through Exceptional Dispatch or dispatched in accordance with a Legacy RMR Contract) for the Supply of Energy. During normal operating conditions, the CAISO may Dispatch those Participating Generators, Participating Loads, Proxy Demand Resources, System Units and System Resources that have contracted to provide Spinning Reserve and Non-Spinning Reserve, except for those reserves designated as Contingency Only, in conjunction with the normal Dispatch of Energy. Contingency Only reserves are Operating Reserve capacity that have been designated, either by the Scheduling Coordinator or the CAISO, as available to supply Energy in the Real-Time only in the event of the occurrence of an unplanned Outage, a Contingency or an imminent or actual System Emergency. During normal operating conditions, the CAISO may also elect to designate any reserve not previously identified as Contingency Only by Scheduling Coordinator as Contingency Only reserves. In the event of an unplanned Outage, a Contingency or a threatened or actual System Emergency, the CAISO may dispatch Contingency Only reserves. If Contingency Only reserves are dispatched through the RTCD, which as described in Section 34.5.2 only Dispatches in the event of a Contingency, such Dispatch and pricing will be based on the original Energy Bids. If Contingency Only reserves are dispatched in response to a System Emergency that has occurred because the CAISO has run out of Economic Bids when no Contingency event has occurred, the RTED will Dispatch such Contingency Only reserves using maximum Bid prices as provided in Section 39.6.1 as the Energy Bids for such reserves and will set prices accordingly. If a Participating Generator, Participating Load, System Unit or System Resource that is supplying Operating Reserve is Dispatched to provide Energy, the CAISO shall replace the Operating Reserve as necessary to maintain NERC and WECC reliability standards, including any requirements of the NRC. If the CAISO uses Operating Reserve to meet Real-Time Energy requirements, and if the CAISO needs Operating Reserves to satisfy NERC and WECC reliability standards, including any requirements of the NRC, the CAISO shall restore the Operating Reserves to the extent necessary to meet NERC and WECC reliability standards, including any requirements of the NRC through either the procurement of additional Operating Reserve in the RTM or the Dispatch of other Energy Bids in SCED to allow the resources that were providing Energy from the Operating Reserve to return to their Dispatch Operating Target. The Energy Bid Curve is not used by the AGC system when Dispatching Energy from Regulation. For Regulation Up capacity, the upper portion of the resource capacity from its Regulation Limit is allocated to Regulation regardless of its

Energy Bid Curve. For a resource providing Regulation Up or Operating Reserves the remaining Energy Bid Curve shall be allocated to any RTM AS Awards in the following order from higher to lower capacity where applicable: (a) Spinning Reserve; and (b) Non-Spinning Reserve. For resources providing Regulation Up, the applicable upper Regulation Limit shall be used as the basis of allocation if it is lower than the upper portion of the Energy Bid Curve. The remaining portion of the Energy Bid Curve, if there is any, shall constitute a Bid for RTM Energy. For Regulation Down capacity, the lower portion of the resource capacity from its applicable Regulation Limit is allocated to Regulation regardless of its Energy Bid Curve.

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34.13.1 Response Required by Resources to Dispatch Instructions

Resources must:

- (a) unless otherwise stated in the Dispatch Instruction, comply with a Dispatch Instruction immediately upon receipt;
- (b) respond to all Dispatch Instructions in accordance with Good Utility Practice;
- (c) meet voltage criteria in accordance with the provisions in the CAISO Tariff;
- (d) meet any applicable Operational Ramp Rates;
- (e) respond to Dispatch Instructions for Ancillary Services within the required time periods and (in the case of Participating Generators providing Regulation) respond to AGC from the EMS;
- (f) if a time frame is stated in a Dispatch Instruction, respond to a Dispatch Instruction within the stated time frame; and
- (g) not intentionally generate above or below Dispatch Operating Target.

Notwithstanding the requirements to comply with and respond to Dispatch Instructions, when an Eligible Intermittent Resource's Dispatch Operating Target is equal to its forecasted output, it may produce to its capability. An Eligible Intermittent Resource in the process of developing a CAISO forecast pursuant to Section 3.1 of Appendix Q may produce to its capability when its Dispatch Operating Target is equal to its scheduled output.

In any event, the CAISO may issue an Operating Instruction if necessary to maintain system reliability consistent with Sections 7.6 or 7.7. Upon receiving such an Operating Instruction, an Eligible Intermittent Resource must not generate in excess of its Dispatch Operating Target until the Operating Instruction expires, except when physically impossible. When such an Operating Instruction is in effect, Eligible Intermittent Resources should follow a linear ramp between Dispatch Operating Targets, except when physically impossible.

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Section 37

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37.1.5 Administration

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

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37.4.4 Enhancements And Exceptions

Except as otherwise specifically provided, penalty amounts shall be tripled for any violation of Section 37.4.1 or 37.4.2 that occurs during a CAISO System Emergency.

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37.8.8 [Not Used]

37.8.10 Review Of Determination

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

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37.9.1 Assessment; Waivers And Adjustments

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

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Section 39

39.7.1 Calculation of Default Energy Bids

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

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

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39.7.1.3 Negotiated Rate Option

39.7.1.3.1 Submission Process

Scheduling Coordinators that elect the Negotiated Rate Option for the Default Energy Bid shall submit a proposed Default Energy Bid along with supporting information and documentation as described in a BPM. Within ten (10) Business Days of receipt, the CAISO will provide a written response. If the CAISO accepts the proposed Default Energy Bid, it will generally become effective within eleven (11) Business Days from the date of acceptance by the CAISO and remain in effect until: (1) the Default Energy Bid is modified by FERC; (2) the Default Energy Bid is modified by mutual agreement of the CAISO and the Scheduling Coordinator; or (3) the Default Energy Bid expires, is terminated or is modified pursuant to any agreed upon term or condition or pertinent FERC order.

If the CAISO does not accept the proposed Default Energy Bid, the CAISO and the Scheduling Coordinator shall enter a period of good faith negotiations that terminates sixty (60) days following the date of submission of a proposed Default Energy Bid by a Scheduling Coordinator. If at any time during this period, the CAISO and the Scheduling Coordinator agree upon the Default Energy Bid, it will generally become effective within eleven (11) Business Days of the date of agreement and remain in effect until: (1) the Default Energy Bid is modified by FERC; (2) the Default Energy Bid is modified by mutual agreement of the CAISO and the Scheduling Coordinator; or (3) the Default Energy Bid expires, is terminated or is modified pursuant to any agreed upon term or condition or pertinent FERC order. If by the end of the sixty (60)-day period the CAISO and the Scheduling Coordinator fail to agree on the Default Energy Bid to be used under the Negotiated Rate Option, the Scheduling Coordinator has the right to file a proposed Default Energy Bid with FERC pursuant to Section 205 of the Federal Power Act. During the sixty (60)-day period following the submission of a proposed negotiated Default Energy Bid by a Scheduling Coordinator, and pending FERC's acceptance in cases where the CAISO fails to agree on the Default Energy Bid for use under the Negotiated Rate Option and the Scheduling Coordinator filed a proposed Default Energy Bid with FERC pursuant to Section 205 of the Federal Power Act, the Scheduling Coordinator has the option of electing to use any of the other options available pursuant to Section 39.7. If the Scheduling Coordinator does not elect to use any of the other options available

pursuant to Section 39.7, or if sufficient data do not exist to calculate a Default Energy Bid using any of these options, the CAISO may establish a temporary Default Energy Bid as specified in Section 39.7.1.5. Any negotiated Default Energy Bid for a resource that includes an opportunity cost component as of April 1, 2019, will remain in effect, subject to the CAISO's renegotiation rights pursuant to Section 39.7.1.3.2.1, unless the Scheduling Coordinator pursues an Opportunity Cost pursuant to Section 30.4.1.1.6.1.2. If a Scheduling Coordinator pursues an Opportunity Cost pursuant to Section 30.4.1.1.6.1.2, the Scheduling Coordinator must either elect the Variable Cost Default Energy Bid or the CAISO will renegotiate the negotiated Default Energy Bid to, at a minimum, utilize the Variable Energy Opportunity Cost as a component of the negotiated Default Energy Bid in place of any previously negotiated Opportunity Cost value.

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39.7.1.7.2.2 Maximum Storage Horizon

The maximum hydroelectric resource storage horizon submitted by the Scheduling Coordinator must:

(a) Reflect the typical storage duration of a hydroelectric resource's reservoir, defined as the length of time between which the reservoir cycles from a maximum elevation to a new maximum elevation during a hydro cycle. The Scheduling Coordinator shall compute the reservoir's cycling time based on multiple years of reservoir elevation data.

(b) Be supported by (1) a written attestation by a representative who has the authority to bind the company stating that the value submitted to the CAISO as the maximum storage horizon is consistent with the requirements specified in Section 39.7.1.7.2.2 (a); or (2) corroborating information submitted to the CAISO, which may include several years of historic reservoir levels for the specific hydroelectric resource and regulatory filings related to the operations of the hydroelectric resource.

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39.8.3 Bid Adder Values

The value of the Bid Adder will be either: (i) a unit-specific value determined in consultation with the

CAISO; or (ii) a default Bid Adder of \$24/MWh. For Generating Units with a portion of their capacity identified as meeting an LSE's Resource Adequacy Requirements, that Generating Unit's Bid Adder value will be reduced by the percent of the Generating Unit's capacity that is identified as meeting an LSE's Resource Adequacy Requirements. The reduced Bid Adder will be applied to that Generating Unit's entire Default Energy Bid Curve.

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Section 40

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40.1 Applicability

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

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40.2.1 Requirements for CPUC Load Serving Entities

(a) The Scheduling Coordinator for a CPUC Load Serving Entity must provide the CAISO with all information or data to be provided to the CAISO as required by the CPUC and pursuant to the schedule adopted by the CPUC, except that the monthly Resource Adequacy Plans or the same information as required to be included in the monthly Resource Adequacy Plans, plus any other information the CAISO requires as identified in the Business Practice Manual, shall be submitted to the CAISO no less than 45 days in advance of the first day of the month covered by the plan, as provided in Section 40.2.1(e).

- (b) Where the information or data provided to the CAISO under Section 40.2.1(a) does not include Reserve Margin(s), then the provisions of Section 40.2.2.1(b) shall apply.
- (c) Where the information or data provided to the CAISO under Section 40.2.1(a) does not include criteria for determining qualifying resource types and their Qualifying Capacity, then the provisions of Section 40.8 shall apply.
- Where the information or data provided to the CAISO under Section 40.2.1(a)
 does not include annual and monthly Demand Forecast requirements, then the
 provisions of Section 40.2.2.3 shall apply.
- (e) Where the information or data provided to the CAISO under Section 40.2.1(a) does not include annual and monthly Resource Adequacy Plan requirements that include, at a minimum, identifying Local Capacity Area Resources and Listed Local RA Capacity, or where there is a requirement to submit monthly Resource Adequacy Plans but the submission date is less than 45 days in advance of the first day of the month covered by the plan, then Section 40.2.2.4 shall apply.

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40.6.4.2 RUC Availability Bids

The following resource types providing Resource Adequacy Capacity are not required to submit RUC Availability Bids for that capacity, but any such bids they do submit must be \$0/MW RUC Availability Bids: Hydroelectric Generating Units, Pumping Load, Reliability Demand Response Resources, Combined Heat and Power Resources, Regulatory Must-Take Generation, Non-Dispatchable Resources, Non-Generator Resources using Regulation Energy Management, Conditionally Available Resources, and Eligible Intermittent Resources.

40.6.8 Use of Generated Bids

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40.6.8.1.4 Negotiated Price Option

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

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

If by the end of the sixty (60) day period the CAISO and the Scheduling Coordinator fail to agree on the Generated Bid to be used under the negotiated price option, the Scheduling Coordinator has the right to file a proposed Generated Bid with FERC pursuant to Section 205 of the Federal Power Act. During the sixty (60) day period following the submission of a proposed negotiated Generated Bid by a Scheduling Coordinator, and pending FERC's acceptance in cases where the CAISO fails to agree on the Generated Bid for use under the negotiated price option and the Scheduling Coordinator filed a proposed Generated Bid with FERC pursuant to Section 205 of the Federal Power Act, the Scheduling Coordinator has the option of electing to use any of the other options available pursuant to this Section. The CAISO shall make an informational filing with FERC of any Generated Bids negotiated pursuant to this Section no later than seven (7) days after the end of the month in which the Generated Bids were established.

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Appendix A

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- Day-Ahead Minimum Load Energy

Day-Ahead Scheduled Energy below the registered Minimum Load, or if applicable, as modified pursuant to Section 9.3.3, which applies to Generating Units with non-zero Minimum Load. Day-Ahead Minimum Load Energy is settled as provided in Section 11.2.1.1, and it is included in Bid Cost Recovery (BCR) at the relevant IFM Minimum Load Cost as described in Section 11.8.2.1.2.

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- Extremely Long-Start Resource (ELS Resource)

A Generating Unit that has a Start-Up Time greater than 18 hours or a System Resource that is either: (1) a Non-Resource-Specific System Resource with contractual limitations that require the Energy be transacted (i.e., committed) prior to the publishing time of the Day-Ahead Market results (1300 hours on the day before the Trading Day); or (2) a Resource-Specific System Resource that has a Start-Up Time greater than 18 hours.

- FMM LAP Price

The marginal price for a particular LAP calculated pursuant to Section 27.2.2.2.

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- IFM LAP Price

The marginal price for a particular LAP calculated pursuant to Section 27.2.2.1.

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- [Not Used]

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- Interconnection Facilities Study

A study conducted by the Participating TO(s), CAISO, or a third party consultant for the Interconnection Customer to determine a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility with the CAISO Controlled Grid. The scope of the study is defined in Section 8 of the Standard Large Generator Interconnection Procedures (Appendix U), Section 6 and 7 of the Generator Interconnection Procedures (Appendix Y) and Section 4.4 of the Generator Interconnection and Deliverability Allocation Procedures (Appendix DD).

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- Interconnection Request

An Interconnection Customer's request, in the form of Appendix 1 to the Generator Interconnection Deliverability Allocation Procedure (Appendix DD), in accordance with Section 25.1.

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- Interconnection Study

Any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Large Generator Interconnection Procedures set forth in Appendix U and the Phase I Interconnection Study and the Phase II Interconnection Study described in the LGIP set forth in Appendix Y and Appendix DD.

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- LAP Price

The marginal price for a particular LAP calculated as specified in Section 27.2.2.

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- Location

A reference to either a Pricing Node or an Aggregated Pricing Node.

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- Minimum Dispatch Level

Either (1) for resources that are not Multi-Stage Generating Resources, the lower limit of the fastest segment of a Generating Unit's Operational Ramp Rate, as adjusted for the Generating Unit's Forbidden Operating Regions, if any, or (2) for Multi-Stage Generating Resources, the minimum MW level of the fastest operational ramp rate across all configurations.

- Negotiated Rate Option

A method of calculating Default Energy Bids based on a negotiation with the CAISO.

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- NRS-RA Resource

A Non-Resource-Specific System Resource that provides Resource Adequacy Capacity.

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- Planning Region

Means each of the following Order 1000 transmission planning regions insofar as they are within the Western Interconnection: CAISO, NorthernGrid, and WestConnect.

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- PMax

The maximum normal capability of the Generating Unit, as measured at the Point of Interconnection or Point of Delivery, as applicable. PMax may not exceed the Interconnection Service Capacity, as documented in the Interconnection Study or Generator Interconnection Agreement.

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- RTD LAP Price

The marginal price for a particular LAP calculated pursuant to Section 27.2.2.2.

- Scheduling Point

A Location in the Base Market Model at which Scheduling Coordinators may submit Intertie Bids in the

CAISO Markets.

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Appendix B.3

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ARTICLE IV

GENERAL TERMS AND CONDITIONS

4.1 Net Scheduled Generating Units

4.1.1 Identification of Net Scheduled Generating Unit. The Participating Generator has identified the Net Scheduled Generating Unit that it owns, operates or has a contractual entitlement to, in Schedule 1, as required by Section 4.6.4 of the CAISO Tariff.

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4.5 Dispatch and Curtailment. The CAISO shall only dispatch or curtail a Net Scheduled Generating Unit of the Participating Generator: (a) to the extent the Participating Generator bids Energy or Ancillary Services from the Net Scheduled Generating Unit into the CAISO's markets or the Energy is otherwise available to the CAISO under Section 40 or 43A of the CAISO Tariff; or (b) if the CAISO must dispatch or curtail the Net Scheduled Generating Unit in order to respond to an existing or imminent System Emergency or condition that would compromise CAISO Balancing Authority Area integrity or reliability as provided in Sections 7 and 7.6.1 of the CAISO Tariff.

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ARTICLE VI

COSTS

6.1 Operating and Maintenance Costs. The Participating Generator shall be responsible for all its costs incurred in connection with operating and maintaining the Net Scheduled Generating Unit identified in Schedule 1 for the purpose of meeting its obligations under this Agreement.

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ARTICLE VIII

REPRESENTATIONS AND WARRANTIES

- 8.1 **Representation and Warranties.** Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.
- 8.2 Necessary Approvals. The Participating Generator represents that all necessary leases, approvals, permits, licenses, easements, rights of way or access to install, own and/or operate its Net Scheduled Generating Unit have been or will be obtained by the Participating Generator prior to the effective date of this Agreement.
- 8.3 Specific Warranty. The Participating Generator represents and warrants that: (1) the Net Scheduled Generating Unit listed in Schedule 1 is (a) a Qualifying Facility or is operated as an integral part of a Qualifying Facility, or (b) is a CHP Resource, and (2) (a) the Self-provided Load of the Participating Generator that is served by the Net Scheduled Generating Unit either has, and continues to have through the term of this Agreement, standby service from a UDC or MSS Operator under terms approved by the Local Regulatory Authority or the Federal Energy Regulatory Commission, as applicable, or (b) the Self-provided Load shall be curtailed concurrently with any Outage of the Generation serving that Self-provided Load in an amount sufficient to cover that Outage.

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Appendix B.9

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7.2 E-Tagging

The Host Balancing Authority must support associated E-Tagging as described in the CAISO Dynamic Scheduling Protocol and deemed to be consistent with NERC and/or WECC requirements.

* * * * * Appendix B.11

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- A. The CAISO Tariff provides that any entity that holds or intends to hold CRRs must register and qualify with the CAISO and comply with the terms of the CAISO Tariff, regardless of whether they are to acquire CRRs through the CRR Allocation or CRR Auction, or through the Secondary Registration System.
- **B**. The CRR Entity has completed the Candidate CRR Holder application process and is eligible to participate in the CRR Allocation or CRR Auction or register as a CRR Holder through the Secondary Registration System.

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Appendix B.13

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ARTICLE IV

GENERAL TERMS AND CONDITIONS

- 4.1 Resource-Specific System Resource Information.
- **4.1.1 Identification of Resource-Specific System Resources.** The System Resource Owner has identified the generating units comprising its Resource-Specific System Resources that it owns, operates or has a contractual entitlement to in Schedule 1, as required by Section 4.12 of the CAISO Tariff.
- **4.1.2 Technical Characteristics.** The System Resource Owner has provided to the CAISO in Schedule 1 the required information regarding the capacity and operating characteristics of each of the Resource-Specific System Resources listed in that schedule. Pursuant to Sections 8.9 and 8.10 of the CAISO Tariff, the CAISO may verify, inspect and test the capacity and operating

characteristics provided in Schedule 1.

- **4.1.3 Notification of Changes.** Sixty (60) days prior to changing any technical information in Schedule 1, the System Resource Owner shall notify the CAISO of the proposed changes. Pursuant to Sections 8.9 and 8.10 of the CAISO Tariff, the CAISO may verify, inspect and test the capacity and operating characteristics provided in the revised Schedule 1.
- **4.2** Agreement Subject to CAISO Tariff. The Parties will comply with all applicable provisions of the CAISO Tariff. This Agreement shall be subject to the CAISO Tariff which shall be deemed to be incorporated herein.

4.3 Obligations Relating to Resource-Specific System Resources.

- **4.3.1 Bid Cost Recovery.** In order to be eligible for Bid Cost Recovery, the System Resource Owner must comply with all applicable requirements of the CAISO Tariff, including but not limited to compliance with Start-Up Instructions issued by the CAISO and submittal of its Bid Costs to the CAISO in accordance with CAISO Tariff Sections 4.12, 11.8, 30.4, and 30.5.2.4.
- **4.3.2 Telemetry Data for Resource-Specific System Resources.** For purposes of determining compliance with the CAISO's Start-Up Instructions and minimum operation obligations, the System Resource Owner must provide SCADA data by telemetry to the CAISO's EMS for each of its Resource-Specific System Resources in accordance with CAISO Tariff Section 4.12.3. For each of its Non-Dynamic Resource-Specific System Resources, the System Resource Owner has specified in Schedule 1 the manner in which it will provide this telemetry data, as permitted by CAISO Tariff Section 4.12.3.
- **4.3.3** Use of CAISO Forecast. For purposes of participating in the CAISO Markets, the System Resource Owner has the option of using a forecast of their output provided by CAISO, provided that: (1) they agree to provide the CAISO with the meteorological data specified in Appendix Q; and (2) they are certified to do so by the CAISO pursuant to the rules specified in the Business Practice Manuals. Once the election to use the output forecast provided by the CAISO is complete, the CAISO will specify the election status in the Master File. Any changes to this election will be subject to the timeline and rule changes that apply to the Master File as specified in Section 30.7.3.2.

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Appendix B.14

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ARTICLE IV

GENERAL TERMS AND CONDITIONS
4.3.2 Notification of Changes. The Demand Response Provider shall notify the CAISO of any proposed change(s) to the registration of technical information. The CAISO will update the Master File in accordance with Section 30.7.3.2 of the CAISO Tariff. This Agreement shall not apply to any Reliability Demand Response Resources which the Demand Response Provider no longer owns or operates or to which it no longer has a contractual entitlement.

Appendix B.17

EIM Entity Agreement (EIMEA)

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3.2.2 Termination by EIM Entity. In the event that the EIM Entity no longer wishes to enable Energy Imbalance Market services within its Balancing Authority Area pursuant to the CAISO Tariff, it may terminate this Agreement on giving the CAISO not less than one-hundred and eighty (180) days written notice. With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if (1) the request to file a notice of termination is made after the preconditions for termination have been met, and the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination or upon the next production date of the Full-Network Model release following the one-hundred and eighty (180) days after the CAISO's receipt of the EIM Entity's notice of termination, if terminated in accordance with the requirements of FERC orders.

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Appendix B.19

EIM Participating Resource Agreement (EIMPRA)

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3.2.2 Termination by EIM Participating Resource. In the event that the EIM Participating Resource no longer wishes to submit Bids and transmit Energy over the CAISO Controlled Grid, it may terminate this Agreement, on giving the CAISO not less than ninety (90) days written notice, provided, however, that in accordance with Section 2.2.2, the EIM Participating Resource may modify Schedule 1 to remove EIM Resources which it no longer owns or no longer has contractual entitlement to and such modification shall be effective upon receipt by the CAISO. With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC, if this Agreement has been filed with FERC, or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and the CAISO files the notice of termination within thirty (30) days of receipt of such request; or (2) the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination, if such notice is required to be filed with FERC, or upon ninety (90) days after the CAISO's receipt of the EIM Participating Resource's notice of termination, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders.

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Appendix C

Locational Marginal Price

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I.1 Intertie Scheduling Point Price Calculation for IBAAs

I.1.2 Applicable Marginal Loss Adjustment

For import Schedules to the CAISO Balancing Authority Area at the southern terminus of the California-Oregon Transmission Project at the Tracy substation or at the applicable Scheduling Point that connects the CAISO Balancing Authority and the Western Area Power Administration system, the CAISO will replace the Marginal Cost of Losses at the otherwise applicable source for such Schedules with the Marginal Cost of Losses at the Tracy substation or at the applicable Scheduling point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system, provided that the Scheduling Coordinators certify as discussed further below that the Schedules originate from transactions that use: (a) the California-Oregon Transmission Project; or (b) transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA. In addition, as described further below, the Scheduling Coordinator must certify that the Schedules are subject to: (a) charges for losses by the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA; or (b) charges for losses by the Transmission Agency of Northern California for the use of the California-Oregon Transmission Project. The CAISO will establish Resource IDs that are to be used only to submit Bids, including Self-Schedules, for the purpose of establishing Schedules that are eligible for this loss adjustment.

Prior to obtaining such Resource IDs, the relevant Scheduling Coordinator shall certify that it will only use this established Resource ID for Bids, including Self-Schedules, that originate from transactions that use: (a) the California-Oregon Transmission Project; or (b) transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA. In addition, the Scheduling Coordinator must certify that the Schedules are subject to: (a) charges for losses by the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration state SMUD/TID IBAA; or (b) Transmission Agency of Northern California for the use of the California-Oregon Transmission Agency of Northern California for the use of the California-Oregon Transmission Project. Further, by actually using such Resource ID, the Scheduling Coordinator represents that such Bids, including Self-Schedules, that originate from transactions that use: (a) the California-Oregon Transmission Project; or (b) transmission facilities owned by the Western Area Power Administration State Use (a) the California-Oregon Transmission Project; or (b) transmission facilities owned by the Western Area Power Administration State Use (a) the California-Oregon Transmission Project; or (b) transmission facilities owned by the Western Area Power ID, the Scheduling Coordinator represents that such Bids, including Self-Schedules, that originate from transactions that use: (a) the

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Administration within the SMUD/TID IBAA. In addition, the Scheduling Coordinator must certify that the Schedules are subject to: (a) charges for losses by the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA; or (b) Transmission Agency of Northern California for the use of the California-Oregon Transmission Project. Schedules and Dispatches settled under such Resource IDs shall be subject to an LMP which has accounted for the Marginal Cost of Losses as if there were an actual physical generation facility at the Tracy Scheduling Point or at the applicable Scheduling Point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system as opposed to the Marginal Cost of Losses under the IBAA LMPs specified in Section I.1.1 of this Appendix. The CAISO may request information on a monthly basis from such Scheduling Coordinators to verify these certifications. Any such request shall be limited to transactions that use the designated Resource IDs during the six month prior period to the date of the request. The CAISO will calculate a re-adjustment of the Marginal Cost of Losses at the Tracy substation or at the applicable Scheduling Point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system to reflect the otherwise applicable source for such Schedules for any Settlement Interval in which the CAISO has determined that the Scheduling Coordinator's payments did not reflect transactions that meet the above specified certification requirements. Any amounts owed to the CAISO for such Marginal Cost of Losses re-adjustments will be recovered by the CAISO from the affected Scheduling Coordinator by netting the amounts owed from payments due in subsequent Settlements Statements until the outstanding amounts are fully recovered. For export Schedules from the CAISO Balancing Authority Area at the southern terminus of the California-Oregon Transmission Project at the Tracy substation or at the applicable Scheduling Point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system, the CAISO will replace the Marginal Cost of Losses at the otherwise applicable sink for such Schedules with the Marginal Cost of Losses at the Tracy substation or at the applicable Scheduling Point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system, provided that the Scheduling Coordinator certifies, as discussed below, where the export Schedules use: (a) the California-Oregon Transmission Project; or (b) any transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA. In addition, the Scheduling Coordinator must certify

that the affected Schedules are charged losses by: (a) the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA; or (b) Transmission Agency of Northern California for the use of the California-Oregon Transmission Project. The CAISO will establish Resource IDs that are to be used only to submit Bids, including Self-Schedules, for the purpose of establishing Schedules that are eligible for this loss adjustment. Prior to obtaining such Resource IDs, the relevant Schedules, where the export Schedules use: (a) the California-Oregon Transmission Project; or (b) any transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA. In addition the Scheduling Coordinator must certify that the affected Schedules are charged losses by: (a) the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration for the use of transmission Agency of Northern California for the use of the California-Oregon Transmission facilities owned by the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA; or (b) Transmission Agency of Northern California for the use of the California-Oregon Transmission Project. Further, by actually using such Resource ID, the Scheduling Coordinator represents that such Bids, including Self-Schedules, are used for the above specified conditions.

Schedules and Dispatches settled under such Resource IDs shall be subject to an LMP which has accounted for the Marginal Cost of Losses as if there were an actual physical generation facility at the Tracy Scheduling Point or at the applicable Scheduling Point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system as opposed to the Marginal Cost of Losses under the IBAA LMPs specified in Section I.1.1 of this Appendix. The CAISO may request information on a monthly basis from such Scheduling Coordinators to verify that schedules for such Resource IDs meet the above specified conditions. Any such request shall be limited to transactions that use the designated Resource IDs during the six month prior period to the date of the request. The CAISO will calculate a re-adjustment of the Marginal Cost of Losses at the Tracy substation or at the applicable Scheduling Point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system to reflect the otherwise applicable sink for such Schedules for any Settlement Interval in which the CAISO has determined that the Scheduling Coordinator's payments did not reflect transactions that met the above specified conditions. Any amounts owed to the CAISO for such Marginal Cost of Losses re-adjustments will be recovered by the CAISO from the affected

Scheduling Coordinator by netting the amounts owed from payments due in subsequent Settlements Statements until the outstanding amounts are fully recovered.

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Appendix L

Appendix L Method to Assess Available Transfer Capability

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L.2 ATC Algorithm

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Actual ATC mathematical algorithms and other ATC calculation information are located in the CAISO's ATC Implementation Document (ATCID) posted to the CAISO Website.

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Appendix N

Pseudo-Tie Protocols

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1.2.1.6 All Energy transfers associated with a Pseudo-Tie Generating Unit must be electronically tagged

(E-Tagged).

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2.2.1.4 All Energy transfers associated with a Pseudo-Tie generating unit must be electronically tagged (E-Tagged).

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Appendix Q

Eligible Intermittent Resources Protocol (EIRP)

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2.2.5 [Not Used]

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2.4.4 Continuing Obligation

A Participating Intermittent Resource or Eligible Intermittent Resource must meet all applicable obligations established for Participating Intermittent Resources or Eligible Intermittent Resources under the CAISO Tariff and this EIRP, and must fully cooperate in providing all data, other information, and authorizations the CAISO reasonably requests to fulfill its obligation to validate forecast models and explain deviations.

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Appendix R

[Not Used]

Appendix S

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1.3 Application

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1.3.1.4 Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. The Federal Energy Regulatory Commission expects all transmission providers, market participants, and Interconnection Customers interconnected with electric systems to comply with Applicable Reliability Criteria. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.

Appendix T

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12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all transmission providers, market participants, and interconnection customers interconnected to electric systems to comply with Applicable Reliability Criteria. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

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Appendix U

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3.9 Reductions in Generating Facility Capacity

3.9.1 De Minimis Capacity Reductions

If the actual MW capacity of its Generating Facility is reduced by no more than the greater of five percent (5%) of its MW capacity or 10 MW, but by no more than twenty-five percent (25%) of the MW capacity of the Generating Facility, such a one-time reduction shall not constitute a breach of the Interconnection Customer's obligations under the CAISO Tariff or its Generator Interconnection Agreement. The MW capacity value of a Generating Facility for purposes of this section shall be established by reference to the capacity as set forth in the Interconnection Customer's currently applicable Generator Interconnection Agreement. No capacity reductions permitted under this section shall operate to diminish the Interconnection Customer's responsibility for any costs or other obligations set forth in its Generator Interconnection Agreement or the CAISO Tariff.

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4.4.6 The Interconnection Customer shall provide the CAISO a \$10,000 deposit for the modification assessment at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Interconnection Customer in writing, within forty-five (45) calendar days from the date the CAISO receives all of the following: the Interconnection Customer's written notice to modify the project, technical data required to assess the request and payment of the \$10,000 deposit. If the modification assessment cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

The CAISO will defer evaluation of any modification requested pursuant to this section by an Interconnection Customer participating in the Generator Downsizing Process until the completion of that Generator Downsizing Process, as set forth in Section 7.5.2 of Appendix DD to the CAISO Tariff.

The Interconnection Customer will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the modification assessment. If the actual costs of the modification assessment are less than the deposit provided by the Interconnection Customer, the Interconnection Customer will be refunded the balance. If the actual costs of the modification assessment are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer shall pay the balance within 30 days of being invoiced. The CAISO shall coordinate the modification request with the Participating TO(s). The Participating TO(s) shall invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO shall issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment.

The CAISO will publish cost data regarding modification assessments in accordance with the terms set forth in a Business Practice Manual.

Notwithstanding any other provision, all refunds pursuant to this Appendix U will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

4.4.7 Commercial Viability Criteria for Retention of Deliverability beyond Ten Years in Queue

The CAISO's agreement to modifications requested pursuant to Section 4.4.3 for an Interconnection Customer that has exceeded or will exceed ten (10) years from the date the Interconnection Request is received by the CAISO with retention of Deliverability will be predicated upon the Interconnection Customer's ability to meet and maintain the following commercial viability criteria:

- a) Providing proof of having, at a minimum, applied for the necessary governmental permits or authorizations, and that the permitting authority has deemed such documentation as data adequate for the authority to initiate its review process;
- b) Providing proof of having an executed and regulator-approved power purchase agreement. Power purchase agreements must have the point of interconnection, capacity, fuel type, technology, and site location in common with the Interconnection Customer and GIA;
- c) Demonstrating Site Exclusivity for 100% of the property necessary to construct the facility through the Commercial Operation Date requested in the modification request. A Site Exclusivity Deposit does not satisfy this criterion;
- d) Having an executed Generator Interconnection Agreement ("GIA"); and
- e) Being in good standing with the GIA such that neither the Participating TO nor the CAISO has provided a Notice of Breach that has not been cured and the Interconnection Customer has not commenced sufficient curative actions.

Interconnection Customers that satisfied these commercial viability criteria before November 27, 2018, on the basis of balance-sheet or binding financing may continue to do so in their annual review. The CAISO will not consider the addition of energy storage; changes to the type, number, or manufacturer of inverters; or insubstantial changes to the Generating Facility as modifications under this Section. Interconnection Customers may request such modifications pursuant to this LGIP.

If the Interconnection Customer fails to meet all of the commercial viability criteria but informs the CAISO that it intends to proceed with the modified Commercial Operation Date, the Generating Facility's Deliverability Status will become Energy-Only Deliverability Status. Interconnection Customers that become Energy Only for failure to meet these criteria may not reduce their cost responsibility or Interconnection Financial Security for any assigned Delivery Network Upgrades

as a result of converting to Energy Only unless the CAISO and Participating TO(s) determine that the Interconnection Customer's assigned Delivery Network Upgrade(s) is no longer needed for current Interconnection Customers.

If an Interconnection Customer satisfies all the commercial viability criteria except criterion (b), the CAISO will postpone converting the Generating Facility to Energy-Only Deliverability Status for one year from the day the Interconnection Customer submits the modification request, or eleven years after the CAISO received the Interconnection Request, whichever occurs later. Interconnection Customers exercising this provision must continue to meet all other commercial viability criteria.

If an Interconnection Customer has declared Commercial Operation for a portion of a Generating Facility, or one or more Phases of a Phased Generating Facility, the CAISO will not convert to Energy-Only the portion of the Generating Facility that is in service and operating in the CAISO markets. Instead, the portion of the Generating Facility that has not been developed will be converted to Energy-Only Deliverability Status, resulting in Partial Capacity Deliverability Status for the Generating Facility. However, where the Generating Facility has multiple Resource IDs for the Generating Facility. Any individual Resource ID may have Full Capacity Deliverability Status where the Generating Facility as a whole would have Partial Capacity Deliverability Status. If the Generating Facility downsizes pursuant to Section 7.5 of Appendix DD to the CAISO Tariff to the amount in service and operating in the CAISO markets, it will revert to Full Capacity Deliverability Status.

4.4.7.1 Annual Review

For Interconnection Customers extending their Commercial Operation Date beyond the ten-year threshold and retaining Deliverability pursuant to Section 4.4.7, the CAISO will perform an annual review of commercial viability. If any Interconnection Customer fails to maintain its level of commercial viability, the Deliverability Status of the Generating Facility corresponding to the Interconnection Request will convert to Energy-Only Deliverability Status.

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6.4 Re-Study

If re-study of the Interconnection Feasibility Study is required due to a higher queued project dropping out of the queue, or a modification of a higher queued project subject to LGIP Section 4.4, or re-designation of the Point of Interconnection pursuant to LGIP Section 6.1, or any other effective change in information which necessitates a re-study, the CAISO shall notify the Interconnection Customer and the applicable Participating TO(s) in writing along with providing a description of the expected results of the re-study. Upon receipt of such notice, the Interconnection Customer shall provide the CAISO within ten (10) Business Days either a written request that the CAISO (i) terminate the study and withdraw the Interconnection Request; or (ii)

continue the study. If the Interconnection Customer requests the CAISO to continue the study, the Interconnection Customer shall pay the CAISO an additional \$50,000 deposit for the re-study along with providing written notice for the CAISO to continue.

Such re-study shall take not longer than forty-five (45) calendar days from the date the CAISO receives the Interconnection Customer's written notice to continue the study and payment of the additional \$50,000 deposit. The CAISO shall share applicable study results for review, provide the study results for review and comment to any other potentially-impacted Participating TO(s). incorporate comments, and issue a final study to the Interconnection Customer within sixty (60) calendar days from the date the CAISO receives the Interconnection Customer's written notice to continue the study and payment of the additional \$50,000 deposit. If the Interconnection Feasibility Study cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. Any and all costs of the re-study shall be borne by the Interconnection Customer being re-studied. The CAISO will coordinate the re-study with the Participating TO(s). The Participating TO(s) will invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO will issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment. If the actual costs of the re-study are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer will pay the balance within thirty (30) days of being invoiced.

Notwithstanding any other provision, all refunds pursuant to this Appendix U will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

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7.6 Re-Study

If re-study of the Interconnection System Impact Study is required due to a higher queued project dropping out of the queue, a modification of a higher queued project subject to LGIP Section 4.4, or re-designation of the Point of Interconnection pursuant to LGIP Section 7.2, or any other effective change in information which necessitates a re-study, the CAISO shall notify the Interconnection Customer in writing along with providing a description of the expected results of the re-study. Upon receipt of such notice, the Interconnection Customer shall provide the CAISO within ten (10) Business Days either a written request that the CAISO (i) terminate the study and withdraw the Interconnection Request; or (ii) continue the study. If the Interconnection Customer requests the CAISO to continue the study, the Interconnection Customer shall pay the CAISO an additional \$50,000 deposit for the re-study along with providing written notice for the CAISO to continue.

Such re-study shall take no longer than sixty (60) calendar days from the date the CAISO receives the Interconnection Customer's written notice to continue the study and payment of the additional \$50,000 deposit. The CAISO will share applicable study results with the applicable Participating TO(s) for review and comment, and will incorporate comments into the study report. The CAISO will issue a final study report to the Interconnection Customer within eighty (80) calendar days following receipt of the Interconnection Customer's written notice to continue the study and payment of the additional \$50,000 deposit. If the Interconnection System Impact Study

cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. Any and all costs of re-study shall be borne by the Interconnection Customer being re-studied. The CAISO will coordinate the re-study with the Participating TO(s). The Participating TO(s) will invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO will issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment. If the actual costs of the re-study are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer will pay the balance within thirty (30) days of being invoiced.

Notwithstanding any other provision, all refunds pursuant to this Appendix U will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

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10.1 Optional Interconnection Study Agreement

On or after the date when the Interconnection Customer receives Interconnection System Impact Study results, the Interconnection Customer may request, and the CAISO shall conduct or cause to be conducted, a reasonable number of Optional Interconnection Studies. The request shall describe the assumptions that the Interconnection Customer wishes to be studied within the scope described in LGIP Section 10.2. Within five (5) Business Days after receipt of a request for an Optional Interconnection Study, the CAISO shall provide to the Interconnection Customer an Optional Interconnection Study Agreement.

The Optional Interconnection Study Agreement shall: (i) specify the technical data that the Interconnection Customer must provide for each phase of the Optional Interconnection Study, (ii) specify the Interconnection Customer's assumptions as to which Interconnection Requests with higher Queue Positions will be excluded from the Optional Interconnection Study case and assumptions as to the type of interconnection service for Interconnection Requests remaining in the Optional Interconnection Study case, and (iii) the CAISO's estimate of the cost of the Optional Interconnection Study. To the extent known by the CAISO, such estimate shall include any costs expected to be incurred by any Affected System whose participation is necessary to complete the Optional Interconnection Study. Notwithstanding the above, the CAISO shall not be required as a result of an Optional Interconnection Study request to conduct any additional Interconnection Studies with respect to any other Interconnection Request.

The Interconnection Customer shall execute the Optional Interconnection Study Agreement within ten (10) Business Days of receipt and deliver the Optional Interconnection Study Agreement, the technical data and a \$50,000 deposit to the CAISO as applicable. The CAISO will coordinate the study with the Participating TO(s). The Participating TO(s) will invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO will issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment. If the actual costs of the study are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer will pay the balance

within thirty (30) days of being invoiced.

Notwithstanding any other provision, all refunds pursuant to this Appendix U will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

***** Appendix V

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Appendix D Security Arrangement Details

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with Applicable Reliability Criteria. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

<u>Appendix X</u>

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Appendix C

Security Arrangements Details

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, and Approved Project Sponsor interconnected to the CAISO Controlled Grid to comply with Applicable Reliability Criteria. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cybersecurity practices. * * * * *

Appendix Y

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3.10 Reductions in Generating Facility Capacity

3.10.1 De Minimis Capacity Reductions

If the actual MW capacity of its Generating Facility is reduced by no more than the greater of five percent (5%) of its MW capacity or 10 MW, but by no more than twenty-five percent (25%) of the MW capacity of the Generating Facility, such a one-time reduction shall not constitute a breach of the Interconnection Customer's obligations under the CAISO Tariff or its Generator Interconnection Agreement. The MW capacity value of a Generating Facility for purposes of this section shall be established by reference to the capacity as set forth in the Interconnection Customer's currently applicable Generator Interconnection Agreement. No capacity reductions permitted under this section shall operate to diminish the Interconnection Customer's responsibility for any costs or other obligations set forth in its Generator Interconnection Agreement or the CAISO Tariff.

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6.9.2.3 The Interconnection Customer shall provide the CAISO a \$10,000 deposit for the modification assessment at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Interconnection Customer in writing, within forty-five (45) calendar days from the date the CAISO receives all of the following: the Interconnection Customer's written notice to modify the project, technical data required to assess the request and payment of the \$10,000 deposit. If the modification assessment cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

The CAISO will defer evaluation of any modification requested pursuant to this section by an Interconnection Customer participating in the Generator Downsizing Process until the completion of that Generator Downsizing Process, as set forth in Section 7.5.2 of Appendix DD to the CAISO Tariff.

The Interconnection Customer will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the modification assessment. If the actual costs of the modification assessment are less than the deposit provided by the Interconnection Customer, the Interconnection Customer will be refunded the balance. If the actual costs of the modification assessment are greater than the deposit provided by the Interconnection Customer, the

Interconnection Customer shall pay the balance within 30 days of being invoiced. The CAISO shall coordinate the modification request with the Participating TO(s). The Participating TO(s) shall invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO shall issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment.

The CAISO will publish cost data regarding modification assessments in accordance with the terms set forth in a Business Practice Manual.

Notwithstanding any other provision, all refunds pursuant to this Appendix Y will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

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Appendix Z

LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)

[INTERCONNECTION CUSTOMER]

[PARTICIPATING TO]

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

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ARTICLE 3. REGULATORY FILINGS AND CAISO TARIFF COMPLIANCE

- 3.1 Filing
- 3.2 Agreement Subject to CAISO Tariff

3.3 Relationship Between this LGIA and the CAISO Tariff

3.4 Relationship Between this LGIA and the Net Scheduled PGA

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ARTICLE 1. DEFINITIONS

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Net Scheduled PGA shall mean a Net Scheduled Participating Generator Agreement specifying the special provisions for the operating relationship between a Net Scheduled Generating Unit and the CAISO, a pro forma version of which is set forth in Appendix B.3 of the CAISO Tariff.

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ARTICLE 3. REGULATORY FILINGS AND CAISO TARIFF COMPLIANCE

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3.4 Relationship Between this LGIA and the Net Scheduled PGA. With regard to the rights and obligations of a Net Scheduled Generating Unit that has entered into a Net Scheduled PGA with the CAISO and has entered into this LGIA, if and to the extent a matter is specifically addressed by a provision of the Net Scheduled PGA that is inconsistent with this LGIA, the terms of the Net Scheduled PGA shall govern.

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Appendix D

To LGIA

Security Arrangements Details

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with Applicable Reliability Criteria. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

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Appendix BB

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Appendix D To LGIA

Security Arrangements Details

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with Applicable Reliability Criteria. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

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Appendix CC

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Appendix D To LGIA

Security Arrangements Details

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with Applicable Reliability Criteria. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

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Appendix DD

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3.5.1.1 Use of Interconnection Study Deposit.

The CAISO shall deposit all Interconnection Study Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Interconnection Study Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the Interconnection Studies and to meet and otherwise communicate with Interconnection Customers with respect to their Interconnection Requests.

Except for proposed Generating Facilities processed under the Fast Track Process set forth in Section 5, the Interconnection Study Deposits shall be refundable as follows:

- (a) Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under Section 3.8 on or before thirty (30) calendar days following the Scoping Meeting, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.
- (b) Should an Interconnection Request made under Section 3.5.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under Section 3.8 more than thirty (30) calendar days after the Scoping Meeting, but on or before thirty (30) calendar days following the Results Meeting (or the latest date permitted under this GIDAP for a Results Meeting if a customer elects not to have a Results Meeting) for the Phase I Interconnection Study or the system impact and facilities study for Generating Facilities processed under the Independent Study Process, the CAISO shall refund to the Interconnection Customer the difference between (i) the Interconnection Customer's Interconnection Study Deposit and (ii) the greater of the costs the CAISO and Participating TOs have incurred on the Interconnection Customer's behalf or one-half of the original Interconnection Study Deposit up to a maximum of \$75,000, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal.

Interconnection Customers in Queue Cluster 5 who have provided the Study Deposit may receive a refund of the Interconnection Study Deposit, less actual costs expended

on the Interconnection Studies to date, by withdrawing from the Queue within ten (10) calendar days after July 25, 2012.

- (c) Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under Section 3.8 at any time more than thirty (30) calendar days after the Results Meeting (or the latest date permitted for a Results Meeting if a customer elects not to have a Results Meeting) for the Phase I Interconnection Study, or the system impact and facilities study for proposed Generating Facilities processed under the Independent Study Process, the Interconnection Study Deposit shall be non-refundable.
- (d) Upon execution of a GIA by an Interconnection Customer, the CAISO and the applicable Participating TOs, or the approval by FERC of an unexecuted GIA, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceeds the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.

Notwithstanding the foregoing, an Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request during an Interconnection Study Cycle shall be obligated to pay to the CAISO all costs in excess of the Interconnection Study Deposit that have been prudently incurred or irrevocably have been committed to be incurred with respect to that Interconnection Request prior to withdrawal. The CAISO will reimburse the applicable Participating TO(s) or third parties, as applicable, for all work performed on behalf of the withdrawn Interconnection Request at the CAISO's direction. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.

All non-refundable portions of the Interconnection Study Deposit that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf, and any non-refundable interconnection study deposit funds that are received by the CAISO from a Participating TO, pursuant to a requirement in the Participating TO's wholesale distribution tariff for such funds to be distributed by the CAISO, shall be treated in accordance with Section 7.6.

Notwithstanding any other provision, all refunds pursuant to this Appendix DD will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

* * * * *

3.8 Withdrawal

The Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to the CAISO, and the CAISO will notify the applicable Participating TO(s) and Affected System Operators, if any, within three (3) Business Days of receipt of such a notice. In addition, after confirmation by the CAISO of a valid Interconnection Request under Section 3.5.2, if the Interconnection Customer fails to adhere to all requirements of this GIDAP,

except as provided in Section 15.5 (Disputes), the CAISO shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer within five (5) Business Days of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, the Interconnection Customer shall have five (5) Business Days in which to respond with information or action that either cures the deficiency or supports its position that the deemed withdrawal was erroneous and notifies the CAISO of its intent to pursue Dispute Resolution.

* * * * *

4.2 Determination of Electrical Independence

An Interconnection Request will qualify for the Independent Study Process without having to demonstrate electrical independence pursuant to this Section 4.2 if, at the time the Interconnection Request is submitted, there are no other active Interconnection Requests in the same study area in the current Queue Cluster or in the Independent Study Process.

Otherwise, an Interconnection Request submitted under the Independent Study Process must pass all of the tests for determining electrical independence set forth in this Section 4.2 in order to qualify for the Independent Study Process. These tests will utilize study results for active Interconnection Requests in the same study area, including Phase I Interconnection study results for Generating Facilities in the current Queue Cluster and any system impact study (or combined system impact and facilities study) results for earlier queued Generating Facilities being studied in the Independent Study Process.

4.2.1 Flow Impact Test

An Interconnection Request shall have satisfied the requirements of this Section if it satisfies, alternatively, either the set of requirements set forth in Section 4.2.1.1 or the set of requirements set forth in Section 4.2.1.2.

* * * * *

4.5 Intentionally left blank.

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6.7.2.3 The Interconnection Customer shall provide the CAISO a \$10,000 deposit for the modification assessment at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Interconnection Customer in writing, within forty-five (45) calendar days from the date the CAISO receives all of the following: the Interconnection

Customer's written notice to modify the project, technical data required to assess the request and payment of the \$10,000 deposit. If the modification request results in a change to the Interconnection Facilities or Network Upgrades the modification assessment could take up to ninety (90) total calendar days. If the modification assessment cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

The CAISO will defer evaluation of any modification requested pursuant to this section by an Interconnection Customer participating in the Generator Downsizing Process until the completion of that Generator Downsizing Process, as set forth in Section 7.5.2.

The Interconnection Customer will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the modification assessment. If the actual costs of the modification assessment are less than the deposit provided by the Interconnection Customer, the Interconnection Customer will be refunded the balance. If the actual costs of the modification assessment are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer shall pay the balance within 30 days of being invoiced. The CAISO shall coordinate the modification request with the Participating TO(s). The Participating TO(s) shall invoice the CAISO for any assessment, and, within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO shall issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment.

The CAISO will publish cost data regarding modification assessments in accordance with the terms set forth in a Business Practice Manual.

Notwithstanding any other provision, all refunds pursuant to this Appendix DD will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

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6.8.3 Only Substantial Errors or Omissions Adjust Posting Dates

Only substantial errors and omissions related to the Phase I and Phase II study reports can result in adjustments to Interconnection Financial Security posting due dates. Once the initial and second Interconnection Financial Security posting due dates as described in this section have passed, the error or omission provisions described in this Section 6.8 no longer apply. Unless the error or omission is substantial, resulting in the issuance of a revised final Interconnection Study report, the correction of an error or omission will not delay any deadline for posting Interconnection Financial Security set forth in Section 11. In the case of a substantial error or omission resulting in the issuance of a revised final Phase I or Phase II Interconnection Study report, the deadline for posting Interconnection

Financial Security shall be extended as set forth in Section 11. In addition to issuing a revised final report, the CAISO will promptly notify the Interconnection Customer of any revised posting amount and extended due date occasioned by a substantial error or omission.

* * * * *

7.5.1 Objectives and Applicability

In accordance with the requirements set forth in this Section 7.5, the CAISO shall conduct, on an annual basis, a process for evaluating requests by Interconnection Customers to reduce the megawatt generating capacities of their Generating Facilities. In each annual cycle of this Generator Downsizing Process, the CAISO will process valid Generator Downsizing Requests submitted during the applicable Generator Downsizing Request Window as part of the annual reassessment process set forth in Section 7.4.

All reductions to the megawatt generating capacity of Generating Facilities by Interconnection Customers shall utilize this annual Generator Downsizing Process unless explicitly exempted. Specifically, beginning on the date of the opening of the annual Generator Downsizing Request Window, all proposed reductions of megawatt generating capacity by Interconnection Customers shall, regardless of the dates of the Interconnection Customer's Interconnection Request(s), be subject to the requirements and procedures of the Generator Downsizing Process set forth in Section 7.5, except for MW capacity reductions made pursuant to the following: (1) the provisions of the CAISO's interconnection procedures that permit Interconnection Customers to reduce the size of their Generating Facilities between the Phase I and Phase II Interconnection Studies, as set forth in Section 6.7.2; (2) specific non-conforming provisions of an Interconnection Customer's Generator Interconnection Agreement that provide the Interconnection Customer with an explicit right to reduce the capacity of its Generating Facility through a partial termination of its Generator Interconnection Agreement; (3) the de minimis threshold set forth in Section 7.5.13.1; (4) the parking options set forth in Sections 8.9.4, 8.9.5, and 8.9.6; and (5) where the CAISO and Participating TO determine no study is required.

Generator Downsizing Requests that meet the eligibility requirements set forth in this Section 7.5 will be studied as part of the next annual reassessment process set forth in Section 7.4.

* * * * *

7.5.13 Reductions in Generating Facility Capacity

7.5.13.1 De Minimis Capacity Reductions

If the actual MW capacity of its Generating Facility is reduced by no more than the greater of five percent (5%) of its MW capacity or 10 MW, but not by more than twenty-five percent (25%) of the MW capacity of the Generating Facility, such a one-time reduction shall not constitute a breach of the Interconnection Customer's obligations under the CAISO Tariff or its Generator Interconnection Agreement. The MW capacity value of a Generating Facility for purposes of this section shall be established by reference to the capacity as set forth in the Interconnection Customer's currently applicable Generator Interconnection Agreement. No capacity reductions permitted under this Section 7.5.13 shall operate to diminish the Interconnection Customer's responsibility for any costs or other obligations set forth in its Generator Interconnection Agreement or the CAISO Tariff.

* * * * *

8.9.2 Second Component: Allocating TP Deliverability

Following the process set forth in Section 8.9.1, the CAISO will allocate any remaining TP Deliverability in the following order.

The CAISO shall allocate available TP Deliverability to all or a portion of the full MW capacity of the Generating Facility as specified in the Interconnection Request. Where a criterion is met by a portion of the full MW generating capacity of the Generating Facility, the eligibility score associated with that criterion shall apply to the portion that meets the criterion. The demonstration must relate to the same proposed Generating Facility as described in the Interconnection Request.

- (1) To Interconnection Customers in the current Queue Cluster or coming out of parking that have executed power purchase agreements, and to Interconnection Customers in the current Queue Cluster that are Load Serving Entities serving their own Load.
- (2) To Interconnection Customers in the current Queue Cluster or coming out of parking that are actively negotiating a power purchase agreement or on an active short list to receive a power purchase agreement.
- (3) To Interconnection Customers in the current Queue Cluster with a completed Phase II Interconnection Study that have not parked, which are subject to Section 8.9.2.2 and elect to proceed without a power purchase agreement, or that parked before November 27, 2018 and attested to balance-sheet financing upon the end of their parking period.

Only these three foregoing groups may trigger the construction of Delivery Network Upgrades pursuant to Section 6.3.2. After the CAISO has allocated TP Deliverability to the three foregoing groups, the CAISO will allocate any remaining TP Deliverability to Energy Only Interconnection Customers requesting Deliverability based on the reassessment study and in the following order:

(4) To Interconnection Customers that have not achieved their Commercial Operation Date, originally requested Full Capacity Deliverability Status or Partial Capacity Deliverability Status, and have executed power purchase agreements; and to Interconnection Customers that have achieved their Commercial Operation Date and have executed power purchase agreements.

- (5) To Interconnection Customers that have not achieved their Commercial Operation Date, originally requested Full Capacity Deliverability Status or Partial Capacity Deliverability Status, and are actively negotiating a power purchase agreement or on an active short list to receive a power purchase agreement; and to Interconnection Customers that have achieved their Commercial Operation Date and are actively negotiating a power purchase agreement or on an active short list to receive a power purchase agreement or on an active short list to receive a power purchase agreement.
- (6) To Interconnection Customers that originally requested Full Capacity Deliverability Status or Partial Capacity Deliverability Status but achieved their Commercial Operation Date as Energy Only.
- (7) To Interconnection Customers that achieved their Commercial Operation Date.

The CAISO will allocate TP Deliverability to these four foregoing groups solely based on TP Deliverability available from existing transmission facilities, from already planned upgrades in the CAISO Transmission Planning Process, or upgrades assigned to an interconnection project that has an executed GIA and currently has a TPD allocation.

Energy Only Interconnection Customers requesting Deliverability must submit to the CAISO a \$60,000 study deposit for each Interconnection Request seeking TP Deliverability. The CAISO will deposit these funds in an interest bearing account at a bank or financial institution designated by the CAISO. The funds will be applied to pay for prudent costs incurred by the CAISO, the Participating TO(s), and/or third parties at the direction of the CAISO or applicable Participating TO(s), as applicable, to perform and administer the TP Deliverability studies for the Energy Only Interconnection Customers. Any and all costs of the Energy Only TP Deliverability study will be borne by the Interconnection Customer. The CAISO will coordinate the study with the Participating TO(s). The Participating TO(s) will invoice the CAISO for any work within seventy-five (75) calendar days of completion of the study, and, within thirty (30) days thereafter, the CAISO will issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the study. If the actual costs of the study are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer will pay the balance within thirty (30) days of being invoiced.

All power purchase agreements in this Section 8.9 must require Deliverability for the Interconnection Customer to represent that it has, is negotiating, or is shortlisted for a power purchase agreement. For all TP Deliverability allocations based upon having, negotiating, or being shortlisted for power purchase agreements, the CAISO will allocate TP Deliverability up to the amount of deliverable MW capacity procured by the power purchase agreement. All Load Serving Entities building Generating Facilities to serve their own Load must be doing so to fulfill a regulatory requirement that warrants Deliverability. Load Serving Entities acting as Interconnection Customers are otherwise eligible for all other attestations.

Notwithstanding any other provision, all refunds pursuant to this Appendix DD will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

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8.9.2.1 Deliverability Affidavits

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In allocating TP Deliverability under this section, in a situation where the TP Deliverability cannot accommodate all of the Interconnection Customers in a qualifying group, the CAISO will allocate TP Deliverability based on the highest numerical score. In a situation where the available amount of TP Deliverability can accommodate all Interconnection Customers with equal scores, the CAISO will allocate the TP Deliverability to the Interconnection Customers with the lowest LDNU cost estimates. For all TP Deliverability allocations based upon having, negotiating, or being shortlisted for power purchase agreements, the CAISO will allocate TP Deliverability up to the amount of deliverable MW capacity procured by the power purchase agreement.

* * * * *

8.9.3 Retaining TP Deliverability Allocation

For Interconnection Customers in Queue Cluster 10 or later, once a Generating Facility is allocated TP Deliverability under Section 8.9.1, the Interconnection Customer annually, on the date set forth and according to the process described in the Business Practice Manual, must demonstrate that the Generating Facility meets the following criteria to retain its TP Deliverability:

* * * * *

(5) The Interconnection Customer must maintain its Commercial Operation Date set forth in the GIA unless an extension results in no Material Modification or delay in the construction schedule for Network Upgrades common to multiple Generating Facilities; or unless the extension is occasioned by a material delay in the Participating TO's construction of any Network Upgrades or Participating TO's Interconnection Facilities

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8.9.9 Deliverability Transfers

Deliverability may not be assigned or otherwise transferred except as expressly provided by the CAISO Tariff. An Interconnection Customer may reallocate its Generating Facility's Deliverability among its own Generating Units or Resource IDs at the Generating Facility. The Generating Units must be located at the same Point of Interconnection. The Generating Facility's aggregate output as evaluated in the Deliverability Assessment cannot increase as the result of any transfer, but may decrease based on the assignee's characteristics and capacity. The CAISO will inform the Interconnection Customer of each Generating Unit's Deliverability Status and associated capacity as the result of any transfer. The results will be based on the current Deliverability Assessment methodology.

14.2.4.2 The Generating Unit owner will provide the CAISO a \$10,000 deposit for the limited operation study with the request. Except as provided below, any limited operation study will be concluded, and a response provided to the Generating Unit owner in writing, within forty-five (45) calendar days from when the CAISO receives all of the following: the Generating Unit owner's written approval of the limited operation study plan, technical data required to assess the request, and the \$10,000 deposit. If the limited operation study cannot be completed within that time period, the CAISO will notify the Generating Unit owner and provide an estimated completion date and an explanation of the reasons why additional time is required.

Notwithstanding any other provision, all refunds pursuant to this Appendix DD will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

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Appendix 3

GENERATOR INTERCONNECTION STUDY PROCESS AGREEMENT FOR QUEUE CLUSTERS

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13.10 [Not Used]

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IN WITNESS THEREOF, the Party has caused this Agreement to be duly executed by its duly authorized officers or agents on the day and year first above written.

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Appendix 4

AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY AGREEMENTS

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3.4.1 For any tasks specifically assigned to the PTO pursuant to Attachment A or otherwise mutually agreed upon by the CAISO and the PTO, the CAISO reserves the right, on a case-by-case basis, to perform or reassign to a mutually agreed upon and pre-qualified contractor such task only where: (a) the quality and accuracy of prior PTO Interconnection Study work product resulting from assigned tasks has been deemed deficient by the CAISO, the CAISO has notified the PTO pursuant to the notice provision of Section 4.15 of this Agreement in writing of the deficiency, and the deficiency has not been cured pursuant to Section 3.4.2 of this Agreement; (b) the timeliness of PTO Interconnection Study work product has been deemed deficient, and either (i) the CAISO has not been notified of the reasons and actions taken to address the timeliness of the work, or (ii) if notified, the stated reasons and actions taken are insufficient or unjustifiable and the PTO has not cured the deficiency pursuant to Section 3.4.2 of this Agreement; (c) the PTO has failed, in a mutually agreed upon timeframe, to provide the CAISO with information or data related to an Interconnection Request despite a written request by the CAISO, pursuant to Section 3.5 hereof, to do so, and such data is the responsibility of the PTO to provide to the CAISO, subject to Section 4.3 of this Agreement; (d) the PTO advises the CAISO in writing that it does not have the resources to adequately or timely perform the task according to the applicable timelines set forth in Attachment A; or (e) the estimated cost of the PTO performing the task has been determined in writing by the CAISO to significantly exceed the cost of the CAISO or mutually agreed upon contractor performing the task, inclusive of the costs that will be incurred by the PTO in exercising its review rights of the results of any such tasks performed by such third party(ies). If the CAISO deviates from the assignments set forth in Attachment A based on the foregoing factors, the CAISO will provide the PTO with a written explanation for the deviation and any associated reassignments of work. The PTO may contest the deviation pursuant to the Dispute Resolution procedures set forth in Section 4.1 of this Agreement.

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Appendix EE

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ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION

5.1 Options

- 5.1.1 Standard Option
- 5.1.2 Alternate Option
- 5.1.3 Option to Build
- 5.1.4 Negotiated Option
- 5.1.5 Merchant Option

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Appendix D Security Arrangements Details

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with Applicable Reliability Criteria. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

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Appendix H

INTERCONNECTION REQUIREMENTS FOR AN ASYNCHRONOUS GENERATING FACILITY

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vi. Transient Data Recording Equipment for Facilities above 20 MW

Asynchronous Generating Facilities with generating capacities of more than 20 MW must monitor and record data for all frequency ride-through events, transient low voltage disturbances that initiated reactive current injection, reactive current injection or momentary cessation for transient high voltage disturbances, and inverter trips. The data may be recorded and stored in a central plant control system. The following data must be recorded:

Plant Level:

- (1) Plant three phase voltage and current
- (2) Status of ancillary reactive devices
- (3) Status of all plant circuit breakers
- (4) Status of plant controller
- (5) Plant control set points
- (6) Position of main plant transformer no-load taps
- (7) Position of main plant transformer tap changer (if extant)
- (8) Protective relay trips or relay target data

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Appendix FF

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Article 3. Effective Date, Term, Termination, and Disconnection

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3.4.5 Modification of the Small Generating Facility

Prior to making any modifications to the Small Generating Facility before it has achieved its Commercial Operation Date, the Interconnection Customer must first request that the CAISO evaluate whether such modification is a Material Modification and receive written authorization from the Participating TO and the CAISO. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. The CAISO may engage the services of the applicable Participating TO to assess the modification. Costs incurred by the Participating TO and CAISO (if any) shall be borne by the party making the request under Section 6.7.2 of Appendix DD, and such costs shall be included in any CAISO invoice for modification assessment activities. If the Interconnection Customer has achieved its Commercial Operation Date, the CAISO and Participating TO(s) will review the requested modification pursuant to Sections 25 and 25.1(c) of the CAISO Tariff. If the Interconnection Customer makes modifications without the Participating TO's and the CAISO's prior written authorization, the Participating TO or the CAISO shall have the right to temporarily disconnect the Small Generating Facility. Any change to the Point of Interconnection, except those deemed acceptable under this article of the GIDAP SGIA or so allowed elsewhere, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

Notwithstanding Section 7.5 of Appendix DD, at any time after achieving its Commercial Operation Date, the Interconnection Customer may reduce the megawatt generating capacities of its Generating Facilities, subject to Section 25.1(c) of the CAISO Tariff. Section 7.5.11 of Appendix DD will still apply to such requests to reduce capacity.

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Article 6. Billing, Payment, Milestones, And Financial Security

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6.4.1 The Interconnection Customer is obligated to provide all necessary Interconnection Financial Security required under Section 11 of the GIDAP in a manner acceptable under Section 11 of the GIDAP. Failure by the Interconnection Customer to timely satisfy the GIDAP's requirements for the provision of Interconnection Financial Security shall be deemed a breach of this Agreement and a condition of Default of this Agreement.

Article 12. Miscellaneous

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12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all transmission providers, market participants, and interconnection customers interconnected to electric systems to comply with Applicable Reliability Criteria. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

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Appendix GG

[Not Used]

Attachment C – Marked Tariff

Bucket Reconciliation Filing

California Independent System Operator Corporation

July 10, 2020

Section 4

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Section 4.5.1 Scheduling Coordination Certification

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4.5.1.1.1 Scheduling Coordinator Application

To become a Scheduling Coordinator, a Scheduling Coordinator Applicant must submit a completed application, as set forth in the applicable Business Practice Manual, to the CAISO by mail<u>electronic</u> <u>submission</u>, or in person. A Scheduling Coordinator Applicant may retrieve the application and necessary information from the CAISO Website.

* * * * *

4.5.1.1.6 CAISO Review of Application[Not Used]

Within ten (10) Business Days after receiving an application, the CAISO will provide electronic notification to the Scheduling Coordinator Applicant whether the Scheduling Coordinator Applicant has submitted all necessary information as set forth in Section 4.5.1, and the Scheduling Coordinator Application Form set forth in the applicable Business Practice Manual.

* * * * *

4.5.1.1.10.1 Scheduling Coordinator's Administrative, Financial and Technical Requirements

The CAISO will not certify that a Scheduling Coordinator Applicant has become a Scheduling Coordinator until the Scheduling Coordinator Applicant has completed all of the following requirements:

- (a) provided the technical/operational information required <u>in Tariff Section 4.5</u>to complete the Scheduling Coordinator Application Form as set forth in the applicable Business Practice Manual, and to comply with Section 10.3;
- (b) executed a network connectivity security agreement for access to the CAISO's software used in conducting business with the CAISO and compliance with the CAISO's system security requirements in a form approved by the CAISO, if applicable;
- (c) obtained and installed any required software for functional interface forValidation, Estimation and Editing meter values (VEE), if applicable;
- (d) undertaken required training and testing regarding the use of the CAISO's market, operating, and technical systems, as specified in the applicable Business Practice Manual;
- (e) provided its bank account information and arranged for Fedwire transfers, with the Scheduling Coordinator being obligated to maintain at all times an account with a bank capable of Fedwire transfer and being permitted, at its option, to arrange for ACH payment service;
- (f) provided an emergency plan specifying the procedures by which Scheduling
 Coordinator operations and contacts with the CAISO will be maintained during an emergency, containing information specified in the applicable Business Practice Manual; and
- (g) obtained and installed a computer link and any necessary software in order to communicate with the CAISO, as specified in the applicable Business Practice Manual.

Additional instructions for completing the foregoing requirements will be set forth in a Business Practice Manual posted on the CAISO Website. <u>The Scheduling Coordinator is also responsible for ongoing</u> <u>compliance with all tariff requirements applicable to Scheduling Coordinators.</u>

* * * * *

4.5.1.2.1.2 Obligation to Report a Change in Credit Rating or Material Change in Financial Condition

The Scheduling Coordinator has an ongoing obligation to inform the CAISO within three <u>five (35)</u> Business Days of any change to its credit ratings or any Material Change in Financial Condition.

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4.10.1.1 Candidate CRR Holder Application

To become a Candidate CRR Holder, a Candidate CRR Holder applicant must submit a completed written application, as provided in the applicable form posted on the CAISO Website, to the CAISO by mail, <u>electronic submission</u>, or in person. A Candidate CRR Holder applicant may retrieve the application and necessary information from the CAISO Website.

* * * * *

4.10.1.5.1 Information Requirements

The Candidate CRR Holder applicant must <u>complete all of the following requirements as part of the</u> application processsubmit with its application:

- (a) the proposed date for commencement of the CRR Allocation, CRR Auction or Secondary Registration System in which the applicant intends to qualify to participate, which may not be less than sixty (60) days after the date the application was filed, unless waived by the CAISO;
- (b) financial <u>and creditSecurity</u> information as set forth in Section 12;

- (c) proof of completion of CRR training or expected completion of CRR training;
- (d) the prescribed non-refundable application fee; and
- (e) identity of the applicant's Affiliates, as described in Section 39.9.

* * * * *

4.10.1.8.1 Candidate CRR Holder Applicant's Acceptance

If the CAISO accepts the application, the Candidate CRR Holder applicant must return an executed CRR Entity Agreement and any required <u>financial and credit information pursuant to Section 12 of the CAISO</u> <u>tariffletter of credit, guaranty, escrow agreement or other form of Financial Security, as applicable</u>.

* * * * *

4.14.1.1 Convergence Bidding Entity Application

To become a Convergence Bidding Entity, a Convergence Bidding Entity applicant must submit a completed written application, as provided in the applicable form posted on the CAISO Website, to the CAISO by mail, <u>electronic submission</u>, or in person.

* * * * *

Section 5

5.1 Black Start Capability
The CAISO shall determine the amount and location of Black Start Generation it requires through a system restoration plan that meets the requirements of Applicable Reliability Criteria. In making this determination, the CAISO shall consult with Participating Transmission Owners.

Participating Transmission Owners with their own system restoration plans that include transmission lines and associated facilities that are part of the CAISO Controlled Grid shall upon the request of the CAISO provide the CAISO with these system restoration plans. The CAISO shall consider Participating Transmission Owners' system restoration plans in developing a system restoration plan for the CAISO Balancing Authority Area and may identify Black Start Generation needs for the CAISO Balancing Authority Area not identified in Participating Transmission Owner's system restoration plans. Scheduling Coordinators shall notify the CAISO of their Load restoration time requirements for any Loads that provide emergency services. This notice shall include the MW amount of Load, required restoration time, and associated Node on the CAISO Controlled Grid. For purposes of preparing system restoration plans, the CAISO shall consult with applicable Participating Transmission Owners concerning any Load restoration information provided by Scheduling Coordinators.

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Section 7

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7.7.3 Suspension of CAISO Markets and Application of Administrative Price.

(d) If a Load curtailment is required to manage System Emergencies, -the CAISO will determine the amount and location of Load to be reduced. In those instances when the CAISO requires load-shedding assistance from the entire CAISO Balancing Authority Area to preserve or restore stable operation of the CAISO Controlled Grid and to the extent practicable, the CAISO will allocate a portion to each UDC or MSS Operator based on the ratio of its Demand (at the time of the Balancing Authority Area annual peak for the previous year) to total Balancing Authority Area annual peak Demand for the previous year taking into account system considerations and the UDC's or MSS Operator's curtailment rights under their tariffs. Each UDC or MSS Operator shall be responsible for notifying its customers and Generators connected to its system of curtailments and service interruption.

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7.7.4 Preparatory Actions for a System Emergency

(a) Periodic Tests Of Emergency Procedures. The CAISO shall develop and administer periodic tests of System Emergency procedures designed to ensure that the Participating <u>Transmission Owners and Scheduling Coordinators received the information required</u> <u>CAISO Market Participants are capable of promptly and efficiently to</u> responding to operating conditions, including imminent or actual System Emergencies.

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Section 9

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9.3.10.6.1 Outage Reporting By NRS-RA Resources

The Scheduling Coordinator for a <u>N</u>non-Resource-Specific System Resource that provides Resource Adequacy Capacity shall report to the CAISO through the outage management system any Forced Outage of a Generating Unit or Forced Outage or Constraint of transmission facilities external to the CAISO Balancing Authority Area that directly results in the inability of the resource to deliver all or a portion of the Resource Adequacy Capacity identified in the resource's Supply Plan to the CAISO Balancing Authority Area. The Scheduling Coordinator for a <u>N</u>non-Resource-Specific System Resource that provides Resource Adequacy Capacity is required to provide to the CAISO notice of the Forced Outage or Constraint within sixty (60) minutes after becoming aware of the circumstance. The Scheduling Coordinator for a <u>N</u>non-Resource-Specific System Resource Adequacy Capacity shall promptly provide information requested by the CAISO to enable the CAISO to review the Forced Outage or Constraint and its impact on the ability of the resource to deliver Resource Adequacy Capacity to the CAISO Balancing Authority Area.

DMM shall identify and notify FERC's Office of Enforcement staff of instances in which the reporting of the Forced Outage or Constraint may require investigation. DMM is to make a non-public referral to FERC in all instances where DMM has reason to believe that the reporting of the Forced Outage or Constraint constitutes a Market Violation other than those Market Violations identified in Section 11.1.13 of Appendix P. While DMM need not be able to prove that a Market Violation has occurred, DMM is to provide sufficient credible information to warrant further investigation by FERC. Once DMM has obtained sufficient credible information to warrant referral to the Commission, DMM is to immediately refer the matter to FERC and desist from independent action related to the alleged Market Violation. This does not preclude DMM from continuing to monitor for any repeated instances of the activity by the same or other entities, which would constitute new Market Violations. DMM is to respond to requests from FERC for any additional information in connection with the alleged Market Violation it has referred.

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9.4.3 Uncomplicated Workd

When line rearrangements and/or station equipment work is uncomplicated and easily understood, the CAISO Outage Coordination Office may determine that the work can be accomplished using Outages

approved in accordance with Section 9.3.6. The CAISO will make this determination in coordination with the respective requesting Operator or Connected Entity.



10.2.4 Certification Of Meters

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10.2.4.4 Certificate of Compliance

If the Metering Facilities satisfy the certification criteria as specified in this CAISO Tariff and in the Business Practice Manuals (after taking into account any exemptions to the certification criteria granted by the CAISO), the CAISO will issue a Certificate of Compliance of those Metering Facilities to the CAISO Metered Entity.

Subject to any exemption granted by the CAISO under this CAISO Tariff, the CAISO will not accept Revenue Quality Meter Data from a CAISO Metered Entity unless that Revenue Quality Meter Data is produced by Metering Facilities that are certified in accordance with this CAISO Tariff and the CAISO Metered Entity has a current Certificate of Compliance.

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10.2.4.6 Revocation of Certification

The CAISO may revoke in full or in part any Certificate of Compliance if:

- (a) it has reasonable grounds to believe that all or some of the Metering Facilities covered by that Certificate of Compliance no longer meet the certification criteria for Metering Facilities contained in the CAISO Tariff and the Business Practice Manuals; and
- (b) it has given written notice to the relevant CAISO Metered Entity stating that it does not believe that the identified Metering Facilities meet the certification criteria (including the reasons for that belief) and that CAISO Metered Entity fails to satisfy the CAISO, within the time period specified in the CAISO's notice, that the Metering Facilities meet the certification criteria.

If the CAISO revokes in full or part a Certificate of Compliance, the relevant CAISO Metered Entity may seek recertification of the relevant Metering Facilities by requesting certification. Such request must indicate that it relates to Metering Facilities in respect of which the CAISO has previously revoked a Certificate of Compliance.

-Subject to any exemption granted by the CAISO under this CAISO Tariff, the CAISO will not accept Revenue Quality Meter Data from a CAISO Metered Entity unless that Revenue Quality Meter Data is produced by Metering Facilities that are certified in accordance with this CAISO Tariff and the CAISO Metered Entity has a current Certificate of Compliance.

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10.2.7 Format of Meter Data

CAISO Metered Entities shall make available to the CAISO's RMDAPS Revenue Quality Meter Data meeting the <u>format</u> requirements of this Section 10 and in accordance with the Business Practice Manual <u>standards</u>. The format of Meter Data to be submitted shall be identified by Transmission Owner, <u>Distribution System, PNode, CAISO Controlled Grid interface point</u> and other information reasonably required by the CAISO.

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10.3.6 Settlement Quality Meter Data Submission

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10.3.6.3 Timing of SQMD Submission for Recalculation Settlement Statement T+55B Scheduling Coordinators must submit Actual Settlement Quality Meter Data for the Scheduling Coordinator Metered Entities they represent to the CAISO no later than midnight on the forty-eighth (48) Business Day after the Trading Day (T+48B) for the Recalculation Settlement Statement T+55B calculation. A Scheduling Coordinator that timely submits Actual Settlement Quality Meter Data for the Recalculation Settlement Statement T+12B pursuant to Section 10.3.6.2 may submit revised Actual Settlement Quality Meter Data for the Recalculation Settlement T+55B no later than the fortyeighth (48) Business Day after the Trading Day pursuant to this Section.

- (a) When Actual Settlement Quality Meter Data is not received by the CAISO for a Scheduling Coordinator Metered Entity by forty-eight (48) Business Days after the Trading Day (T+48B), the Scheduling Coordinator has failed to submit complete and accurate meter data as required by Section 37.5.2.1 and will be subject to monetary penalty pursuant to Section 37.5.2.2.
- (b) Any Scheduling Coordinator Estimated Settlement Quality Meter Data submitted by a Scheduling Coordinator on behalf of the Scheduling Coordinator Metered Entities it represents that is not replaced with Actual Settlement Quality Meter Data by forty-eight (48) Business Days after the Trading Day (T+48B) has failed to submit complete and accurate meter data as required by Section 37.5.2.1 and will be subject to monetary penalty pursuant to Section 37.5.2.2. In the absence of Actual Settlement Quality Meter Data, Scheduling Coordinator Estimated Settlement Quality Meter Data will be used in the Recalculation Settlement Statements.
- (c) The CAISO will not estimate a Scheduling Coordinator Metered Entity's Settlement Quality Meter Data for any outstanding metered Demand and/or Generation for use in a Recalculation Settlement Statement T+55B calculation. Any previous CAISO Estimated Settlement Quality Meter Data that the Scheduling Coordinator does not replace with Actual Settlement Quality Meter Data by forty-eight (48) Business Days after the Trading

Day (T+48B) will be set to zero. The CAISO will follow the control process described in the BPM for Metering to monitor and identify the CAISO Estimated Settlement Quality Meter Data that was not timely replaced and will take proactive measures to obtain the Actual Settlement Quality Meter Data. A Scheduling Coordinator that fails to replace CAISO Estimated Settlement Quality Meter Data with Actual Settlement Quality Meter Data by forty-eight (48) Business Days after the Trading Day (T+48B) has failed to provide complete and accurate Settlement Quality Meter Data as required by Section 37.5.2.1 and will be subject to monetary penalty pursuant to Section 37.5.2.2.

10.3.6.4 Timing of SQMD Submission for Recalculation Settlement Statement T+9M

Scheduling Coordinators may submit Actual Settlement Quality Meter Data for the Scheduling Coordinator Metered Entities they represent to the CAISO, during the period from one-hundred and sixtyeight Business Days after the Trading Day (T+168B) to one-hundred and seventy-two Business Days after the Trading Day (T+172B) for use in Recalculation Settlement Statement T+9M <u>up to one hundred</u> and seventy-two Business Days after the Trading Day (T+172B). Scheduling Coordinators submitting Actual Settlement Quality Meter Data <u>after forty-eight Business Days after the Trading Day (T+48B)</u> <u>butduring the period, from T+168B up</u> to T+172B, which is more than forty-eight (48) Business Days after the Trading Day (T+48B) have failed to provide complete and accurate Settlement Quality Meter Data as required by Section 37.5.2.1 and will be subject to monetary penalty pursuant to Section 37.5.2.2. Any Actual Settlement Quality Meter Data that is submitted by a Scheduling Coordinator after the T+48B meter data submittal deadline, and outside the period from T+168B to T+172B, will be rejected by the CAISO and not used in settlement calculations.

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Section 11

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11.8.2 IFM Bid Cost Recovery Amount

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11.8.2.1.3 IFM Pump Shut-Down Cost

For Pumped-Storage Hydro Units and Participating Load only, the IFM Pump Shut-Down Costs for each Settlement Interval shall be equal to the relevant Pump Shut-Down Cost submitted to CAISO in the IFM divided by the number of Settlement Intervals in a Trading Hour that is preceded by a previous commitment by the IFM to pump, in which actual shut down occurs if the unit is committed by the IFM not to pump and actually does not operate in pumping mode in that Settlement Interval (as detected through Meter Data). The IFM Pump Shut-Down Cost for an IFM Shut-Down period shall be zero if: (1) it is followed by an IFM <u>Self-Commitment Period</u> or R<u>T</u>FM Self-Commitment Period in generation mode; (2) the Shut-Down is due to an Outage reported through the CAISO's outage management system as described in Section 9; or (3) the Shut-Down is delayed by the RTM past the IFM Shut-Down period in question or cancelled by the RTM before the Shut-Down process has started.

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11.8.2.5.1 Calculation of Day-Ahead Metered Energy Adjustment Factor

The CAISO will calculate the Day-Ahead Metered Energy Adjustment Factor for each BCR Eligible Resource through the following steps:

 a) For Generation Unit and Resource_-Specific_-System Resource scheduled by CAISO in the Day-Ahead Market

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11.23 Penalties for Uninstructed Imbalance Energy

Effective December 1, 2004, the CAISO shall not charge any Uninstructed Deviation Penalties pursuant

to this Section 11.23 until FERC issues an order authorizing the CAISO to charge Uninstructed Deviation Penalties pursuant to this section. Beginning with Settlement Statements for the first Trading Day for which FERC authorizes the CAISO to charge Uninstructed Deviation Penalties pursuant to this section, the CAISO shall charge Scheduling Coordinators Uninstructed Deviation Penalties for Uninstructed Imbalance Energy resulting from resource deviations outside a Tolerance Band from their Dispatch Operating Point, for dispatched resources, or their Day-Ahead Schedule otherwise. Publishing of Uninstructed Deviation Penalty results will not occur on the Initial Settlement Statement T+3B but rather will occur on the Recalculation Settlement Statement T+12B. The Uninstructed Deviation Penalty will be applied as follows:

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(h) The Uninstructed Deviation Penalty will be calculated and assessed for each resource individually, except as specified in Appendix R, which specifies when Uninstructed Deviations from individual resources may be aggregated.

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11.29.10 Billing And Payment

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11.29.10.5 Use of Estimated Data

In the event of an emergency or a failure of any of the CAISO software or business systems, the CAISO may use estimated Settlement Statements and Invoices and Payment Advices and may implement any temporary variation of the timing requirements relating to <u>the Settlement Statements and Invoices and Payment Advices</u> <u>and Invoices and Payment Advices</u> <u>the Settlement and billing process contained in the CAISO Tariff</u>. Details of the variation and the method chosen to produce estimated data, Settlement Statements and Invoices and Payment Advices will be published on the CAISO Website.

11.31 Intertie Schedules Decline Charges

The Decline Potential Charge shall apply to Intertie transactions as discussed below. The Decline Potential Charge does not apply to FMM Schedules of Economic Bids, dynamic transfers, and Variable Energy Resources located outside the CAISO Balancing Authority Area that have been qualified to use the forecast of their output produced by the CAISO as specified in Section 4.8.2.1.2.

- (a) HASP Block Intertie Schedules: Any HASP Block Intertie Schedule for an Energy import when the HASP Block Intertie Schedule is not delivered for any reason (with no exceptions based on the circumstances of a particular failure to deliver), to the extent the decline is made prior to the start of the applicable FMM interval. The Decline Potential Charge Exports shall apply to any HASP Block Intertie Schedule for an Energy export when the HASP Block Intertie Schedule is not delivered for any reason (with no exceptions based on the circumstances of a particular failure to deliver), to the extent the decline is made prior to the start of the applicable FMM interval. The Decline Potential Charge Exports based on the circumstances of a particular failure to deliver), to the extent the decline is made prior to the start of the applicable FMM interval. The Decline Potential Charge will not apply if the decline is made after the applicable E-<u>T</u>tag deadline, as defined in Section 30.6.2.
- (b) Economic Hourly Block Bid with Intra-Hour Option: Imports and exports accepted in an HASP Block Intertie Schedule that are incremental to Day-Ahead Schedules are subject to the Decline Potential Charge to the extent the decline is made prior to the start of the applicable FMM interval. The Decline Potential Charge will not apply if the decline is made after the applicable E-<u>T</u>tag deadline, as defined in Section 30.6.2. To the extent the incremental import or export schedule in HASP is curtailed through the FMM, for the 15-minute FMM interval in which the resource follows the CAISO Dispatch Instructions will not be subject to the Decline Potential Charge.

Section 14

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14.7.2 Direction Allocation of Reliability Standards Penalties

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14.7.2.2 Notice to Affected RC Customer or Market Participant

The CAISO will notify the <u>RC Customer(s) or Market Participant(s)</u> it believes contributed to the Reliability Standards violation(s) during the CMEP proceeding or, if applicable, during the enforcement proceeding directly instituted by FERC. This notification shall be in writing and shall: (i) inform the RC Customer(s) or Market Participant(s) that the CAISO intends to invoke the direct allocation provisions of this Section; (ii) detail the underlying factual basis for the CAISO's position; and (iii) inform the <u>RC Customer(s) or Market</u> Participant(s) that it may seek to participate in the CMEP proceeding or, if applicable, the enforcement proceeding directly instituted by FERC.

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Section 19

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19.7 Settlements and Billing for RC Customers

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(e) **Payment by RC Customers.**

(3) Late Payment and Default. If payment is not received by <u>21</u>the last Business Days after an RC Services Invoice is issued in January, the RC Customer will be charged a \$1,000 late payment fee on a supplemental RC Services Invoice and will be considered to be in default, understanding that the CAISO reserves the right to terminate, consistent with the terms of the RCSA, such RC Customer's RC Services until such time as payment is received except as otherwise may be required to comply with Schedule 2 of the RCSA.

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Section 24

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24.13 Interregional Transmission Proposals in the Regional Process

Under the procedures set forth in Sections 24.3.3(d) and 24.4.3, the CAISO may consider potential interregional solutions to regional needs during Phase 2 of the Transmission Planning Process. Potential interregional solutions submitted to the CAISO pursuant to these sections will be evaluated on the basis of the need for the entire proposed facility as a CAISO regional solution, the costs of which would be recovered through the Transmission Access Charge if approved as part of the comprehensive Transmission Plan. A potential interregional solution found by the CAISO to meet identified regional needs will be submitted to the CAISO Board for approval in the Transmission Plan and, if approved and applicable, the Project Sponsor will be selected in accordance with the competitive solicitation process described in Section 24.5. Subsequently, the Project Sponsor may elect to have the project studied by Relevant Planning Regions other than the CAISO pursuant to section 24.18.3 and may elect to seek Interregional Cost Allocation per section 24.18.4. The Project Sponsor must comply with the submission requirements contained in sections 24.18.3.1 and 24.18.4.1, respectively. The CAISO may also identify an interregional solution to the Relevant Planning Regions if the CAISO believes such conceptual solution could provide benefits to the other Planning Regions.

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Section 25

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25.5 Modifications to Generating Facilities

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25.5.2

The Generating Unit owner will provide the CAISO a \$50,000 deposit <u>for repowering requests, or a</u> <u>\$10,000 deposit</u> for theall other modification assessments at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Generating Unit owner in writing, within forty-five (45) calendar days from the date the CAISO receives all of the following: the Generating Unit owner's written notice to modify the project, technical data required to assess the request, and payment of the <u>applicable</u>\$50,000 deposit. If the modification assessment cannot be completed within that time period, the CAISO will notify the Generating Unit owner and provide an estimated completion date and an explanation of the reasons why additional time is required.

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Section 27

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27.1.1 Locational Marginal Prices for Energy

As further described in Appendix C, the LMP for Energy at any PNode is the marginal cost of serving the

next increment of Demand at that PNode calculated by the CAISO through the operations of the CAISO Markets considering, as described further in the CAISO Tariff, among other things, modeled Transmission Constraints (including Remedial Action Schemes), transmission losses, the performance characteristics of resources, and Bids submitted by Scheduling Coordinators and as modified through the Locational Market Power Mitigation process. The LMP at any given PNode is comprised of three marginal cost components: the System Marginal Energy Cost (SMEC); Marginal Cost of Losses (MCL); and Marginal Cost of Congestion (MCC). Through the IFM the CAISO calculates LMPs for each Trading Hour of the next Trading Day. Through the FMM the CAISO calculates distinct financially binding fifteenminute LMPs for each of the four fifteen-minute intervals within a Trading Hour. Through the Real-Time Dispatch, the CAISO calculates five-minute LMPs for each of the twelve (12) five (5) minute Dispatch Intervals of each Trading Hour. The CAISO uses the FMM or RTD LMPs for Settlements of the Real-Time Market. In the event that a Pricing Node becomes electrically disconnected from the market model during a CAISO Market run, the LMP, including the SMEC, MCC and MCL, at the closest electrically connected Pricing Node will be used as the LMP at the affected location. The CAISO will include the impact of the disconnected Pricing Node on any modeled Remedial Action Scheme in determining the LMP.

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27.1.1.3 Marginal Cost of Congestion

The Marginal Cost of Congestion at a PNode reflects a linear combination of the Shadow Prices of the binding Transmission Constraints (including Remedial Action Schemes) in the network, multiplied by the corresponding Power Transfer Distribution Factor (PTDF) and coefficient relevant to the transmission segment within that constraint, which is described in Appendix C. The Marginal Cost of Congestion for a Transmission Constraint may be positive or negative depending on whether a power injection at that Location marginally increases or decreases Congestion.

27.1.1.4 Disconnected Pricing Node or Aggregated Pricing Node

In the event that a Pricing Node or Aggregated Pricing Node becomes electrically disconnected from the market model during a CAISO Market run, the LMP, including the SMECSystem Marginal Energy Cost,

<u>MCC</u>Marginal Cost of Congestion and <u>MCL</u>Marginal Cost of Losses, at the closest electrically connected <u>Pricing Node will be used as the LMP at the affected location</u>. The CAISO will include the impact of the disconnected Pricing Node on any modeled Remedial Action Scheme in determining the LMP.

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22.7.2 Determination of LAP Prices

27.2.2.1 IFM LAP Prices

The IFM LAP Price, except for IFM MSS Price, for Settlement of Demand at any LAP for a given Trading Hour is the price as produced by the IFM optimization run based on the distribution of system Load at the constituent Pricing Nodes within the applicable LAP and is determined by the effectiveness of the Load within the LAP in relieving a Transmission Constraint within the effectiveness threshold as specified in Section 27.4.3.6.

27.2.2.2 Real-Time Market LAP Prices

The FMM <u>LAP Price</u> and RTD LAP Price, except for the RTD MSS Price and FMM MSS Price, for a fifteen-minute FMM interval and five minute Dispatch Interval is the price as produced by the FMM and RTD optimization runs, respectively, based on the distribution of system Load at the constituent Pricing Nodes within the applicable LAP and is determined by the effectiveness of the Load within the LAP in relieving a Transmission Constraint within the effectiveness threshold as specified in Section 27.4.3.6. The Hourly Real-Time LAP Price is then determined for Settlement purposes as further described in Section 11.5.2.2.

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Section 29

29.7 EIM Operations Under Normal And Emergency Conditions.

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(j) **EIM Disruption.**

- (2) CAISO Response to EIM Disruption. If the CAISO declares an interruption of EIM Entity participation in the Real-Time Market, the CAISO may in its judgment, among other things-
 - (A) separate the affected EIM Entity Balancing Authority Area from the EIM
 Area and maintain the Real-Time Market for other Balancing Authority
 Areas in the EIM Area by enforcing a net transfer constraint for the
 affected Balancing Authority Area to separate it from the remainder of the
 EIM Area;
 - (B) reduce or suspend EIM Transfers between one or more Balancing Authority Areas in the EIM Area;
 - (C) instruct one or more EIM Entities to maintain system balance within their Balancing Authority Area without RTM Dispatch; or
 - (D) in addition or as an alternative, use market results in the Real-Time Market in accordance with Section 7.7.9 or take any of the actions specified in Section 7.7.6 with respect to the Real-Time Market, except that if Section 7.7.69 calls for the use of Day-Ahead Market results, the CAISO will use: –
 - the price specified in the EIM Entity's open access transmission tariff as the LMP;
 - (ii) the EIM Entity's EIM Base Schedule as the schedule;
 - (iii) the EIM Bid Adder from the most recent corresponding interval

that is available as the EIM Bid Adder; and

(iv) the emissions rate set by the California Air Resources Board for an unspecified source multiplied by the daily Greenhouse Gas Allowance Price.

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29.34 EIM Operations

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(f) Real-Time EIM Base Schedules.

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- (3) EIM Base Schedule for Imports and Exports. EIM Base Schedules must-
 - (A) disaggregate Day-Ahead import/export schedules between the EIM
 Entity Balancing Authority Area and the CAISO Balancing Authority Area;
 - (B) identify the relevant EIM Interties for imports and exports to an EIM
 Entity Balancing Authority Area from Balancing Authority Areas other
 than the CAISO Balancing Authority Area; and
 - (C) include approved, pending, and adjusted <u>eE-tT</u>ags for imports and exports.

Section 30

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30.4.1 Start-Up and Minimum Load Costs

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30.4.1.1.4 Adders for Major Maintenance Expenses

Scheduling Coordinators may propose adders for major maintenance expenses as a component of Start-Up Costs, Minimum Load Costs, or both. Such proposed adders must be based solely on resourcespecific information derived from actual maintenance costs, when available, or estimated maintenance costs provided by the Scheduling Coordinators to the CAISO and the Independent Entity. Scheduling Coordinators may submit updated resource-specific major maintenance information for purposes of seeking a change to any major maintenance adder, no sooner than thirty (30) days after a major maintenance adder has been determined. The CAISO or Independent Entity will evaluate the information provided by Scheduling Coordinators, and may require Scheduling Coordinators to provide additional information, to enable the CAISO or Independent Entity to determine reasonable adders for major maintenance expenses or to conduct audits of major maintenance expenses. Within fifteen (15) days of receipt of the information or any requested additional information, the CAISO or Independent Entity will notify the Scheduling Coordinator in writing whether it has sufficient and accurate information to determine reasonable major maintenance adders to be included in Start-Up or Minimum Load Cost calculations or both. Within ten (10) days after providing written notification to the Scheduling Coordinator that the information is sufficient and accurate, the CAISO or Independent Entity will determine the reasonable adder for major maintenance expenses to be included in Start-Up or Minimum Load Costs or both and will so inform the Scheduling Coordinator in writing.

In the event of a dispute regarding the sufficiency or accuracy of the information provided by the Scheduling Coordinator, the CAISO or Independent Entity and the Scheduling Coordinator will enter a

period of good faith negotiations that terminates sixty (60) days after the date the dispute began. If the CAISO or Independent Entity and the Scheduling Coordinator resolve the dispute during the 60-day negotiation period, within ten (10) days of such agreement, the CAISO or Independent Entity will determine the reasonable adder for major maintenance expenses and will provide the adder to the Scheduling Coordinator in writing. If the CAISO or Independent Entity and the Scheduling Coordinator fail to agree upon the sufficiency or accuracy of the information during the 60-day negotiation period, the Scheduling Coordinator has the right to petition FERC to resolve the dispute as to the sufficiency or accuracy of its information.

In the event of a dispute regarding the CAISO's or Independent Entity's determination of adders for major maintenance expenses, the CAISO or Independent Entity and the Scheduling Coordinator will enter a period of good faith negotiations that terminates sixty (60) days after the date the dispute began. If the CAISO or Independent Entity and the Scheduling Coordinator resolve the dispute during the 60-day negotiation period, the agreed-upon values will be effective as of the first Business Day following the resolution date. If the CAISO or Independent Entity and the Scheduling Coordinator fail to agree on the major maintenance values for either Start-Up or Minimum Load Costs following the 60-day negotiation period, the Scheduling Coordinator has the right to file proposed values and supporting information for major maintenance adders for Start-Up or Minimum Load Costs with FERC pursuant to Section 205 of the Federal Power Act.

In the event of a dispute regarding the reasonableness of the adder for major maintenance expenses determined by the CAISO or Independent Entity, but not a dispute regarding the sufficiency or accuracy of the information provided by the Scheduling Coordinator, the CAISO or Independent Entity will determine a reasonable interim adder for major maintenance expenses until the adder for major maintenance expenses is determined by agreement between the CAISO or Independent Entity and the Scheduling Coordinator or by FERC. Any subsequent agreement or FERC order determining the adder for major maintenance expenses will be reflected in an adjustment to the interim adder for major maintenance expenses in the next applicable Settlement Statement.

30.5.2 Supply Bids

30.5.2.1 Common Elements for Supply Bids

In addition to the resource-specific Bid requirements of this Section, all Supply Bids must contain the following components: Scheduling Coordinator ID Code; Resource Location or Resource ID, as appropriate; MSG Configuration ID, as applicable; PNode or Aggregated Pricing Node as applicable; Energy Bid Curve; Self-Schedule component; Ancillary Services Bid; RUC Availability Bid as applicable, the CAISO Market to which the Bid applies; Trading Day to which the Bid applies; Priority Type (if any), and a Transaction ID as created by the CAISO. Supply Bids offered in the CAISO Markets must be monotonically increasing. Energy Bids in the RTM must also contain a Bid for Ancillary Services to the extent the resource is certified and capable of providing Ancillary Service in the RTM up to the registered certified capacity for that Ancillary Service less any Day-Ahead Ancillary Services Awards. Scheduling Coordinators must submit the applicable Supply Bid components, including Self-Schedules, for the submitted MSG Configuration.

Scheduling Coordinators submitting Bids for Scheduling Points must adhere to the eE-Tagging requirements outlined in Section 30.<u>5.76.2</u>.

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30.5.7 E-Tag Rules and Treatment of Intertie Schedules

In addition to complying with all generally applicable E-Tagging requirements, Scheduling Coordinators must submit their E-tTags consistent with the requirements specified in this Section 30.5.7. If a Scheduling Coordinator receives an intra-hour Schedule change, then the Scheduling Coordinator must, by twenty minutes before the start of the FMM interval to which the Schedule change applies, ensure that an updated energy profile reflects the change. Absent extenuating circumstances, the CAISO automatically updates Energy profiles on E-tTags for Energy Schedules that change from HASP to the FMM within a Trading Hour. In performing this service for a Scheduling Coordinator, the CAISO does not assume any responsibility for compliance with any E-tTag requirements or obligations to which the

Scheduling Coordinator is subject. The changed energy profile will apply for the balance of the operating hour unless it is subsequently changed by a further updated energy profile.

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Section 31

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31.5.3 RUC Procurement Target

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31.5.3.1 CAISO Operator Review & Adjustment

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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. To the extent the scheduled quantity for an Eligible Intermittent Resource in the IFM is less than the quantity forecasted by CAISO, the CAISO makes a Supply side adjustment in RUC by using the CAISO forecasted quantity for the Eligible Intermittent Resource as the expected

delivered quantity. 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. To the extent the scheduled quantity for an Eligible Intermittent Resource in the IFM is greater than the quantity forecasted by the CAISO's forecast of the EIR, the CAISO may makes a Demand side adjustment to the RUC Zone Demand equal to the difference between the <u>EIR's</u> Day-Ahead Schedule and the CAISO forecasted quantity.

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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.

Section 34

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34.1.3 Bids in the Real-Time Market

Scheduling Coordinators may submit Bids, including Self-Schedules, for Supply that the CAISO shall use for the Real-Time Market, starting from the time Day-Ahead Schedules are posted, which is approximately 1:00 p.m., unless the posting of the Day-Ahead Market results are delayed for reasons specified in Section 31.6, until seventy-five (75) minutes prior to each applicable Trading Hour in the Real-Time. Scheduling Coordinators can submit Bids in the form of: (1) an Economic Bid for a Schedule in the RTM; (2) a Self-Schedule for acceptance to the RTM; (3) a Self-Schedule Hourly Block for acceptance in the HASP; (4) a Variable Energy Resource Self-Schedule for the RTM; (5) an Economic Hourly Block Bid for acceptance in the HASP; or (6) an Economic Hourly Block Bid with Intra-Hour Option for acceptance in the HASP and the FMM. This includes Self-Schedules by Participating Load that is modeled using the Pumped-Storage Hydro Unit. Scheduling Coordinators may not submit Bids, including Self-Schedules, for CAISO Demand in the RTM. Scheduling Coordinators may submit Bids, including Self-Schedules, for exports at Scheduling Points in the RTM. The rules for submitted Bids specified in Section 30 apply to Bids submitted to the RTM. Scheduling Coordinators may not submit Virtual Bids to the Real-Time Market, although Virtual Awards from the DAM are settled for their liquidated positions based on prices from the FMM. In the case of Multi-Stage Generating Resources, the RTM procedures will optimize Transition Costs in addition to the Start-Up Costs 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, all of the RTM processes 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.

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34.3.1 RTUC Optimization

The Real-Time Unit Commitment (RTUC) process uses SCUC and is run every fifteen (15) minutes to make commitment decisions for Fast Start and Short Start Units having Start-Up Times within the applicable time periods described below in this section for the next four to seven subsequent fifteenminute intervals, depending on when during the hour the run occurs. For Multi-Stage Generating Resources the RTUC will issue a binding Transition Instruction separately from the binding Start-Up or Shut Down instructions. The RTUC can also be run with the Contingency Flag activated, in which case the RTUC can commit Contingency Only Operating Reserves. If RTUC is run without the Contingency Flag activated, it cannot commit Contingency Only Operating Reserves. RTUC is run at the following time intervals: (1) at approximately 127.5 minutes prior to the first Trading Hour, to serve as the HASP run, for T-45 minutes to T+60 minutes; (2) at approximately 7.5 minutes into the current hour for T-30 minutes to T+60 minutes; (3) at approximately 22.5 minutes into the current hour for T-15 minutes to T+60 minutes; and (4) at approximately 37.5 minutes into the current hour for T to T+60 minutes, where T is the beginning of the next Trading Hour. The HASP is a special RTUC run that is performed at approximately 67.5 minutes before each Trading Hour and has the additional responsibility of predispatching Energy and awarding Ancillary Services for HASP Block Intertie Schedules. A Day-Ahead Schedule or RUC Schedule for an MSG Configuration that is later impacted by the resource's derate or outages, will be reconsidered in the RTUC and the FMM taking into consideration the impacts of the derate or outage on the available MSG Configurations. Not all resources identified as needed in a given RTUC run will necessarily receive CAISO commitment instructions immediately, because during the Trading Day the CAISO may issue a commitment instruction to a resource only at the latest possible time that allows the resource to be ready to provide Energy when it is expected to be needed.

34.10 Dispatch of Energy from Ancillary Services

The CAISO may issue Dispatch Instructions to Participating Generators, Participating Loads, Proxy Demand Resources, (via communication with the Scheduling Coordinators of Demand Response Providers) System Units and System Resources contracted to provide Ancillary Services (either procured through the CAISO Markets, Self-Provided by Scheduling Coordinators, or through Exceptional Dispatch or dispatched in accordance with a Legacy RMR Contract) for the Supply of Energy. During normal operating conditions, the CAISO may Dispatch those Participating Generators, Participating Loads, Proxy Demand Resources, System Units and System Resources that have contracted to provide Spinning Reserve and Non-Spinning Reserve, except for those reserves designated as Contingency Only, in conjunction with the normal Dispatch of Energy. Contingency Only reserves are Operating Reserve capacity that have been designated, either by the Scheduling Coordinator or the CAISO, as available to supply Energy in the Real-Time only in the event of the occurrence of an unplanned Outage, a Contingency or an imminent or actual System Emergency. During normal operating conditions, the CAISO may also elect to designate any reserve not previously identified as Contingency Only by Scheduling Coordinator as Contingency Only reserves. In the event of an unplanned Outage, a Contingency or a threatened or actual System Emergency, the CAISO may dispatch Contingency Only reserves. If Contingency Only reserves are dispatched through the RTCD, which as described in Section 34.5.2 only Dispatches in the event of a Contingency, such Dispatch and pricing will be based on the original Energy Bids. If Contingency Only reserves are dispatched in response to a System Emergency that has occurred because the CAISO has run out of Economic Bids when no Contingency event has occurred, the RTED will Dispatch such Contingency Only reserves using maximum Bid prices as provided in Section 39.6.1 as the Energy Bids for such reserves and will set prices accordingly. If a Participating Generator, Participating Load, System Unit or System Resource that is supplying Operating Reserve is Delispatched to provide Energy, the CAISO shall replace the Operating Reserve as necessary to maintain NERC and WECC reliability standards, including any requirements of the NRC. If the CAISO uses Operating Reserve to meet Real-Time Energy requirements, and if the CAISO needs Operating Reserves to satisfy NERC and WECC reliability standards, including any requirements of the NRC, the CAISO shall restore the Operating Reserves to the extent necessary to meet NERC and WECC reliability standards,

including any requirements of the NRC through either the procurement of additional Operating Reserve in the RTM or the Dispatch of other Energy Bids in SCED to allow the resources that were providing Energy from the Operating Reserve to return to their Dispatch Operating Target. The Energy Bid Curve is not used by the AGC system when Dispatching Energy from Regulation. For Regulation Up capacity, the upper portion of the resource capacity from its Regulation Limit is allocated to Regulation regardless of its Energy Bid Curve. For a resource providing Regulation Up or Operating Reserves the remaining Energy Bid Curve shall be allocated to any RTM AS Awards in the following order from higher to lower capacity where applicable: (a) Spinning Reserve; and (b) Non-Spinning Reserve. For resources providing Regulation Up, the applicable upper Regulation Limit shall be used as the basis of allocation if it is lower than the upper portion of the Energy Bid Curve. The remaining portion of the Energy Bid Curve, if there is any, shall constitute a Bid for RTM Energy. For Regulation Down capacity, the lower portion of the resource capacity from Limit is allocated to Regulation regardless of its Energy Bid Curve.

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34.13.1 Response Required by Resources to Dispatch Instructions

Resources must:

- (a) unless otherwise stated in the Dispatch Instruction, comply with a Dispatch Instruction immediately upon receipt;
- (b) respond to all Dispatch Instructions in accordance with Good Utility Practice;
- (c) meet voltage criteria in accordance with the provisions in the CAISO Tariff;
- (d) meet any applicable Operational Ramp Rates;
- (e) respond to Dispatch Instructions for Ancillary Services within the required time periods and (in the case of Participating Generators providing Regulation) respond to AGC from the EMS;
- (f) if a time frame is stated in a Dispatch Instruction, respond to a Dispatch Instruction within the stated time frame; and

(g) not intentionally generate above or below Dispatch Operating Target.

Notwithstanding the requirements to comply with and respond to Dispatch Instructions, when an Eligible Intermittent Resource's Dispatch Operating Target is equal to its forecasted output, it may produce to its capability. An Eligible Intermittent Resource in the process of developing a CAISO forecast pursuant to Section 3.1 of Appendix Q may produce to its capability when its Dispatch Operating Target is equal to its scheduled output.

In any event, the CAISO may issue an Operating TargetInstruction if necessary to maintain system reliability consistent with Sections 7.6 or 7.7. Upon receiving such an Operating Instruction, an Eligible Intermittent Resource must not generate in excess of its Dispatch Operating Target until the Operating Instruction expires, except when physically impossible. When such an Operating Instruction is in effect, Eligible Intermittent Resources should follow a linear ramp between Dispatch Operating Targets, except when physically impossible.

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Section 37

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37.1.5 Administration

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

* * * * *

37.4.4 Enhancements And Exceptions

Except as otherwise specifically provided, penalty amounts shall be tripled for any violation of Section

37.4.1 or 37.4.2 through Section 37.4.3 that occurs during a CAISO System Emergency. Violations of the above rules that result in circumstances in which an Uninstructed Deviation Penalty under Section 11.23 is assessed shall not be subject to Sanction under this Section. 37.4.

* * * * *

37.8.8 Officer Representative [Not Used]

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

* * * * *

37.8.10 Review Of Determination

A Market ParticipantScheduling Coordinator that receives a Sanction, or a Market Participant whose conduct gave rise to the Sanction, may obtain immediate review of the CAISO's determination by directly appealing to FERC, in accordance with FERC's rules and procedures. In such case, the applicable Scheduling Coordinator shall also dispute the Recalculation Settlement Statement containing the financial penalty, in accordance with Section 11. The Recalculation Settlement Statement dispute and appeal to FERC must be made in accordance with the timeline for raising disputes specified in Section 11.29.8. The penalty will be tolled until FERC renders its decision on the appeal. The disposition by FERC of such appeal shall be final, and no separate dispute of such Sanction may be initiated under Section 13, except as provided in Section 37.9.3.4. For the purpose of applying the time limitations set forth in Section 37.10.1, a Sanction will be considered assessed when it is included on a Recalculation Settlement Statement Statement Statement Statement pending resolution of an appeal to FERC in accordance with this section or Section 37.9.3.3.

37.9.1 Assessment; Waivers And Adjustments

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

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Section 39

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39.7.1 Calculation of Default Energy Bids

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

* * * * *

39.7.1.1.2 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 Minimum Load Costs pursuant to Section 30.4.

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39.7.1.3 Negotiated Rate Option

39.7.1.3.1 Submission Process

Scheduling Coordinators that elect the Negotiated Rate Option for the Default Energy Bid shall submit a proposed Default Energy Bid along with supporting information and documentation as described in a BPM. Within ten (10) Business Days of receipt, the CAISO or an Independent Entity selected by the CAISO will provide a written response. If the CAISO or Independent Entity accepts the proposed Default Energy Bid, it will generally become effective within eleven (11) Business Days from the date of acceptance by the CAISO and remain in effect until: (1) the Default Energy Bid is modified by FERC; (2) the Default Energy Bid is modified by mutual agreement of the CAISO and the Scheduling Coordinator; or (3) the Default Energy Bid expires, is terminated or is modified pursuant to any agreed upon term or condition or pertinent FERC order.

If the CAISO or Independent Entity selected by the CAISO does not accept the proposed Default Energy Bid, the CAISO or Independent Entity selected by the CAISO and the Scheduling Coordinator shall enter a period of good faith negotiations that terminates sixty (60) days following the date of submission of a proposed Default Energy Bid by a Scheduling Coordinator. If at any time during this period, the CAISO or Independent Entity selected by the CAISO and the Scheduling Coordinator agree upon the Default Energy Bid, it will generally become effective within eleven (11) Business Days of the date of agreement and remain in effect until: (1) the Default Energy Bid is modified by FERC; (2) the Default Energy Bid is modified by mutual agreement of the CAISO and the Scheduling Coordinator; or (3) the Default Energy Bid expires, is terminated or is modified pursuant to any agreed upon term or condition or pertinent FERC order.

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

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

Any negotiated Default Energy Bid for a resource that includes an opportunity cost component as of April 1, 2019, will remain in effect, subject to the CAISO's renegotiation rights pursuant to Section 39.7.1.3.2.1, unless the Scheduling Coordinator pursues an Opportunity Cost pursuant to Section 30.4.1.1.6.1.2. If a Scheduling Coordinator pursues an Opportunity Cost pursuant to Section 30.4.1.1.6.1.2, the Scheduling Coordinator must either elect the Variable Cost Default Energy Bid or the CAISO will renegotiate the negotiated Default Energy Bid to, at a minimum, utilize the Variable Energy Opportunity Cost as a component of the negotiated Default Energy Bid in place of any previously negotiated Opportunity Cost value.

39.7.1.7.2.2 Maximum Storage Horizon

The maximum hydroelectric resource storage horizon submitted by the Scheduling Coordinator must:

(a) Reflect the typical storage duration of a hydroelectric resource's reservoir, defined as the length of time between which the reservoir cycles from a maximum elevation to a new maximum elevation during a hydro cycle. The Scheduling Coordinator shall compute the reservoir's cycling time based on multiple years of reservoir elevation data.

(b) Be supported by (1) a written attestation by a representative who has the authority to bind the company stating that the value submitted to the CAISO as the maximum storage horizon is consistent with the requirements specified in Section 39.7.1.7.2.2 (a); or (2) corroborating information submitted to the CAISO, which may include several years of historic reservoir levels for the specific hydroelectric resource and regulatory filings related to the operations of the hydroelectric resource.

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39.8.3 Bid Adder Values

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

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Section 40

40.1 Applicability

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

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40.2.1 Requirements for CPUC Load Serving Entities

- (a) The Scheduling Coordinator for a CPUC Load Serving Entity must provide the CAISO with all information or data to be provided to the CAISO as required by the CPUC and pursuant to the schedule adopted by the CPUC, except that the monthly Resource Adequacy Plans or the same information as required to be included in the monthly Resource Adequacy Plans, plus any other information the CAISO requires as identified in the Business Practice Manual, shall be submitted to the CAISO no less than 45 days in advance of the first day of the month covered by the plan, as provided in Section 40.2.1.4(e).
- (b) Where the information or data provided to the CAISO under Section 40.2.1.4(a) does not include Reserve Margin(s), then the provisions of Section 40.2.2.1(b) shall apply.
- (c) Where the information or data provided to the CAISO under Section 40.2.1.4(a) does not include criteria for determining qualifying resource types and their Qualifying Capacity, then the provisions of Section 40.8 shall apply.
- Where the information or data provided to the CAISO under Section 40.2.1.4(a) does not include annual and monthly Demand Forecast requirements, then the provisions of Section 40.2.2.3 shall apply.

(e) Where the information or data provided to the CAISO under Section 40.2.1.4(a) does not include annual and monthly Resource Adequacy Plan requirements that include, at a minimum, identifying Local Capacity Area Resources and Listed Local RA Capacity, or where there is a requirement to submit monthly Resource Adequacy Plans but the submission date is less than 45 days in advance of the first day of the month covered by the plan, then Section 40.2.2.4 shall apply.

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40.6.4.2 RUC Availability Bids

The following resource types providing Resource Adequacy Capacity are not required to submit RUC Availability Bids for that capacity, but any suchk bids they do submit must be \$0/MW RUC Availability Bids: Hydroelectric Generating Units, Pumping Load, Reliability Demand Response Resources, Combined Heat and Power Resources, Regulatory Must-Take Generation, Non-Dispatchable Resources, Non-Generator Resources using Regulation Energy Management, Conditionally Available Resources, and Eligible Intermittent Resources.

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40.6.8 Use of Generated Bids

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40.6.8.1.4 Negotiated Price Option

Under the negotiated price option, a Scheduling Coordinator shall submit a proposed Generated Bid along with supporting information and documentation as described in a Business Practice Manual. Within ten (10) Business Days of receipt, the CAISO or an Independent Entity selected by the CAISO will provide a written response. If the CAISO or Independent Entity accepts the proposed Generated Bid, it will become effective within three (3) Business Days from the date of acceptance by the CAISO and remain in effect until: (1) the Generated Bid is modified by FERC; (2) the Generated Bid is modified by mutual agreement of the CAISO and the Scheduling Coordinator; or (3) the Generated Bid expires, is terminated or is modified pursuant to any agreed upon term or condition or pertinent FERC order. If the CAISO or Independent Entity selected by the CAISO does not accept the proposed Generated Bid, the CAISO or Independent Entity selected by the CAISO and the Scheduling Coordinator shall enter a period of good faith negotiations that terminates sixty (60) days following the date of submission of a proposed Generated Bid by a Scheduling Coordinator. If at any time during this period, the CAISO or Independent Entity selected by the Scheduling Coordinator agree upon the Generated Bid, it will be become effective within three (3) Business Days of the date of agreement and remain in effect until: (1) the Generated Bid is modified by FERC; (2) the Generated Bid is modified by mutual agreement of the CAISO and the Scheduling Coordinator; or (3) the Generated Bid expires, is terminated or is modified pursuant to any agreed upon term or condition or pertinent FERC order.

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

During the sixty (60) day period following the submission of a proposed negotiated Generated Bid by a Scheduling Coordinator, and pending FERC's acceptance in cases where the CAISO or Independent Entity selected by the CAISO fails to agree on the Generated Bid for use under the negotiated price option and the Scheduling Coordinator filed a proposed Generated Bid with FERC pursuant to Section 205 of the Federal Power Act, the Scheduling Coordinator has the option of electing to use any of the other options available pursuant to this Section.

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

Appendix A

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- Day-Ahead Minimum Load Energy

Day-Ahead Scheduled Energy below the registered Minimum Load, <u>or if applicable, as modified pursuant</u> to Section 9.3.3, which applies to Generating Units with non-zero Minimum Load. Day-Ahead Minimum Load Energy is settled as provided in Section 11.2.1.1, and it is included in Bid Cost Recovery (BCR) at the relevant IFM Minimum Load Cost as described in Section 11.8.2.1.2.

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- Extremely Long-Start Resource (ELS Resource)

A Generating Unit that has a Start-Up Time greater than 18 hours or a System Resource that is either: (1) a <u>N</u>non-Resource-Specific System Resource with contractual limitations that require the Energy be transacted (i.e., committed) prior to the publishing time of the Day-Ahead Market results (1300 hours on the day before the Trading Day); or (2) a Resource-Specific System Resource that has a Start-Up Time greater than 18 hours.

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- FMM LAP Price

The marginal price for a particular LAP calculated pursuant to Section 27.2.2.2.

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- IFM LAP Price
The marginal price for a particular LAP calculated pursuant to Section 27.2.2.1.

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- Independent Entity[Not Used]

The entity, not affiliated with the CAISO or any Market Participant, that assists the CAISO in the determination of values used in the CAISO's market processes.

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- Interconnection Facilities Study

A study conducted by the Participating TO(s), CAISO, or a third party consultant for the Interconnection Customer to determine a list of facilities (including the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades), the cost of those facilities, and the time required to interconnect the Generating Facility with the CAISO Controlled Grid. The scope of the study is defined in Section 8 of the Standard Large Generator Interconnection Procedures (Appendix U), Section 6 and 7 of the Generator Interconnection Procedures (Appendix Y) and Section 4.4 of the Generator Interconnection and Deliverability Allocation Procedures (Appendix DD).

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- Interconnection Request

An Interconnection Customer's request, in the form of Appendix 1 to the Large Generator Interconnection Procedures or Attachment 2 to the Small Generator Interconnection Procedures, Generator Interconnection Deliverability Allocation Procedure (Appendix DD), in accordance with Section 25.1.

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- Interconnection Study

Any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Large Generator Interconnection Procedures set forth in Appendix U and in the Generator Interconnection Procedures set forth in Appendix Y or the Phase I Interconnection Study and the Phase II Interconnection Study described in the LGIP set forth in Appendix Y and Appendix DD.

* * * * *

- LAP Price

The marginal price for a particular LAP, except for the IFM MSS Price, FMM MSS Price and RTD MSS Price, calculated as specified in Section 27.2.2.

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- Location

A reference to either a Pricing Node or an Aggregated Pricing Node.

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- Minimum Dispatch Level

<u>Either The greater of (1) for resources that are not Multi-Stage Generating Resources, the lower limit of</u> the fastest segment of a Generating Unit's Operational Ramp Rate, as adjusted for the Generating Unit's Forbidden Operating Regions, if any, <u>orand (2) for Multi-Stage Generating Resources, the minimum MW</u> <u>level of the fastest operational ramp rate across all configurations.</u> if the resource is providing regulation, the lower limit of a Generating Unit's Regulating Range.

- Negotiated Rate Option

A method of calculating Default Energy Bids based on a negotiation with the CAISO-or the Independent Entity.

* * * * *

- NRS-RA Resource

A <u>nN</u>on-Resource-Specific System Resource that provides Resource Adequacy Capacity.

* * * * *

- Planning Region

Means each of the following Order 1000 transmission planning regions insofar as they are within the Western Interconnection: CAISO, <u>NorthernGrid, ColumbiaGrid, Northern Tier Transmission Group,</u> and WestConnect.

* * * * *

- PMax

The maximum normal capability of the Generating Unit, as measured at the Point of Interconnection or <u>Point of Delivery, as applicable</u>. PMax <u>may not exceed the Interconnection Service Capacity, as</u> <u>documented in the Interconnection Study or Generator Interconnection Agreementshould not be confused</u> as an emergency rating of the Generating Unit.

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- RTD LAP Price

The marginal price for a particular LAP calculated pursuant to Section 27.2.2.2.

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- Scheduling Point

A Location in the Base Market Model at which Scheduling Coordinators may submit Intertie Bids in the

CAISO Markets.

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Appendix B.3

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ARTICLE IV

GENERAL TERMS AND CONDITIONS

4.1 Net Scheduled Generating Units

4.1.1 Identification of Net Scheduled Net Scheduled Generating Unit. The Participating Generator has identified the Net Scheduled Generating Unit that it owns, operates or has a contractual entitlement to, in Schedule 1, as required by Section 4.6.4 of the CAISO Tariff.

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4.5 Dispatch and Curtailment. The CAISO shall only dispatch or curtail a Net Scheduled Generating Unit of the Participating Generator: (a) to the extent the Participating Generator bids Energy or Ancillary Services from the Net Scheduled Generating Unit into the CAISO's markets or the Energy is otherwise available to the CAISO under Section 40 or 43<u>A</u> of the CAISO Tariff; or (b) if the CAISO must dispatch or curtail the Net Scheduled Generating Unit in order to respond to an existing or imminent System Emergency or condition that would compromise CAISO Balancing Authority Area integrity or reliability as provided in Sections 7 and 7.6.1 of the CAISO Tariff.

ARTICLE VI

COSTS

6.1 Operating and Maintenance Costs. The Participating Generator shall be responsible for all its costs incurred in connection with operating and maintaining the Net Scheduled QF-Generating Unit identified in Schedule 1 for the purpose of meeting its obligations under this Agreement.

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ARTICLE VIII

REPRESENTATIONS AND WARRANTIES

- 8.1 **Representation and Warranties.** Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.
- 8.2 Necessary Approvals. The Participating Generator represents that all necessary leases, approvals, permits, licenses, easements, rights of way or access to install, own and/or operate its Net Scheduled QF-Generating Unit have been or will be obtained by the Participating Generator prior to the effective date of this Agreement.
- 8.3 Specific Warranty. The Participating Generator represents and warrants that: (1) the Net Scheduled Generating Unit listed in Schedule 1 is (a) a Qualifying Facility or is operated as an integral part of a Qualifying Facility, or (b) is a CHP Resource, and (2) (a) the Self-provided Load of the Participating Generator that is served by the Net Scheduleding QFGenerating Unit either has, and continues to have through the term of this Agreement, standby service from a UDC or MSS Operator under terms approved by the Local Regulatory Authority or the Federal Energy Regulatory Commission, as applicable, or (b) the Self-provided Load shall be curtailed concurrently with any Outage of the Generation serving that Self-provided Load in an amount sufficient to cover that Outage.

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Appendix B.9

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7.2 E-Tagging

The Host Balancing Authority must support associated <u>Ee-T</u>tagging as described in the CAISO Dynamic Scheduling Protocol and deemed to be consistent with NERC and/or WECC

requirements.

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Appendix B.11

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- A. The CAISO Tariff provides that any entity that holds or intends to hold CRRs must register and qualify with the CAISO and comply with the terms of the CAISO Tariff, regardless of whether they are to acquire CRRs through the CRR Allocation or CRR Auction, or through the Secondary Registration System.
- AB. The CRR Entity has completed the Candidate CRR Holder application process and is eligible to participate in the CRR Allocation or CRR Auction or register as a CRR Holder through the Secondary Registration System.

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Appendix B.13

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ARTICLE IV

GENERAL TERMS AND CONDITIONS

4.1 Resource-Specific System Resource Information.

- **4.1.1 Identification of Resource-Specific System Resources.** The System Resource Owner has identified the generating units comprising its Resource-Specific System Resources that it owns, operates or has a contractual entitlement to in Schedule 1, as required by Section 4.12 of the CAISO Tariff.
- **4.1.2 Technical Characteristics.** The System Resource Owner has provided to the CAISO in Schedule 1 the required information regarding the capacity and operating characteristics of each of the Resource-Specific System Resources listed in that schedule. Pursuant to Sections 8.9 and 8.10 of the CAISO Tariff, the CAISO may verify, inspect and test the capacity and operating

characteristics provided in Schedule 1.

- **4.1.3 Notification of Changes.** Sixty (60) days prior to changing any technical information in Schedule 1, the System Resource Owner shall notify the CAISO of the proposed changes. Pursuant to Sections 8.9 and 8.10 of the CAISO Tariff, the CAISO may verify, inspect and test the capacity and operating characteristics provided in the revised Schedule 1.
- **4.2** Agreement Subject to CAISO Tariff. The Parties will comply with all applicable provisions of the CAISO Tariff. This Agreement shall be subject to the CAISO Tariff which shall be deemed to be incorporated herein.

4.3 Obligations Relating to Resource-Specific System Resources.

- **4.3.1 Bid Cost Recovery.** In order to be eligible for Bid Cost Recovery, the System Resource Owner must comply with all applicable requirements of the CAISO Tariff, including but not limited to compliance with Start-Up Instructions issued by the CAISO and submittal of its Bid Costs to the CAISO in accordance with CAISO Tariff Sections 4.12, 11.8, 30.4, and 30.5.2.4.
- **4.3.2 Telemetry Data for Resource-Specific System Resources.** For purposes of determining compliance with the CAISO's Start-Up Instructions and minimum operation obligations, the System Resource Owner must provide SCADA data by telemetry to the CAISO's EMS for each of its Resource-Specific System Resources in accordance with CAISO Tariff Section 4.12.3. For each of its Non-Dynamic Resource-Specific System Resources, the System Resource Owner has specified in Schedule 1 the manner in which it will provide this telemetry data, as permitted by CAISO Tariff Section 4.12.3.
- 4.3.3 Use of CAISO Forecast. For purposes of participating in the CAISO Markets, the System Resource Owner has the option of using a forecast of their output provided by CAISO, provided that: (1) they agree to provide the CAISO with the meteorological data specified in Appendix Q; and (2) they are certified to do so by the CAISO pursuant to the rules specified in the Business Practice Manuals. Once the election to use the output forecast provided by the CAISO is complete, the CAISO will specify the election status in the Master File. Any changes to this election will be subject to the timeline and rule changes that apply to the Master File as specified in Section 30.7.3.2.

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Appendix B.14

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ARTICLE IV

GENERAL TERMS AND CONDITIONS

4.3.2 Notification of Changes. The Demand Response Provider shall notify the CAISO of any proposed change(s) to the registration ofto technical information. The CAISO will update the Master File in accordance with Section 30.7.3.2 of the CAISO Tariff. This Agreement shall not apply to any Reliability Demand Response Resources which the Demand Response Provider no longer owns or operates or to which it no longer has a contractual entitlement.

Appendix B.17

EIM Entity Agreement (EIMEA)

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3.2.2 Termination by EIM Entity. In the event that the EIM Entity no longer wishes to enable Energy Imbalance Market services within its Balancing Authority Area pursuant to the CAISO Tariff, it may terminate this Agreement on giving the CAISO not less than one-hundred and eighty (180) days written notice. With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if (1) the request to file a notice of termination is made after the preconditions for termination have been met, and the CAISO files the notice of termination within thirty (42030) days of receipt of such request; or (2) the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination or upon the next production date of the Full-Network Model release following the one-hundred and eighty (180) days after the CAISO's receipt of the EIM Entity's notice of termination, if terminated in accordance with the requirements of FERC orders.

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Appendix B.19

EIM Participating Resource Agreement (EIMPRA)

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3.2.2 Termination by EIM Participating Resource. In the event that the EIM Participating Resource no longer wishes to submit Bids and transmit Energy over the CAISO Controlled Grid, it may terminate this Agreement, on giving the CAISO not less than ninety (90) days written notice, provided, however, that in accordance with Section 2.2.2.3.3, the EIM Participating Resource may modify Schedule 1 to remove EIM Resources which it no longer owns or no longer has contractual entitlement to and such modification shall be effective upon receipt by the CAISO. With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC, if this Agreement has been filed with FERC, or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and the CAISO files the notice of termination within thirty (30) days of receipt of such request; or (2) the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination, if such notice is required to be filed with FERC, or upon ninety (90) days after the CAISO's receipt of the EIM Participating Resource's notice of termination, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders.

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Appendix C

Locational Marginal Price

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I.1 Intertie Scheduling Point Price Calculation for IBAAs

I.1.2 Applicable Marginal Loss Adjustment

For import Schedules to the CAISO Balancing Authority Area at the southern terminus of the California-Oregon Transmission Project at the Tracy substation or at the applicable Scheduling Point that connects the CAISO Balancing Authority and the Western Area Power Administration system, the CAISO will replace the Marginal Cost of Losses at the otherwise applicable source for such Schedules with the Marginal Cost of Losses at the Tracy substation or at the applicable Scheduling point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system, provided that the Scheduling Coordinators certify as discussed further below that the Schedules originate from transactions that use: (a) the California-Oregon Transmission Project; or (b) transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA. In addition, as described further below, the Scheduling Coordinator must certify that the Schedules are subject to: (a) charges for losses by the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA; or (b) charges for losses by the Transmission Agency of Northern California for the use of the California-Oregon Transmission Project. The CAISO will establish Resource IDs that are to be used only to submit Bids, including Self-Schedules, for the purpose of establishing Schedules that are eligible for this loss adjustment.

Prior to obtaining such Resource IDs, the relevant Scheduling Coordinator shall certify that it will only use this established Resource ID for Bids, including Self-Schedules, that originate from transactions that use: (a) the California-Oregon Transmission Project; or (b) transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA. In addition, the Scheduling Coordinator must certify that the Schedules are subject to: (a) charges for losses by the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration state SMUD/TID IBAA; or (b) Transmission Agency of Northern California for the use of the California-Oregon Transmission Agency of Northern California for the use of the California-Oregon Transmission Project. Further, by actually using such Resource ID, the Scheduling Coordinator represents that such Bids, including Self-Schedules, that originate from transactions that use: (a) the California-Oregon Transmission Project; or (b) transmission facilities owned by the Western Area Power Administration State Use (a) the California-Oregon Transmission Project; or (b) transmission facilities owned by the Western Area Power Administration State Use (a) the California-Oregon Transmission Project; or (b) transmission facilities owned by the Western Area Power ID, the Scheduling Coordinator represents that such Bids, including Self-Schedules, that originate from transactions that use: (a) the

Administration within the SMUD/TID IBAA. In addition, the Scheduling Coordinator must certify that the Schedules are subject to: (a) charges for losses by the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA; or (b) Transmission Agency of Northern California for the use of the California-Oregon Transmission Project. Schedules and Dispatches settled under such Resource IDs shall be subject to an LMP which has accounted for the Marginal Cost of Losses as if there were an actual physical generation facility at the Tracy Scheduling Point or at the applicable Scheduling Point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system as opposed to the Marginal Cost of Losses under the IBAA LMPs specified in Section IG.1.1 of this Appendix. The CAISO may request information on a monthly basis from such Scheduling Coordinators to verify these certifications. Any such request shall be limited to transactions that use the designated Resource IDs during the six month prior period to the date of the request. The CAISO will calculate a re-adjustment of the Marginal Cost of Losses at the Tracy substation or at the applicable Scheduling Point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system to reflect the otherwise applicable source for such Schedules for any Settlement Interval in which the CAISO has determined that the Scheduling Coordinator's payments did not reflect transactions that meet the above specified certification requirements. Any amounts owed to the CAISO for such Marginal Cost of Losses re-adjustments will be recovered by the CAISO from the affected Scheduling Coordinator by netting the amounts owed from payments due in subsequent Settlements Statements until the outstanding amounts are fully recovered. For export Schedules from the CAISO Balancing Authority Area at the southern terminus of the California-Oregon Transmission Project at the Tracy substation or at the applicable Scheduling Point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system, the CAISO will replace the Marginal Cost of Losses at the otherwise applicable sink for such Schedules with the Marginal Cost of Losses at the Tracy substation or at the applicable Scheduling Point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system, provided that the Scheduling Coordinator certifies, as discussed below, where the export Schedules use: (a) the California-Oregon Transmission Project; or (b) any transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA. In addition, the Scheduling Coordinator must certify

that the affected Schedules are charged losses by: (a) the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA; or (b) Transmission Agency of Northern California for the use of the California-Oregon Transmission Project. The CAISO will establish Resource IDs that are to be used only to submit Bids, including Self-Schedules, for the purpose of establishing Schedules that are eligible for this loss adjustment. Prior to obtaining such Resource IDs, the relevant Schedules, where the export Schedules use: (a) the California-Oregon Transmission Project; or (b) any transmission facilities owned by the Western Area Power Administration within the SMUD/TID IBAA. In addition the Scheduling Coordinator must certify that the affected Schedules are charged losses by: (a) the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration for the use of transmission Agency of Northern California for the use of the California-Oregon Transmission facilities owned by the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration for the use of transmission facilities owned by the Western Area Power Administration for the use of transmission Agency of Northern California for the use of the California-Oregon Transmission Project. Further, by actually using such Resource ID, the Scheduling Coordinator represents that such Bids, including Self-Schedules, are used for the above specified conditions.

Schedules and Dispatches settled under such Resource IDs shall be subject to an LMP which has accounted for the Marginal Cost of Losses as if there were an actual physical generation facility at the Tracy Scheduling Point or at the applicable Scheduling Point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system as opposed to the Marginal Cost of Losses under the IBAA LMPs specified in Section IG.1.1 of this Appendix. The CAISO may request information on a monthly basis from such Scheduling Coordinators to verify that schedules for such Resource IDs meet the above specified conditions. Any such request shall be limited to transactions that use the designated Resource IDs during the six month prior period to the date of the request. The CAISO will calculate a re-adjustment of the Marginal Cost of Losses at the Tracy substation or at the applicable Scheduling Point that connects the CAISO Balancing Authority Area and the Western Area Power Administration system to reflect the otherwise applicable sink for such Schedules for any Settlement Interval in which the CAISO has determined that the Scheduling Coordinator's payments did not reflect transactions that met the above specified conditions. Any amounts owed to the CAISO for such Marginal Cost of Losses re-adjustments will be recovered by the CAISO from the affected

Scheduling Coordinator by netting the amounts owed from payments due in subsequent Settlements Statements until the outstanding amounts are fully recovered.

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Appendix L

Appendix L Method to Assess Available Transfer Capability

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L.2 ATC Algorithm

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Actual ATC mathematical algorithms and other ATC calculation information are located in the CAISO's ATC Implementation Document (ATCID) posted on OASIS to the CAISO Website.

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Appendix N

Pseudo-Tie Protocols

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1.2.1.6 All Energy transfers associated with a Pseudo-Tie Generating Unit must be electronically tagged

(E-<u>T</u>tagged).

2.2.1.4 All Energy transfers associated with a Pseudo-Tie generating unit must be electronically tagged (<u>Ee-T</u>tagged).

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Appendix Q

Eligible Intermittent Resources Protocol (EIRP)

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2.2.5 [Not Used]Information Requirements for Participating Intermittent Resource Export Fee

In order for the CAISO to administer, implement and calculate the Participating Intermittent Resource Export Fee, each Participating Intermittent Resource jointly with, and through, its Scheduling Coordinator must provide the CAISO with the following information and documents under the schedule and conditions set forth in this section.

The CAISO will maintain the confidentiality of all information and documents received under this section in accordance with CAISO Tariff Section 20 et seq.

(a) A certification, in the form set forth in a Business Practice Manual, signed by an officer of the Participating Intermittent Resource and its Scheduling Coordinator, identifying each contract to sell Energy or capacity from the Participating Intermittent Resource, including for each such contract, the counterparty, start and end dates, delivery point(s), quantity in MW, other temporal terms, i.e., seasonal or hourly limitations.

The certification must be updated by resubmission to the CAISO (1) upon a request to modify the composition of the Participating Intermittent Resource under Section 2.4.2 of this EIRP; or (2) within ten (10) calendar days of final execution of a new contract or any change in counterparty, start and end dates, delivery point(s), quantity in MW, or other temporal terms, as described above, for any prior certified contract. All other contractual changes will not trigger the obligation for recertification.

(b) Copies of all contracts, including changes, identified in the above-referenced certification; however, price information may be redacted from the contracts provided.

Each Participating Intermittent Resource, as of November 1, 2006, must initially provide the information requested by this Section 2.2.5 in accordance with a Market Notice provided by the CAISO to Participating Intermittent Resources. All other Eligible Intermittent Resources must satisfy this Section 2.2.5 in order to become a Participating Intermittent Resource after November 1, 2006.

2.4.4 Continuing Obligation

A Participating Intermittent Resource or Eligible Intermittent Resource must meet all applicable obligations established for Participating Intermittent Resources or Eligible Intermittent Resources under the CAISO Tariff and this EIRP, and must fully cooperate in providing all data, other information, and authorizations the CAISO reasonably requests to fulfill its obligation to validate forecast models, and explain deviations, and implement the Participating Intermittent Resource Export Fees.

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Appendix R

UDP Aggregation Protocol[Not Used]



There are two types of UDP Aggregation classifications:

- (1) Basic UDP Aggregations: composed of Generating Units connected at the same substation and stepping up to the same voltage level bus bar, or
- (2) Custom UDP Aggregations: composed of Generating Units connected at different substations and/or different voltage levels, particularly where the Generating Units to be aggregated are separated by CAISO Controlled Grid facilities. Examples of a proposed custom UDP Aggregation include hydroelectric units operating on a common watershed (but having multiple different interconnection points), or geothermal units fed from a common geothermal steam supply.

2 SUBMITTAL OF A REQUEST FOR UDP AGGREGATION

Requests for UDP Aggregation are submitted to the CAISO and must include the following documentation:

- (1) A completed UDP Aggregation request form, which is available for downloading on the CAISO Website;
- (2) A simplified electrical one-line diagram, which illustrates each resource, the connection of the resources to each other and to the CAISO Balancing Authority Area;
- (3) For custom UDP Aggregations, a detailed description that explains physical operating interrelationships between the units, or, if there are no interrelationships, how the units are compatible and why an aggregation of these units for the purpose of calculating Uninstructed Deviation Penalties is reasonable.
- 3 CAISO REVIEW OF A UDP AGGREGATION REQUEST

- Upon receipt of a completed request form and accompanying attachments, the CAISO shall review the request according to the criteria outlined herein. For basic UDP Aggregations, the CAISO shall review and approve or reject it within one week of receipt. The CAISO shall review and approve or reject a request for a custom UDP Aggregation within thirty (30) days of receipt.
- 3.1 Criteria for Reviewing a Request
- 3.1.1 Scheduling Coordinator and Interconnection Point

Uninstructed Deviations may be aggregated for resources that are:

- (1) Represented by the same Scheduling Coordinator and
- (2) Connected to the same CAISO Controlled Grid bus and voltage level. The CAISO will consider, on a case-by-case basis, requests to aggregate Uninstructed Deviations among resources represented by the same Scheduling Coordinator but not sharing a common CAISO Controlled Grid bus and voltage level based on a CAISO review of impact on the CAISO Controlled Grid. In particular, the CAISO will consider whether the request concerns resources related by a common flow of fuel which cannot be interrupted without a substantial loss of efficiency of the combined output of all components; whether the Energy production from one resource necessarily causes Energy production from other resource(s); and whether the operational arrangement of resources determines the overall physical efficiency of the combined output of all of the resources.

3.1.2 Additional Criteria

Additional eligibility criteria for a UDP Aggregation are as follows:

- (1) Only Generating Units shall be eligible for UDP Aggregation. As a general rule, pump-generating Units (or a Physical Scheduling Plant [PSP] containing a pumpgenerating Unit) cannot be part of a UDP Aggregation. However, it is possible that Generating Units could form a UDP Aggregation comprised entirely of pumpgenerating Units whose operation is uniform, that is, units all operating in either Generation mode or all in pump mode, but never mixed.
- (2) UDP Aggregations cannot include any of the following:
- (a) Load;
- (b) Condition 2 Reliability Must-Run (RMR) Units;
- (c) Participating Intermittent Resources; or
- (d) Generating Units less than five (5) MW.
- (3) The resources must have CAISO direct telemetry and must be fully compliant with the CAISO's direct telemetry standards.
- (4) The Generating Units must have the same relative effect on all network elements for which the Generating Units have at least a five percent (5%) effectiveness factor, that is, for those network elements for which a one (1) MW change in the output of the Generating Unit changes the flow across that element by at least

0.05 MW. For the purposes of this item (4), the "same relative effect" means that the effectiveness factors of any Generating Unit relative to a network element cannot differ by more than ten percent (10%) from the midpoint effectiveness factor of all the units. The midpoint effectiveness is the arithmetic mean of the two most different effectiveness factors to be aggregated.

- (5) Custom UDP Aggregations involving units not directly connecting to the CAISO Controlled Grid must recognize the transfer limits and status of the intermediate local facilities.
- (6) The applicable PMax of aggregated groups of resources will exclude units that are not operating.

3.1.3 Approval of a Request

If a UDP Aggregation request is approved, the CAISO shall create a new unique Resource ID, which reflects the identity or location of the units and stipulates the UDP Aggregation, but which cannot be used for scheduling purposes. The CAISO shall inform the Scheduling Coordinator of the approval and ask the Scheduling Coordinator to confirm the desired start date of the UDP Aggregation. When that confirmation has been received, the new aggregation will be entered into the CAISO systems. Unless otherwise agreed to by the Scheduling Coordinator and the CAISO, the UDP Aggregation will become effective on the first day of the month following approval. The units in an approved UDP Aggregation are obligated to follow their individual Schedules and instructions at all times.

3.1.4 Rejection of a Request

If the CAISO determines that the proposed UDP Aggregation is likely to impact grid reliability or the reliability of transmission systems or equipment of intermediate entities between the relevant resources and the CAISO Controlled Grid, the request will be rejected. If the CAISO rejects a request, the CAISO shall inform the Scheduling Coordinator, and forward to it the reason for the rejection. The CAISO may suggest alternative solutions if it has adequate time and data. The Scheduling Coordinator may choose to resubmit based on the CAISO's recommendations, or to close the request.

4 MODIFICATIONS TO AN EXISTING UDP AGGREGATION

4.1 Status of UDP Aggregation

An approved UDP Aggregation shall be considered active until otherwise requested by the Scheduling Coordinator.

4.2 Suspension by the CAISO

The CAISO may temporarily suspend any UDP Aggregation as needed to ensure reliability. The CAISO may also suspend previously approved UDP Aggregations if, due to changes to the grid, to the aggregated Generating Units, or to the facilities connecting aggregated Generating Units to the grid, the UDP Aggregation no longer meets the criteria set forth in Sections 3.1.1 and 3.1.2 of this Appendix R.

If the CAISO must suspend the UDP Aggregation due to a Forced Outage or other

unanticipated event, the CAISO shall provide notice that the UDP Aggregation has been suspended as soon as practical after the affecting event, but in no case longer than seventy-two (72) hours after that event. If the CAISO must suspend the UDP Aggregation due to future changes, the CAISO shall notify the affected Scheduling Coordinator (1) that the UDP Aggregation will be suspended and (2) when the UDP Aggregation will be suspended as soon as practical after the CAISO determines the UDP Aggregation must be suspended.

- The CAISO shall write a report that explains the reason for the suspension and that specifies the effective date and time. The CAISO will forward the report to the Scheduling Coordinator and take steps to have the UDP Aggregation removed from the CAISO systems.
- In the event that a resource in a UDP Aggregation changes from one Scheduling Coordinator to another, the UDP Aggregation will be suspended. In order to reinstate the aggregation, the new Scheduling Coordinator must submit a new request reflecting the change.
- 4.3 Request for Modification by a Scheduling Coordinator
- A Scheduling Coordinator may request a modification to an existing UDP Aggregation up to once per calendar month. A request for modification will follow the same procedures as a new request.

Appendix S

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1.3 Application

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1.3.1.4 Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. The Federal Energy Regulatory Commission expects all transmission providers, market participants, and Interconnection Customers interconnected with electric systems to comply with <u>Applicable Reliability Criteria</u> the recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.

Appendix T

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12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all transmission providers, market participants, and interconnection customers interconnected to electric systems to comply with <u>Applicable Reliability Criteria the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.</u>

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Appendix U

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3.9 Reductions in Generating Facility Capacity

3.9.1 De Minimis Capacity Reductions

If, at the time an Interconnection Customer achieves Commercial Operation, the actual MW capacity of its Generating Facility is reduced by no more than the greater of five percent (5%) of its MW capacity or 10 MW, but by no more than twenty-five percent (25%) of the MW capacity of the Generating Facility, such a <u>one-time</u> reduction shall not constitute a breach of the Interconnection Customer's obligations under the CAISO Tariff or its Generator Interconnection Agreement. The MW capacity value of a Generating Facility for purposes of this section shall be established by reference to the capacity as set forth in the Interconnection Customer's currently applicable Generator Interconnection Agreement. No capacity reductions permitted under this section shall operate to diminish the Interconnection Customer's responsibility for any costs or other obligations set forth in its Generator Interconnection Agreement or the CAISO Tariff.

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4.4.6 The Interconnection Customer shall provide the CAISO a \$10,000 deposit for the modification assessment at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Interconnection Customer in

writing, within forty-five (45) calendar days from the date the CAISO receives all of the following: the Interconnection Customer's written notice to modify the project, technical data required to assess the request and payment of the \$10,000 deposit. If the modification assessment cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

The CAISO will defer evaluation of any modification requested pursuant to this section by an Interconnection Customer participating in the Generator Downsizing Process until the completion of that Generator Downsizing Process, as set forth in Section 7.5.2 of Appendix DD to the CAISO Tariff.

The Interconnection Customer will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the modification assessment. If the actual costs of the modification assessment are less than the deposit provided by the Interconnection Customer, the Interconnection Customer will be refunded the balance. If the actual costs of the modification assessment are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer shall pay the balance within 30 days of being invoiced. The CAISO shall coordinate the modification request with the Participating TO(s). The Participating TO(s) shall invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO shall issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment.

The CAISO will publish cost data regarding modification assessments in accordance with the terms set forth in a Business Practice Manual.

Notwithstanding any other provision, all refunds pursuant to this Appendix U will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

4.4.7 Commercial Viability Criteria for Retention of Deliverability beyond Ten Years in Queue

The CAISO's <u>agreement</u> to modifications requested pursuant to Section 4.4.3 for an Interconnection Customer that has exceeded or will exceed ten (10) years from the date the Interconnection Request is received by the CAISO with retention of Deliverability will be predicated upon the Interconnection Customer's ability to meet and maintain the following commercial viability criteria:

- a) Providing proof of having, at a minimum, applied for the necessary governmental permits or authorizations, and that the permitting authority has deemed such documentation as data adequate for the authority to initiate its review process;
- b) Providing proof of having an executed and regulator-approved power purchase agreement. Power purchase agreements must have the point of interconnection, capacity, fuel type, technology, and site location in common with the Interconnection Customer and GIA;

- Demonstrating Site Exclusivity for 100% of the property necessary to construct the facility through the Commercial Operation Date requested in the modification request. A Site Exclusivity Deposit does not satisfy this criterion;
- d) Having an executed Generator Interconnection Agreement ("GIA"); and
- e) Being in good standing with the GIA such that neither the Participating TO nor the CAISO has provided a Notice of Breach that has not been cured and the Interconnection Customer has not commenced sufficient curative actions.

Interconnection Customers that satisfied these commercial viability criteria before November 27, 2018, on the basis of balance-sheet or binding financing may continue to do so in their annual review. The CAISO will not consider the addition of energy storage; changes to the type, number, or manufacturer of inverters; or insubstantial changes to the Generating Facility as modifications under this Section. Interconnection Customers may request such modifications pursuant to this LGIP.

If the Interconnection Customer fails to meet all of the commercial viability criteria but informs the CAISO that it intends to proceed with the modified Commercial Operation Date, the Generating Facility's Deliverability Status will become Energy-Only Deliverability Status. Interconnection Customers that become Energy Only for failure to meet these criteria may not reduce their cost responsibility or Interconnection Financial Security for any assigned Delivery Network Upgrades as a result of converting to Energy Only unless the CAISO and Participating TO(s) determine that the Interconnection Customer's assigned Delivery Network Upgrade(s) is no longer needed for current Interconnection Customers.

If an Interconnection Customer satisfies all the commercial viability criteria except criterion (b), the CAISO will postpone converting the Generating Facility to Energy-Only Deliverability Status for one year from the day the Interconnection Customer submits the modification request, or eight eleven years after the CAISO received the Interconnection Request, whichever occurs later. Interconnection Customers exercising this provision must continue to meet all other commercial viability criteria.

If an Interconnection Customer has declared Commercial Operation for a portion of a Generating Facility, or one or more Phases of a Phased Generating Facility, the CAISO will not convert to Energy-Only the portion of the Generating Facility that is in service and operating in the CAISO markets. Instead, the portion of the Generating Facility that has not been developed will be converted to Energy-Only Deliverability Status, resulting in Partial Capacity Deliverability Status for the Generating Facility. However, where the Generating Facility has multiple Resource IDs for the Generating Facility, each Resource ID will have its own Deliverability Status independent from

the Generating Facility. Any individual Resource ID may have Full Capacity Deliverability Status where the Generating Facility as a whole would have Partial Capacity Deliverability Status. If the Generating Facility downsizes pursuant to Section 7.5 of Appendix DD to the CAISO Tariff to the amount in service and operating in the CAISO markets, it will revert to Full Capacity Deliverability Status.

4.4.7.1 Annual Review

For Interconnection Customers extending their Commercial Operation Date beyond the <u>tenseven</u>year threshold and retaining Deliverability pursuant to Section 4.4.7, the CAISO will perform an annual review of commercial viability. If any Interconnection Customer fails to maintain its level of commercial viability, the Deliverability Status of the Generating Facility corresponding to the Interconnection Request will convert to Energy-Only Deliverability Status.

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6.4 Re-Study

If re-study of the Interconnection Feasibility Study is required due to a higher queued project dropping out of the queue, or a modification of a higher queued project subject to LGIP Section 4.4, or re-designation of the Point of Interconnection pursuant to LGIP Section 6.1, or any other effective change in information which necessitates a re-study, the CAISO shall notify the Interconnection Customer and the applicable Participating TO(s) in writing along with providing a description of the expected results of the re-study. Upon receipt of such notice, the Interconnection Customer shall provide the CAISO within ten (10) Business Days either a written request that the CAISO (i) terminate the study and withdraw the Interconnection Request; or (ii) continue the study. If the Interconnection Customer requests the CAISO to continue the study, the Interconnection Customer shall pay the CAISO an additional \$50,000 deposit for the re-study along with providing written notice for the CAISO to continue.

Such re-study shall take not longer than forty-five (45) calendar days from the date the CAISO receives the Interconnection Customer's written notice to continue the study and payment of the additional \$50,000 deposit. The CAISO shall share applicable study results for review, provide the study results for review and comment to any other potentially-impacted Participating TO(s), incorporate comments, and issue a final study to the Interconnection Customer within sixty (60) calendar days from the date the CAISO receives the Interconnection Customer's written notice to continue the study and payment of the additional \$50,000 deposit. If the Interconnection Feasibility Study cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. Any and all costs of the re-study shall be borne by the Interconnection Customer being re-studied. The CAISO will coordinate the re-study with the Participating TO(s). The Participating TO(s) will invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO will issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment. If the actual costs of the re-study are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer will pay the balance within thirty (30) days of being invoiced.

Notwithstanding any other provision, all refunds pursuant to this Appendix U will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

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7.6 Re-Study

If re-study of the Interconnection System Impact Study is required due to a higher queued project dropping out of the queue, a modification of a higher queued project subject to LGIP Section 4.4, or re-designation of the Point of Interconnection pursuant to LGIP Section 7.2, or any other effective change in information which necessitates a re-study, the CAISO shall notify the Interconnection Customer in writing along with providing a description of the expected results of the re-study. Upon receipt of such notice, the Interconnection Customer shall provide the CAISO within ten (10) Business Days either a written request that the CAISO (i) terminate the study and withdraw the Interconnection Request; or (ii) continue the study. If the Interconnection Customer requests the CAISO to continue the study, the Interconnection Customer shall pay the CAISO an additional \$50,000 deposit for the re-study along with providing written notice for the CAISO to continue.

Such re-study shall take no longer than sixty (60) calendar days from the date the CAISO receives the Interconnection Customer's written notice to continue the study and payment of the additional \$50,000 deposit. The CAISO will share applicable study results with the applicable Participating TO(s) for review and comment, and will incorporate comments into the study report. The CAISO will issue a final study report to the Interconnection Customer within eighty (80) calendar days following receipt of the Interconnection Customer's written notice to continue the study and payment of the additional \$50,000 deposit. If the Interconnection System Impact Study cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. Any and all costs of re-study shall be borne by the Interconnection Customer being re-studied. The CAISO will coordinate the re-study with the Participating TO(s). The Participating TO(s) will invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO will issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment. If the actual costs of the re-study are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer will pay the balance within thirty (30) days of being invoiced.

Notwithstanding any other provision, all refunds pursuant to this Appendix U will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

10.1 Optional Interconnection Study Agreement

On or after the date when the Interconnection Customer receives Interconnection System Impact Study results, the Interconnection Customer may request, and the CAISO shall conduct or cause to be conducted, a reasonable number of Optional Interconnection Studies. The request shall describe the assumptions that the Interconnection Customer wishes to be studied within the scope described in LGIP Section 10.2. Within five (5) Business Days after receipt of a request for an Optional Interconnection Study, the CAISO shall provide to the Interconnection Customer an Optional Interconnection Study Agreement.

The Optional Interconnection Study Agreement shall: (i) specify the technical data that the Interconnection Customer must provide for each phase of the Optional Interconnection Study, (ii) specify the Interconnection Customer's assumptions as to which Interconnection Requests with higher Queue Positions will be excluded from the Optional Interconnection Study case and assumptions as to the type of interconnection service for Interconnection Requests remaining in the Optional Interconnection Study case, and (iii) the CAISO's estimate of the cost of the Optional Interconnection Study. To the extent known by the CAISO, such estimate shall include any costs expected to be incurred by any Affected System whose participation is necessary to complete the Optional Interconnection Study. Notwithstanding the above, the CAISO shall not be required as a result of an Optional Interconnection Study request to conduct any additional Interconnection Studies with respect to any other Interconnection Request.

The Interconnection Customer shall execute the Optional Interconnection Study Agreement within ten (10) Business Days of receipt and deliver the Optional Interconnection Study Agreement, the technical data and a \$50,000 deposit to the CAISO as applicable. The CAISO will coordinate the study with the Participating TO(s). The Participating TO(s) will invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO will issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment. If the actual costs of the study are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer will pay the balance within thirty (30) days of being invoiced.

Notwithstanding any other provision, all refunds pursuant to this Appendix U will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

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Appendix V

Appendix D Security Arrangement Details

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority Applicable Reliability Criteria. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

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Appendix X

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Appendix C

Security Arrangements Details

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, and Approved Project Sponsor interconnected to the CAISO Controlled Grid to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authorityApplicable Reliability Criteria. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

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Appendix Y

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3.10 Reductions in Generating Facility Capacity

3.10.1 De Minimis Capacity Reductions

If, at the time an Interconnection Customer achieves Commercial Operation, the actual MW capacity of its Generating Facility is reduced by no more than the greater of five

percent (5%) of its MW capacity or 10 MW, but by no more than twenty-five percent (25%) of the MW capacity of the Generating Facility, such a <u>one-time</u> reduction shall not constitute a breach of the Interconnection Customer's obligations under the CAISO Tariff or its Generator Interconnection Agreement. The MW capacity value of a Generating Facility for purposes of this section shall be established by reference to the capacity as set forth in the Interconnection Customer's currently applicable Generator Interconnection Agreement. No capacity reductions permitted under this section shall operate to diminish the Interconnection Customer's responsibility for any costs or other obligations set forth in its Generator Interconnection Agreement or the CAISO Tariff.

* * * * *

6.9.2.3 The Interconnection Customer shall provide the CAISO a \$10,000 deposit for the modification assessment at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Interconnection Customer in writing, within forty-five (45) calendar days from the date the CAISO receives all of the following: the Interconnection Customer's written notice to modify the project, technical data required to assess the request and payment of the \$10,000 deposit. If the modification assessment cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

The CAISO will defer evaluation of any modification requested pursuant to this section by an Interconnection Customer participating in the Generator Downsizing Process until the completion of that Generator Downsizing Process, as set forth in Section 7.5.2 of Appendix DD to the CAISO Tariff.

The Interconnection Customer will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the modification assessment. If the actual costs of the modification assessment are less than the deposit provided by the Interconnection Customer, the Interconnection Customer will be refunded the balance. If the actual costs of the modification assessment are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer shall pay the balance within 30 days of being invoiced. The CAISO shall coordinate the modification request with the Participating TO(s). The Participating TO(s) shall invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO shall issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment.

The CAISO will publish cost data regarding modification assessments in accordance with the terms set forth in a Business Practice Manual.

Notwithstanding any other provision, all refunds pursuant to this Appendix Y will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

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Appendix Z

LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)

[INTERCONNECTION CUSTOMER]

[PARTICIPATING TO]

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

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ARTICLE 1. DEFINITIONS

<u>Net Scheduled</u>QF PGA shall mean a <u>Qualifying FacilityNet Scheduled</u> Participating Generator Agreement specifying the special provisions for the operating relationship between a <u>Qualifying</u> <u>FacilityNet Scheduled Generating Unit</u> and the CAISO, a pro forma version of which is set forth in Appendix B.3 of the CAISO Tariff.

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ARTICLE 3. REGULATORY FILINGS AND CAISO TARIFF COMPLIANCE

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3.4 Relationship Between this LGIA and the <u>Net ScheduledQF</u> PGA. With regard to the rights and obligations of a <u>Qualifying FacilityNet Scheduled Generating Unit</u> that has entered into a <u>Net</u> <u>ScheduledQF</u> PGA with the CAISO and has entered into this LGIA, if and to the extent a matter is specifically addressed by a provision of the <u>QF-Net Scheduled</u> PGA that is inconsistent with this LGIA, the terms of the <u>QF-Net Scheduled</u> PGA shall govern.

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Appendix D

To LGIA

Security Arrangements Details

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority/Applicable Reliability Criteria. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

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Appendix BB

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Appendix D To LGIA

Security Arrangements Details

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority Applicable Reliability Criteria. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

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Appendix CC

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Appendix D To LGIA

Security Arrangements Details

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority/Applicable Reliability Criteria. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

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Appendix DD

3.5.1.1 Use of Interconnection Study Deposit.

The CAISO shall deposit all Interconnection Study Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Interconnection Study Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the Interconnection Studies and to meet and otherwise communicate with Interconnection Customers with respect to their Interconnection Requests.

Except for proposed Generating Facilities processed under the Fast Track Process set forth in Section 5, the Interconnection Study Deposits shall be refundable as follows:

- (a) Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under Section 3.8 on or before thirty (30) calendar days following the Scoping Meeting, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.
- (b) Should an Interconnection Request made under Section 3.5.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under Section 3.8 more than thirty (30) calendar days after the Scoping Meeting, but on or before thirty (30) calendar days following the Results Meeting (or the latest date permitted under this <u>GIDAP</u> for a Results Meeting if a customer elects not to have a Results Meeting) for the Phase I Interconnection Study or the system impact and facilities study for Generating Facilities processed under the Independent Study Process, the CAISO shall refund to the Interconnection Customer the difference between (i) the Interconnection Customer's Interconnection Study Deposit and (ii) the greater of the costs the CAISO and Participating TOs have incurred on the Interconnection Customer's behalf or one-half of the original Interconnection Study Deposit up to a maximum of \$75100,000, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal.

Interconnection Customers in Queue Cluster 5 who have provided the Study Deposit may receive a refund of the Interconnection Study Deposit, less actual costs expended on the Interconnection Studies to date, by withdrawing from the Queue within ten (10) calendar days after July 25, 2012.

- (c) Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under Section 3.8 at any time more than thirty (30) calendar days after the Results Meeting (or the latest date permitted for a Results Meeting if a customer elects not to have a Results Meeting) for the Phase I Interconnection Study, or the system impact and facilities study for proposed Generating Facilities processed under the Independent Study Process, the Interconnection Study Deposit shall be non-refundable.
- (d) Upon execution of a GIA by an Interconnection Customer, the CAISO and the applicable Participating TOs, or the approval by FERC of an unexecuted GIA, the CAISO shall

refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceeds the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.

Notwithstanding the foregoing, an Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request during an Interconnection Study Cycle shall be obligated to pay to the CAISO all costs in excess of the Interconnection Study Deposit that have been prudently incurred or irrevocably have been committed to be incurred with respect to that Interconnection Request prior to withdrawal. The CAISO will reimburse the applicable Participating TO(s) or third parties, as applicable, for all work performed on behalf of the withdrawn Interconnection Request at the CAISO's direction. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.

All non-refundable portions of the Interconnection Study Deposit that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf, and any non-refundable interconnection study deposit funds that are received by the CAISO from a Participating TO, pursuant to a requirement in the Participating TO's wholesale distribution tariff for such funds to be distributed by the CAISO, shall be treated in accordance with Section 7.6.

Notwithstanding any other provision, all refunds pursuant to this Appendix DD will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

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3.8 Withdrawal

The Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to the CAISO, and the CAISO will notify the applicable Participating TO(s) and Affected System Operators, if any, within three (3) Business Days of receipt of such a notice. In addition, after confirmation by the CAISO of a valid Interconnection Request under Section 3.5.2, if the Interconnection Customer fails to adhere to all requirements of this GIDAP, except as provided in Section 154.35 (Disputes), the CAISO shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer within five (5) Business Days of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Upon receipt of such written notice, the Interconnection Customer shall have five (5) Business Days in which to respond with information or action that either cures the deficiency or supports its position that the deemed withdrawal was erroneous and notifies the CAISO of its intent to pursue Dispute Resolution.

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4.2 Determination of Electrical Independence

An Interconnection Request will qualify for the Independent Study Process without having to demonstrate electrical independence pursuant to this Section 4.2 if, at the time the Interconnection Request is submitted, there are no other active Interconnection Requests in the same study area in the current Queue Cluster or in the Independent Study Process.

Otherwise, an ach-Interconnection Request submitted under the Independent Study Process must pass all of the tests for determining electrical independence set forth in this Section 4.2 in order to qualify for the Independent Study Process. These tests will utilize study results for active Interconnection Requests in the same study area, including Phase I Interconnection study results for Generating Facilities in the current Queue Cluster and any system impact study (or combined system impact and facilities study) results for earlier queued Generating Facilities being studied in the Independent Study Process.

4.2.1 Flow Impact Test/Behind-the-Meter Capacity Expansion Criteria

An Interconnection Request shall have satisfied the requirements of this Section if it satisfies, alternatively, either the set of requirements set forth in Section 4.2.1.1 or the set of requirements set forth in Section 4.2.1.2.

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4.5 Intentionally left blank.

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6.7.2.3 The Interconnection Customer shall provide the CAISO a \$10,000 deposit for the modification assessment at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Interconnection Customer in writing, within forty-five (45) calendar days from the date the CAISO receives all of the following: the Interconnection Customer's written notice to modify the project, technical data required to assess the request and payment of the \$10,000 deposit. If the modification request results in a change to the Interconnection Facilities or Network Upgrades the modification assessment cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

The CAISO will defer evaluation of any modification requested pursuant to this section by an Interconnection Customer participating in the Generator Downsizing Process until the completion of that Generator Downsizing Process, as set forth in Section 7.5.2.

The Interconnection Customer will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the modification assessment. If the actual costs of the modification assessment are less than the deposit provided by the Interconnection Customer, the Interconnection Customer will be refunded the balance. If the actual costs of the modification assessment are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer shall pay the balance within 30 days of being invoiced. The CAISO shall coordinate the modification request with the Participating TO(s). The Participating TO(s) shall invoice the CAISO for any assessment, and, within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO shall issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment.

The CAISO will publish cost data regarding modification assessments in accordance with the terms set forth in a Business Practice Manual.

Notwithstanding any other provision, all refunds pursuant to this Appendix DD will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

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6.8.3 Only Substantial Errors or Omissions Adjust Posting Dates

Only substantial errors and omissions related to the Phase I and Phase II study reports can result in adjustments to Interconnection Financial Security posting due dates. Once the initial and second Interconnection Financial Security posting due dates as described in this section have passed, the error or omission provisions described in this Section 6.8.3 no longer apply. Unless the error or omission is substantial, resulting in the issuance of a revised final Interconnection Study report, the correction of an error or omission will not delay any deadline for posting Interconnection Financial Security set forth in Section 11. In the case of a substantial error or omission resulting in the issuance of a revised final Phase I or Phase II Interconnection Study report, the deadline for posting Interconnection Financial Security shall be extended as set forth in Section 11. In addition to issuing a revised final report, the CAISO will promptly notify the Interconnection Customer of any revised posting amount and extended due date occasioned by a substantial error or omission.

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7.5.1 Objectives and Applicability

In accordance with the requirements set forth in this Section 7.5, the CAISO shall

conduct, on an annual basis, a process for evaluating requests by Interconnection Customers to reduce the megawatt generating capacities of their Generating Facilities. In each annual cycle of this Generator Downsizing Process, the CAISO will process valid Generator Downsizing Requests submitted during the applicable Generator Downsizing Request Window as part of the annual reassessment process set forth in Section 7.4.

All reductions to the megawatt generating capacity of Generating Facilities by Interconnection Customers shall utilize this annual Generator Downsizing Process unless explicitly exempted. Specifically, beginning on the date of the opening of the first annual Generator Downsizing Request Window, all proposed reductions of megawatt generating capacity by Interconnection Customers shall, regardless of the dates of the Interconnection Customer's Interconnection Request(s), be subject to the requirements and procedures of the Generator Downsizing Process set forth in Section 7.5, except for MW capacity reductions made pursuant to the following: (1) the provisions of the CAISO's interconnection procedures that permit Interconnection Customers to reduce the size of their Generating Facilities between the Phase I and Phase II Interconnection Studies, as set forth in Section 6.7.2; (2) specific non-conforming provisions of an Interconnection Customer's Generator Interconnection Agreement that provide the Interconnection Customer with an explicit right to reduce the capacity of its Generating Facility through a partial termination of its Generator Interconnection Agreement; (3) the de minimis threshold set forth in Section 7.5.13.1; and (4) the parking options set forth in Sections 8.9.4, 8.9.5, and 8.9.6; and (5) where the CAISO and Participating TO determine no study is required.

Generator Downsizing Requests that meet the eligibility requirements set forth in this Section 7.5 will be studied as part of the next annual reassessment process set forth in Section 7.4.

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7.5.13 Reductions in Generating Facility Capacity

7.5.13.1 De Minimis Capacity Reductions

If, at the time an Interconnection Customer achieves Commercial Operation, the actual MW capacity of its Generating Facility is reduced by no more than the greater of five percent (5%) of its MW capacity or 10 MW, but not by more than twenty-five percent (25%) of the MW capacity of the Generating Facility, such a <u>one-time</u> reduction shall not constitute a breach of the Interconnection Customer's obligations under the CAISO Tariff or its Generator Interconnection Agreement. The MW capacity value of a Generating Facility for purposes of this section shall be established by reference to the capacity as set forth in the Interconnection Customer's currently applicable Generator Interconnection Agreement. No capacity reductions permitted under this Section 7.5.13 shall operate to diminish the Interconnection Customer's responsibility for any costs or other obligations set forth in its Generator Interconnection Agreement or the CAISO Tariff.

8.9.2 Second Component: Allocating TP Deliverability

Following the process set forth in Section 8.9.1, the CAISO will allocate any remaining TP Deliverability in the following order.

The CAISO shall allocate available TP Deliverability to all or a portion of the full MW capacity of the Generating Facility as specified in the Interconnection Request. Where a criterion is met by a portion of the full MW generating capacity of the Generating Facility, the eligibility score associated with that criterion shall apply to the portion that meets the criterion. The demonstration must relate to the same proposed Generating Facility as described in the Interconnection Request.

- (1) To Interconnection Customers in the current Queue Cluster or coming out of parking that have executed power purchase agreements, and to Interconnection Customers in the current Queue Cluster that are Load Serving Entities serving their own Load.
- (2) To Interconnection Customers in the current Queue Cluster or coming out of parking that are actively negotiating a power purchase agreement or on an active short list to receive a power purchase agreement.
- (3) To Interconnection Customers in the current Queue Cluster with a completed Phase II Interconnection Study that have not parked, which are subject to Section 8.9.23.2 and elect to proceed without a power purchase agreement, or that parked before November 27, 2018 and attested to balance-sheet financing upon the end of their parking period.

Only these three foregoing groups may trigger the construction of Delivery Network Upgrades pursuant to Section 6.3.2. After the CAISO has allocated TP Deliverability to the three foregoing groups, the CAISO will allocate any remaining TP Deliverability to Energy Only Interconnection Customers requesting Deliverability based on the reassessment study and in the following order:

- (4) To Interconnection Customers that have not achieved their Commercial Operation Date, originally requested Full Capacity Deliverability Status or Partial Capacity Deliverability Status, and have executed power purchase agreements; and to Interconnection Customers that have achieved their Commercial Operation Date and have executed power purchase agreements.
- (5) To Interconnection Customers that have not achieved their Commercial Operation Date, originally requested Full Capacity Deliverability Status or Partial Capacity Deliverability Status, and are actively negotiating a power purchase agreement or on an active short list to receive a power purchase agreement; and to Interconnection Customers that have achieved their Commercial Operation Date and are actively negotiating a power purchase agreement or on an active short list to receive a power purchase agreement or on an active short list to receive a power purchase agreement.
- (6) To Interconnection Customers that originally requested Full Capacity Deliverability Status or Partial Capacity Deliverability Status but achieved their

Commercial Operation Date as Energy Only.

(7) To Interconnection Customers that achieved their Commercial Operation Date.

The CAISO will allocate TP Deliverability to these four foregoing groups solely based on TP Deliverability available from existing transmission facilities, from already planned upgrades in the CAISO Transmission Planning Process, or upgrades assigned to an interconnection project that has an executed GIA and currently has a TPD allocation.

Energy Only Interconnection Customers requesting Deliverability must submit to the CAISO a \$60,000 study deposit for each Interconnection Request seeking TP Deliverability. The CAISO will deposit these funds in an interest bearing account at a bank or financial institution designated by the CAISO. The funds will be applied to pay for prudent costs incurred by the CAISO, the Participating TO(s), and/or third parties at the direction of the CAISO or applicable Participating TO(s), as applicable, to perform and administer the TP Deliverability studies for the Energy Only Interconnection Customers. Any and all costs of the Energy Only TP Deliverability study will be borne by the Interconnection Customer. The CAISO will coordinate the study with the Participating TO(s). The Participating TO(s) will invoice the CAISO for any work within seventy-five (75) calendar days of completion of the study, and, within thirty (30) days thereafter, the CAISO will issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the study. If the actual costs of the study are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer will pay the balance within thirty (30) days of being invoiced.

All power purchase agreements in this Section 8.9 must require Deliverability for the Interconnection Customer to represent that it has, is negotiating, or is shortlisted for a power purchase agreement. For all TP Deliverability allocations based upon having, negotiating, or being shortlisted for power purchase agreements, the CAISO will allocate TP Deliverability up to the amount of deliverable MW capacity procured by the power purchase agreement. All Load Serving Entities building Generating Facilities to serve their own Load must be doing so to fulfill a regulatory requirement that warrants Deliverability. Load Serving Entities acting as Interconnection Customers are otherwise eligible for all other attestations.

Notwithstanding any other provision, all refunds pursuant to this Appendix DD will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

* * * * *

8.9.2.1 Deliverability Affidavits

* * * * *

In allocating TP Deliverability under this section, in a situation where the TP Deliverability cannot accommodate all of the Interconnection Customers in a qualifying group, the CAISO will allocate TP Deliverability based on the highest
numerical score. In a <u>S</u>ituation where the available amount of TP Deliverability can accommodate all Interconnection Customers with equal scores, the CAISO will allocate the TP Deliverability to the Interconnection Customers with the lowest LDNU cost estimates. For all TP Deliverability allocations based upon having, negotiating, or being shortlisted for power purchase agreements, the CAISO will allocate TP Deliverability up to the amount of deliverable MW capacity procured by the power purchase agreement.

* * * * *

8.9.3 Retaining TP Deliverability Allocation

For Interconnection Customers in Queue Cluster 10 or later, once a Generating Facility is allocated TP Deliverability under Section 8.9.1, the Interconnection Customer annually, on the date set forth and according to the process described in the Business Practice Manual, must demonstrate that the Generating Facility meets the following criteria to retain its TP Deliverability:

* * * * *

(5) The Interconnection Customer must maintain its Commercial Operation Date set forth in the GIA unless an extension is required for reasons beyond the control of the Interconnection Customer or such extension results in no Material Modification or delay in the construction schedule for Network Upgrades common to multiple Generating Facilities; or unless the extension is occasioned by a material delay in the Participating TO's construction of any Network Upgrades or Participating TO's Interconnection Facilities

* * * * *

8.9.9 Deliverability Transfers

Deliverability may not be assigned or otherwise transferred except as expressly provided by the CAISO Tariff. An Interconnection Customer may reallocate its Generating Facility's Deliverability among its own Generating Units or Resource IDs at the Generating Facility. The Generating Units must be located at the same Point of Interconnection and operate under the same GIA. The Generating Facility's aggregate output as evaluated in the Deliverability Assessment cannot increase as the result of any transfer, but may decrease based on the assignee's characteristics and capacity. The CAISO will inform the Interconnection Customer of each Generating Unit's Deliverability Status and associated capacity as the result of any transfer. The results will be based on the current Deliverability Assessment methodology.

* * * * *

14.2.4.2 The Generating Unit owner will provide the CAISO a \$10,000 deposit for the limited operation study with the request. Except as provided below, any

limited operation study will be concluded, and a response provided to the Generating Unit owner in writing, within forty-five (45) calendar days from when the CAISO receives all of the following: the Generating Unit owner's written approval of the limited operation study plan, technical data required to assess the request, and the \$10,000 deposit. If the limited operation study cannot be completed within that time period, the CAISO will notify the Generating Unit owner and provide an estimated completion date and an explanation of the reasons why additional time is required.

Notwithstanding any other provision, all refunds pursuant to this Appendix DD will be processed in accordance with the CAISO's generally accepted accounting practices, including monthly batched deposit refund disbursements. Any CAISO deadline will be tolled to the extent the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate the Interconnection Customer's refund, or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer.

* * * * *

Appendix 3

GENERATOR INTERCONNECTION STUDY PROCESS AGREEMENT FOR QUEUE CLUSTERS

* * * * *

13.10 [Not Used] Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

* * * * *

IN WITNESS THEREOF, the Part<u>yies hasve</u> caused this Agreement to be duly executed by <u>itstheir</u> duly authorized officers or agents on the day and year first above written.

California Independent System Operator Corporation

By: _____ Printed Name: _____

Title: _

Date:

* * * * *

Appendix 4

AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY AGREEMENTS

* * * * *

3.4.1 For any tasks specifically assigned to the PTO pursuant to Attachment A or otherwise mutually agreed upon by the CAISO and the PTO, the CAISO reserves the right, on a case-by-case basis, to perform or reassign to a mutually agreed upon and pre-qualified contractor such task only where: (a) the quality and accuracy of prior PTO Interconnection Study work product resulting from assigned tasks has been deemed deficient by the CAISO, the CAISO has notified the PTO pursuant to the notice provision of Section 4.156 of this Agreement in writing of the deficiency, and the deficiency has not been cured pursuant to Section 3.4.2 of this Agreement; (b) the timeliness of PTO Interconnection Study work product has been deemed deficient, and either (i) the CAISO has not been notified of the reasons and actions taken to address the timeliness of the work, or (ii) if notified, the stated reasons and actions taken are insufficient or unjustifiable and the PTO has not cured the deficiency pursuant to Section 3.4.2 of this Agreement; (c) the PTO has failed, in a mutually agreed upon timeframe, to provide the CAISO with information or data related to an Interconnection Request despite a written request by the CAISO, pursuant to Section 3.5 hereof, to do so, and such data is the responsibility of the PTO to provide to the CAISO, subject to Section 4.3 of this Agreement; (d) the PTO advises the CAISO in writing that it does not have the resources to adequately or timely perform the task according to the applicable timelines set forth in Attachment A; or (e) the estimated cost of the PTO performing the task has been determined in writing by the CAISO to significantly exceed the cost of the CAISO or mutually agreed upon contractor performing the task, inclusive of the costs that will be incurred by the PTO in exercising its review rights of the results of any such tasks performed by such third party(ies). If the CAISO deviates from the assignments set forth in Attachment A based on the foregoing factors, the CAISO will provide the PTO with a written explanation for the deviation and any associated reassignments of work. The PTO may contest the deviation pursuant to the Dispute Resolution procedures set forth in Section 4.1 of this Agreement.

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Appendix EE

TABLE OF CONTENTS

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ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION

5.1 Options

- 5.1.1 Standard Option
 - 5.1.2 Alternate Option
 - 5.1.3 Option to Build
 - 5.1.4 Negotiated Option
 - 5.1.5 Merchant Option

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Appendix D Security Arrangements Details

Infrastructure security of CAISO Controlled Grid equipment and operations and control hardware and software is essential to ensure day-to-day CAISO Controlled Grid reliability and operational security. FERC will expect the CAISO, all Participating TOs, market participants, and Interconnection Customers interconnected to the CAISO Controlled Grid to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority/Applicable Reliability Criteria. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

* * * * *

Appendix H INTERCONNECTION REQUIREMENTS FOR AN ASYNCHRONOUS GENERATING FACILITY

* * * * *

vi. Transient Data Recording Equipment for Facilities above 20 MW

Asynchronous Generating Facilities with generating capacities of more than 20 MW must monitor and record data for all frequency ride-through events, transient low voltage disturbances that initiated reactive current injection, reactive current injection or momentary cessation for transient high voltage disturbances, and inverter trips. The data may be recorded and stored in a central plant control system. The following data must be recorded:

Plant Level:

- (1) Plant three phase voltage and current
- (2) Status of ancillary reactive devices
- (3) Status of all plant circuit breakers
- (4) Status of plant controller
- (5) Plant control set points
- (6) Position of main plant transformer no-load taps
- (7) Position of main plant transformer tap changer (if extant)
- (8) Protective relay trips or relay target data

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Appendix FF

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Article 3. Effective Date, Term, Termination, and Disconnection

* * * * *

3.4.5 Modification of the Small Generating Facility

Prior to making any modifications to the Small Generating Facility before it has achieved its Commercial Operation Date, the Interconnection Customer must first request that the CAISO evaluate whether such modification is a Material Modification and receive written authorization from the Participating TO and the CAISO. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. The CAISO may engage the services of the applicable Participating TO to assess the modification. Costs incurred by the Participating TO and CAISO (if any) shall be borne by the party making the request under Section 6.7.2 of Appendix DD, and such costs shall be included in any CAISO invoice for modification assessment activities. If the Interconnection Customer has achieved its Commercial Operation Date, the CAISO and Participating TO(s) will review the requested modification pursuant to Sections 25 and 25.1(c) of the CAISO Tariff. If the Interconnection Customer makes modifications without the Participating TO's and the CAISO's prior written authorization, the Participating TO or the CAISO shall have the right to temporarily disconnect the Small

Generating Facility. Any change to the Point of Interconnection, except those deemed acceptable under this article of the GIDAP SGIA or so allowed elsewhere, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

Notwithstanding Section 7.5 of Appendix DD, at any time after achieving its Commercial Operation Date, the Interconnection Customer may reduce the megawatt generating capacities of its Generating Facilities, subject to Section 25.1(c) of the CAISO Tariff. Section 7.5.<u>11</u>44 of Appendix DD will still apply to such requests to reduce capacity.

* * * * *

Article 6. Billing, Payment, Milestones, And Financial Security

* * * * *

6.4.1 The Interconnection Customer is obligated to provide all necessary Interconnection Financial Security required under Section <u>119</u> of the GIDAP in a manner acceptable under Section <u>119</u> of the GIDAP. Failure by the Interconnection Customer to timely satisfy the GIDAP's requirements for the provision of Interconnection Financial Security shall be deemed a breach of this Agreement and a condition of Default of this Agreement.

Article 12. Miscellaneous

* * * * *

12.9 Security Arrangements

Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. FERC expects all transmission providers, market participants, and interconnection customers interconnected to electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authorityApplicable Reliability Criteria. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

* * * * *

Appendix GG

One-Time Interconnecting Generator

Downsizing Opportunity[Not Used]

Section 1 Objectives and Definitions

1.1 Objectives and Applicability

This Appendix GG sets out the requirements for Interconnection Customers with Interconnection Requests to interconnect either a Small or Large Generating Facility to the CAISO Controlled Grid who (a) meet the eligibility criteria set out in this Appendix GG and (b) elect to participate in the one-time opportunity set out in this Appendix GG to modify their Interconnection Requests to reduce the megawatt generating capacity of the Small or Large Generating Facility which is the subject of the request.

1.2 Definitions

1.2.1 Master Definitions Supplement and Section References.

Unless the context otherwise requires, any word or expression defined in this Appendix GG shall have the same meaning used in either (a) the Master Definitions Supplement, Appendix A to the CAISO Tariff, or (b) the CAISO Tariff appendix applicable to the Interconnection Customer's Interconnection Request. A reference to a "Section" shall mean a reference to that numerical section of this Appendix GG unless otherwise indicated. A reference to a "GIP Section" shall mean a reference to that numerical section of the CAISO Tariff Appendix Y, Generator Interconnection Procedures.

1.2.2 Special Definitions for this Appendix GG.

In this Appendix GG, the following words and expressions shall have the meanings set opposite them:

"Affected Generator" shall mean an Interconnection Customer who is not a Downsizing Generator whose interconnection configuration, including but not limited to cost responsibility or schedule for Network Upgrades, has been modified through the Generator Downsizing Study. An Affected Generator may mean an interconnection customer connecting to the distribution system of a Participating TO under a wholesale distribution tariff.

"Downsizing Generator" shall mean an Interconnection Customer who submits a Generator Downsizing Request under this Appendix GG.

"Downsizing Generator Interconnection Agreement Amendment" shall mean the pro-forma amendment to a Downsizing Generator's or Affected Generator's Generator Interconnection Agreement, which pro-forma amendment is set forth in CAISO Tariff Appendix HH.

"Downsizing Generator Payment Obligation Agreement" shall mean the repayment agreement set forth in Appendix 3 of this Appendix GG, obligating the Downsizing Generator to pay for study work conducted for the Generator Downsizing Study, preparation of the Generator Downsizing Study Reports and Generator Interconnection Agreements, and amendments thereto necessary to implement this Appendix GG.

"Generator Downsizing Deposit" shall mean a deposit in the amount of two hundred thousand dollars (\$200,000) required by this Appendix GG that is to be paid in cash or cash equivalent funds only.

"Generator Downsizing Request" shall mean a request submitted under this Appendix GG to modify the Downsizing Generator's Interconnection Request to reduce the megawatt generating capacity of the Small or Large Generating Facility.

"Generator Downsizing Request Due Date" shall mean January 4, 2013 at five o'clock (5:00) p.m., Pacific time, which shall be the due date for CAISO receipt of any Generator Downsizing Request under this Appendix GG.

"Generator Downsizing Study" shall mean that study or studies conducted in accordance with this Appendix GG.

"Generator Downsizing Study Report" shall mean the study report issued in conjunction with the Generator Downsizing Study to Downsizing Generators and Affected Generators.

"Generator Interconnection Agreement" shall mean, for purposes of this Appendix GG, Generator Interconnection Agreements as defined in Appendix A of the CAISO Tariff, as well as interconnection agreements of Affected Generators interconnecting to a distribution system of a Participating TO under a wholesale distribution tariff.

"Reasonable Efforts" shall mean, with respect to an action required to be attempted or taken by a Party under this Appendix GG, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

Section 2 Generator Downsizing Request

2.1 General

A Downsizing Generator shall submit its Generator Downsizing Request to the CAISO in the form of Appendix 1 to this Appendix GG. The CAISO will forward a copy of the Generator Downsizing Request to the applicable Participating TO(s).

2.2 Roles and Responsibilities

(a) Each Generator Downsizing Request will be subject to the direction and oversight of the CAISO. The CAISO will conduct or cause to be performed the Generator Downsizing Study and any additional studies the CAISO determines to be reasonably necessary, and will direct the applicable Participating TO(s) to perform portions of studies where the Participating TO has specific and non-transferable expertise or data and can conduct the studies more efficiently and cost-effectively than the CAISO. The CAISO will coordinate with Affected System Operators in accordance with this Appendix GG and GIP Section 3.7.

(b) The CAISO will undertake Reasonable Efforts to complete or cause to be completed all studies as required within the timelines provided in this Appendix GG.

(c) Each Downsizing Generator shall pay the costs for the Generator Downsizing Study and preparation of the Generator Downsizing Study Report prepared for the Downsizing Generator and Affected Generators, and the costs associated with amending the Generator Interconnection Agreements of the Downsizing Generator and any Affected Generators, as necessary, in accordance with Sections 2.7 and 2.8.

(d) The CAISO has established a pro-forma agreement entitled "Agreement for the Allocation of Responsibilities with Regard to Generator Downsizing Opportunity, Generator Downsizing Study, and Amendment of Generator Interconnection Agreements," attached to this Appendix GG as Appendix 4 and incorporated herein by reference, for execution by the CAISO and the applicable Participating TO(s).

2.3 Generator Downsizing Request Due Date

All Generator Downsizing Requests must be submitted by the Generator Downsizing Request Due Date.

2.4 Eligibility to Submit Request

In order to be eligible to submit a Generator Downsizing Request, the Interconnection Customer must

- (1) have an Interconnection Request currently being processed under one of the following provisions of the CAISO Tariff:
 - (a) <u>CAISO Tariff Appendix Y</u> (Generator Interconnection Procedures (GIP)) applying to Interconnection Requests processed in the Transition Cluster and Queue Clusters 1 through 4;
 - (b) <u>CAISO Tariff Appendix U</u> (Standard Large Generator Interconnection Procedures (LGIP)) applying to Large Generating Facility Interconnection Requests not assigned to a Queue Cluster Window;
 - (c) <u>CAISO Tariff Appendix W</u> (Interconnection Procedures in Effect Prior to July 1, 2005 ("Amendment 39 Procedures")) applicable to Small Generating Facilities interconnecting in accordance with Section 1.3 of Appendix S and Large Generating Facilities in accordance with Section 5.1 of Appendix U; or
 - (d) CAISO Tariff Appendix S (Small Generator Interconnection Procedures).
- (2) In addition, the Interconnection Customer must meet all of the following requirements of good standing of its Interconnection Request by the Generator Downsizing Request Due Date:
 - (a) The Interconnection Request has not been withdrawn or deemed withdrawn by the CAISO. If the CAISO has issued a notice of deemed withdrawal to the Interconnection Customer, which the Interconnection Customer has not cured, then the Interconnection Customer shall not be eligible to submit a Generator Downsizing Request.
 - (b) The Interconnection Customer has complied with all applicable requirements of the CAISO Tariff under which the Interconnection Request is being processed, including timely submittal of all Interconnection Financial Security postings which have come due.
 - (c) The Interconnection Customer is in compliance with the terms of its Generator Interconnection Agreement, including Interconnection Customer milestones; has not received a notice of breach or notice of default which the Interconnection Customer has not cured; and does not have its Interconnection Request or Generator Interconnection Agreement in suspension under Article 5.16 or other applicable suspension provision of the Generator Interconnection Agreement.

Interconnection Customers with Interconnection Requests processed under CAISO Appendix DD (Generator Interconnection and Deliverability Allocation Procedures (GIDAP)) shall not be eligible to submit a Generator Downsizing Request.

2.5 Processing a Generator Downsizing Request

2.5.1 Initiating the Generator Downsizing Request.

To initiate the Generator Downsizing Request, the Downsizing Generator must submit all of the following by the Generator Downsizing Request Due Date:

- A completed application in the form of Appendix 1 to this Appendix GG, including required technical data. The technical data shall include data pertaining to the reduced megawatt generating capacity of the Generating Facility corresponding to the megawatt reduction requested. The Downsizing Generator may change the step-up transformer and parameters of the Downsizing Generator's Interconnection Facilities due to the smaller megawatt capacity size. Proposed modifications to the Generating Facility technology or inverter type are beyond the scope of the Generator Downsizing Request and shall not be permitted under this Appendix GG.
- A certification in the form of Appendix 2 to this Appendix GG that the Downsizing Generator meets the eligibility requirements of Section 2.4.
- The Generator Downsizing Deposit.

Failure to submit either the certification required by Section 2.5.1(ii) or the Generator Downsizing Deposit required by Section 2.5.1(iii) by the Generator Downsizing Request Due Date shall result in the Generator Downsizing Request being treated as void and not subject to cure of a deficiency pursuant to Section 2.5.2.

2.5.2 Validation of Generator Downsizing Request.

2.5.2.1 Notification.

The CAISO shall notify the Downsizing Generator no later than ten (10) Business Days after the Generator Downsizing Request Due Date, whether the Generator Downsizing Request is deemed complete, valid, and ready to be studied.

2.5.2.2 Deficiencies in the Request as to Application Information.

A Generator Downsizing Request will not be considered to be a valid request until the CAISO determines that the information contained in the Generator Downsizing Request is complete and that the Downsizing Generator has complied with all of the requirements of Section 2.5.1.

Only if the Generator Downsizing Request contains a deficiency in the application required by Section 2.5.1(i) will the CAISO provide the Downsizing Generator with an opportunity to cure the deficiency. In that event, the CAISO will notify the Downsizing Generator of the reason(s) that the application is deficient and will request additional information to cure the deficiency. In order to remain eligible to participate in the generator downsizing process, the Downsizing Generator must provide the additional requested information needed to constitute a valid Generator Downsizing Request. Whenever additional requested information is provided by the Downsizing Generator, the CAISO shall notify the Downsizing Generator within five (5) Business Days of receipt of the additional requested information whether the Generator Downsizing Request is valid. If the Generator Downsizing Request continues to fail to meet the requirements set forth in Section 2.5.1(i), the CAISO shall include in its notification to the Downsizing Generator the reasons for such failure. If a Generator Downsizing Request has not been deemed valid, the Downsizing Generator must submit all information necessary to meet the requirements of Section 2.5.1(i) no later than fifteen (15) Business Days after the Generator Downsizing Request Due Date or ten (10) Business Days after the CAISO first provided notice that the Generator Downsizing Request was not valid, whichever is later. Generator Downsizing Requests that have not met the requirements of Section 2.5.1(i) within fifteen (15) Business Days after the Generator Downsizing Request Due Date or ten (10) Business Days after the CAISO first provided notice that the Generator Downsizing Request was not valid, whichever is later, will be deemed invalid and will not be included in Generator Downsizing Studies.

2.6 Use of Generator Downsizing Deposit

The CAISO shall deposit all Generator Downsizing Deposits in an interest-bearing account at a bank or financial institution designated by the CAISO. The Generator Downsizing Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the generator downsizing process and to communicate with Downsizing Generators with respect to their Generator Downsizing Requests.

These costs shall include but not be limited to:

- 1. The costs of preparing the Generator Downsizing Study and associated Generator Downsizing Study Report for the Generating Facility subject to the Generator Downsizing Request and for any Affected Generators; and
- 2. The costs associated with amending the Generator Interconnection Agreements of the Downsizing Generator and any Affected Generators, as necessary.

2.7 Obligations of Downsizing Generators for Study Costs

A Downsizing Generator shall be responsible for all actual costs incurred in connection with preparing the Generator Downsizing Study and the Generator Downsizing Study Reports. A Downsizing Generator's share of actual study costs shall be determined by dividing the total amount of actual study costs by the number of valid Generator Downsizing Requests, but shall be no higher than an amount equal to 150 percent of the Downsizing Generator's share of the preliminary estimate posted in accordance with Section 3 of the aggregate costs incurred in connection with preparing the Generator Downsizing Deposit is insufficient to cover the costs for which the Downsizing Generator is responsible, the CAISO shall invoice the Downsizing Generator and such amount shall be paid within thirty (30) calendar days of the date of the invoice.

2.8 Obligations of Downsizing Generators for Costs of Amending GIAs

The Downsizing Generator's responsibility for the costs to amend Generator Interconnection Agreements pursuant to Section 13 will be \$10,000 (ten thousand dollars) for its own Generator Interconnection Agreement and \$10,000 (ten thousand dollars) for each Generator Interconnection Agreement of an Affected Generator that is amended, in whole or in part, due to the Downsizing Generator's Generator Downsizing Request.

In cases where multiple Generator Interconnection Agreements relate to multiple Generator Downsizing Requests, the cost responsibility of each Downsizing Generator that submitted one of the multiple Generator Downsizing Requests will be calculated by (i) multiplying the number of amended Generator Interconnection Agreements by \$10,000 (ten thousand dollars) and then (ii) dividing the resulting amount by the number of Generator Downsizing Requests.

A Downsizing Generator's cost responsibility under this Section shall be capped at \$100,000 (one hundred thousand dollars).

2.9 Refund of Generator Downsizing Deposit

If a Downsizing Generator's total obligation for both actual study costs, per Section 2.7, and amending GIAs, per Section 2.8, is less than its Generator Downsizing Deposit, then the Downsizing Generator will be refunded the unused balance of its Generator Downsizing Deposit, together with applicable interest from the interest-bearing account at the bank or financial institution into which the funds were deposited in accordance with Section 2.6.

2.10 Allocation Between the CAISO and Participating TOs of Study Expenses

The CAISO and the applicable Participating TO(s) shall be paid for expenses incurred in undertaking the Generator Downsizing Study from the amounts paid by the Downsizing Generators pursuant to Section 2.7.

If the total study expenses incurred by the CAISO and the applicable Participating TO(s) exceed the amounts paid by Downsizing Generators by reason of the cost cap set forth in Section 2.7, then the CAISO and the applicable Participating TO(s) will allocate among themselves the total amount paid pro rata, in the proportion of their individual study costs to the total amounts paid by Downsizing Generators.

2.11 Allocation Between the CAISO and Participating TOs of Costs of Amending GIAs Collected from Downsizing Generators

The CAISO will be allocated fifty (50) percent of the amounts paid by the Downsizing Generator for the costs to amend Generator Interconnection Agreements pursuant to Section 2.8, and the applicable Participating TO(s) will be allocated the other fifty (50) percent of such amounts. If there is more than one applicable Participating TO, then the amount paid by Downsizing Generators shall be apportioned as agreed to between the CAISO and the applicable Participating TOs.

2.12 Invoicing and Related Obligations

The Participating TO and any third parties performing work related to the Generator Downsizing Study on the Downsizing Generator's behalf shall invoice the CAISO for such work within seventy-five (75) calendar days of completion of the Generator Downsizing Study, and, within thirty (30) days thereafter, the CAISO shall issue an invoice to the Downsizing Generator based upon such submitted Participating TO and third-party invoices and the CAISO's own costs for the Generator Downsizing Study. The invoice shall include a detailed and itemized accounting of the cost of each Generator Downsizing Study. The CAISO shall draw from the Generator Downsizing Deposit in accordance with the invoice.

If the Downsizing Generator's obligations for

- (i) the actual costs of performing the Generator Downsizing Studies, subject to the cost cap contained in Section 2.7; and
- (ii) the cost responsibility of amending GIAs, subject to the cost cap contained in Section 2.8

exceed the Generator Downsizing Deposit, then the Downsizing Generator shall pay the difference, in accordance with the CAISO-issued invoice, within thirty (30) calendar days. The CAISO shall not be obligated to continue to conduct any other studies unless the Downsizing Generator has paid all outstanding invoices.

Section 3 Internet Posting

Following the Generator Downsizing Request Due Date, the CAISO shall post on the CAISO Website a listing of Interconnection Requests, identified by queue number, having made valid Generator Downsizing Requests. In addition, the CAISO shall publish on the CAISO Website a preliminary estimate of the aggregate study costs for conducting the Generator Downsizing Study. A Downsizing Generator's share of the preliminary estimate of the aggregate study costs for conducting Study shall be determined by dividing the preliminary estimate by the number of valid Generator Downsizing Requests. The CAISO shall issue a Market Notice that it has posted the information in accordance with this Section.

Section 4 Coordination with Affected Systems

The CAISO will notify the Affected System Operators of pertinent results of the Generator Downsizing Study and provide copies of Generator Downsizing Study Reports to Affected System Operators upon request. The Downsizing Generators shall cooperate with the CAISO and Affected System Operators in all matters related to the conduct of the Generator Downsizing Study.

Section 5 Withdrawal of Generator Downsizing Request

5.1 Scope of Withdrawal Rights

A Downsizing Generator's ability to withdraw the Generator Downsizing Request is limited to the following:

(i) <u>First Opportunity to Withdraw</u>. A Downsizing Generator shall have five (5) Business Days following the CAISO issuance of the Market Notice described in Section 3 to withdraw its Generator Downsizing Request. If the CAISO does not receive written notice of withdrawal by 8:00 a.m. Pacific time on the sixth (6th) Business Day following CAISO issuance of the Market Notice, the Downsizing Generator's Generator Downsizing Request will remain in effect.

Following a timely withdrawal under this Section 5.1(i), the CAISO shall refund the Downsizing Generator's Generator Downsizing Deposit, less those costs incurred in validating the Generator Downsizing Request.

(ii) Second Opportunity to Withdraw. Following written notice from the CAISO stating that preliminary results of the Generator Downsizing Study indicate that the Downsizing Generator's cost responsibility for Network Upgrades is expected to increase by more than five percent (5%) or five million dollars (\$5,000,000), whichever is lower, from its cost responsibility identified in its Interconnection Facilities Study or Phase II Interconnection Study report, or its Generator Interconnection Agreement, if it has executed one, the Downsizing Generator shall have seven (7) Business Days following receipt of such notice to withdraw its Generator Downsizing Request. If the CAISO does not receive written notice of withdrawal by 8:00 a.m. Pacific time on the eighth (8th) Business Day following the Downsizing Generator's receipt of the Generator Downsizing Study Report, the Generator Downsizing Request will remain in effect.

A Downsizing Generator withdrawing its Generator Downsizing Request under this Section 5.1(ii) will not receive a refund of the Generator Downsizing Deposit. The CAISO will apply the Generator Downsizing Deposit against the deposit costs incurred in validating the Generator Downsizing Request and conducting the Generator Downsizing Study. The balance of the Generator Downsizing Deposit shall be treated in accordance with Section 37.9.4 of the CAISO Tariff.

Withdrawal shall result in the removal of the Generator Downsizing Request from the Generator Downsizing Study.

5.2 Commitment to Go Forward

Other than the two withdrawal opportunities set out in Section 5.1, a Downsizing Generator has no opportunity to withdraw its Generator Downsizing Request, and must satisfy a Downsizing Generator's obligations set forth in this Appendix GG.

Section 6 Generator Downsizing Study Process

6.1 Downsizing Generator Payment Obligation Agreement

No later than five (5) calendar days prior to the close of the first opportunity to withdraw under Section 5.1(i), the CAISO shall provide to each Downsizing Generator with a valid Generator Downsizing Request received by the Generator Downsizing Request Due Date a pro forma Downsizing Generator Payment Obligation Agreement in the form set forth in Appendix 3 of this Appendix GG. The pro forma Generator Downsizing Payment Obligation Agreement shall specify that the Downsizing Generator is responsible for and agrees to pay costs of the Generator Downsizing Study, the preparation and issuance of Generator Downsizing Study Reports to the Downsizing Generator and Affected Generators, and the negotiation and execution of amendments to the Generator. Interconnection Agreements of Downsizing Generators and Affected Generators, including reasonable administrative costs, and all requirements of this Appendix GG.

Within five (5) calendar days of tender, the Downsizing Generator shall execute and return the Downsizing Generator Payment Obligation Agreement. If the Downsizing Generator fails to execute and return the Downsizing Generator Payment Obligation Agreement, then the Generator Downsizing Request shall be void and the CAISO shall refund the Downsizing Generator's Generator Downsizing Deposit, less the costs incurred in validating the Generator Downsizing Request.

6.2 Interconnection Base Case Data Used in Generator Downsizing Study

In conjunction with the Generator Downsizing Study conducted by the CAISO under this Appendix GG, the CAISO and any applicable Participating TO(s) shall utilize applicable Interconnection Base Case Data.

The CAISO, in coordination with the applicable Participating TO(s), shall publish updated Interconnection Base Case Data containing applicable Base Case data developed for the Generator Downsizing Study, to a secured section of the CAISO Website.

Interconnection Base Case Data shall include information subject to the confidentiality provisions set forth in Section 13.1 of Appendix Y.

The CAISO shall require Affected Generators, current and former Interconnection Customers, Market Participants, and electric utility regulatory agencies within California to sign a CAISO confidentiality agreement and, where the Affected Generator, current or former Interconnection Customer or Market Participant is not a member of WECC, or its successor, an appropriate form of agreement with WECC, or its successor, as necessary. All other entities or persons seeking Interconnection Base Case Data must satisfy the foregoing requirements as well as all requirements under 18 C.F.R. Section 388.113 for obtaining the release of Critical Energy Infrastructure Information (as that term is defined by FERC).

6.3 Grouping Generator Downsizing Requests

The CAISO, in coordination with the applicable Participating TO(s), may develop one or more Group Studies for the Downsizing Generators and Affected Generators. A Group Study will include, in the CAISO's sole judgment after coordination with the applicable Participating TO(s), the Downsizing Generators and the Affected Generators that affect one another electrically with respect to the analysis being performed, without regard to the nature of the underlying Interconnection.

6.4 Scope and Purpose of Generator Downsizing Study

The CAISO shall issue a Market Notice of the anticipated commencement and completion dates for the Generator Downsizing Study. The Generator Downsizing Study shall evaluate the impact of all valid and non-withdrawn Generator Downsizing Requests received by the Generator Downsizing Request Due Date on the current plan of service for Network Upgrades and Participating TOs' Interconnection Facilities resulting from all completed Interconnection Studies, and shall identify alternatives to Network Upgrades or Participating TOs' Interconnection Facilities contained in the current plan of service and the timing impacts of such refreshed upgrades or facilities on the Commercial Operation Dates of Downsizing Generators and Affected Generators.

The Generator Downsizing Study will consist of a short-circuit analysis, a stability analysis to the extent the CAISO and applicable Participating TO(s) reasonably expect transient or voltage stability concerns, a power flow analysis, including off-peak analysis, and an On-Peak Deliverability Assessment. The Generator Downsizing Study will state, within Group Studies, (i) the assumptions upon which it is based, (ii) the results of the analyses, and (iii) the revised requirements or potential impediments to providing the requested Interconnection Service to all Interconnection Requests. The Generator Downsizing Study will provide a list of Network Upgrades to the CAISO Controlled Grid and of Participating TOs' Interconnection Facilities that have been removed, modified, or substituted as a result of the Generator Downsizing Requests, and, as applicable, an estimate of any other financial impacts (*i.e.*, on Local Furnishing Bonds).

Applicable study results shall be set out in a Generator Downsizing Study Report provided, as applicable, to Downsizing Generators and Affected Generators. In general, the Generator Downsizing Study Report shall set out updated Interconnection configuration information with respect to Network Upgrades and Participating TOs' Interconnection Facilities as a result of the Generator Downsizing Requests.

The Generator Downsizing Study Report shall also set forth the applicable cost estimates for Network Upgrades and Participating TOs' Interconnection Facilities if the scope of the Network Upgrades or Participating TOs' Interconnection Facilities has changed as a result of the Generator Downsizing Study. These cost estimates shall form the updated cost estimates for Network Upgrades and Participating TOs' Interconnection Facilities, shall adjust any earlier estimates contained in the prior Interconnection Studies and reports earlier provided to the Downsizing Generators and Affected Generators, and shall establish the basis for the Downsizing Generator's or Affected Generator's Interconnection Financial Security postings.

Section 7 Cost Allocation for Network Upgrades Modified or Substituted in Generator Downsizing Study

The cost estimates for modified or substituted Network Upgrades identified in the Generator Downsizing Study shall be determined in accordance with the methodology used for the Phase II Interconnection Study for Interconnection Requests in a Queue Cluster.

7.1 Cost Allocation for Network Upgrades and Participating TOs' Interconnection Facilities

To the extent that Network Upgrades or Participating TOs' Interconnection Facilities were modified or substituted in the Generator Downsizing Study as a result of the Generator Downsizing Requests, the costs shall be assigned to the Interconnection Customers who originally triggered the Network Upgrades or Participating TOs' Interconnection Facilities on a pro rata basis in proportion to the costs allocated among such Interconnection Customers in the governing Interconnection Studies undertaken before the Generator Downsizing Study. Provided, however, that no Affected Generator shall be assigned a cost amount arising out of the Generator Downsizing Study greater than the cost amount assigned to such Affected Generator for such Network Upgrades and Participating TOs' Interconnection Facilities in the Affected Generator's earlier-governing Interconnection Study or, if applicable, in the Affected Generator's Generator Interconnection Agreement.

7.2 Limitation on Cost Allocation as a Result of Downsizing

- (1) If the estimated costs of a Network Upgrade or Participating TO's Interconnection Facilities modified or substituted as a result of Generator Downsizing Requests that are assigned to an Affected Generator in this process are higher than the costs which such Affected Generator has already been assigned for the original Network Upgrade or Participating TO's Interconnection Facilities pursuant to their relevant Interconnection Studies, such costs shall not be allocated to the Affected Generator. Instead, such costs shall be re-allocated to applicable Downsizing Generators pursuant to the methodology set forth in Section 7.1.
- (2) If the Generator Downsizing Study indicates that a Network Upgrade identified in a Downsizing Generator's or Affected Generator's pertinent Interconnection Studies will no longer be needed by the originally triggering Downsizing Generator or Affected Generator, or by Interconnection Customers in the same Cluster Study as the Downsizing Generator or Affected Generator, but the Network Upgrade or a substitute Network Upgrade will still be needed by laterqueued Affected Generators (provided they are being studied in Queue Cluster 4 or earlier) in the Generator Downsizing Study, the later-queued Affected Generators shall not be allocated the costs of the Network Upgrade. Instead, the interconnection customers that were originally assigned the costs of such Network Upgrade will continue to be assigned the costs of the Network Upgrade, or the substitute Network Upgrade, and shall be required to fund those Network Upgrades on the same schedule as contained in the Downsizing Generator's Generator Interconnection Agreement prior to the Downsizing Request, if maintenance of such schedule is needed by Affected Generators.
- (3) If, as a result of the Generator Downsizing Study, a Network Upgrade that was originally triggered by an interconnection to the Distribution System of a Participating TO is no longer needed by such interconnection, but the upgrade is needed by Affected Generators, then the cost of the upgrade shall not be allocated to the Distribution System interconnection customer; rather, the cost shall be allocated among the Downsizing Generators, based upon flow impact in the case of Delivery Network Upgrades and based upon short circuit duty or

megawatt (MW) capacity in the case of Reliability Network Upgrades, in accordance with Section 6 of Appendix Y.

7.3 Effect of Downsizing on Maximum Cost Responsibility for Generators in a Queue Cluster or Independent Study Process

For Downsizing Generators or Affected Generators in a Queue Cluster or in the Independent Study Process, if the Generator Downsizing Study results in a change in the cost of Network Upgrades assigned to the Downsizing Generator or Affected Generator, then the Downsizing Generator's or Affected Generator's maximum cost responsibility for Network Upgrades, and the maximum value for the Interconnection Financial Security required of the Generator, shall be the amount assigned in the Generator Downsizing Study. However, for Affected Generators, if the assigned Network Upgrade costs increase as a result of the Generator Downsizing Study, then the Affected Generator's maximum cost responsibility shall not be modified, and shall continue to be determined as set forth in Section 9.5 of Appendix Y.

Section 8 Commercial Operation Date

The Downsizing Generator or Affected Generator may request that the CAISO evaluate a proposed change of the Commercial Operation Date of a Generating Facility, or any phase of a Phased Generating Facility, only to the extent that the change is directly and reasonably related to the in-service dates of the Network Upgrades reflected in the Downsizing Generator's or Affected Generator's Interconnection configuration as such Network Upgrades and in-service dates have been refreshed in the Generator Downsizing Study. The CAISO and Participating TO shall consider the request and their agreement to such change request shall not be unreasonably withheld. The Commercial Operation Date change request must be made prior to the execution of the Downsizing Generator Agreement Amendment.

Section 9 Modifications

Proposed modifications to the Interconnection Request that do not directly relate to

- (i) the requested reduction in megawatt capacity of the Generating Facility pursuant to this Appendix GG; or
- (ii) a proposed change of the Commercial Operation Date of the Generating Facility or a phase of a Phased Generating Facility in accordance with Section 8

are beyond the scope of the Generator Downsizing Request and shall not be evaluated in the Generator Downsizing Study or as part of the Generator Downsizing Request activities under this Appendix GG.

The CAISO shall defer any Downsizing Generator request to modify the Interconnection Request or to request preliminary review of a proposed modification which the Downsizing Generator may make under the applicable CAISO Tariff Appendix governing the Downsizing Generator's Interconnection Request until the completion of the Downsizing Generator's Generator Downsizing Request made under this Appendix GG. Other than the deferral of such request as provided in this Section 9, nothing in this Section 9 shall diminish the rights of the Downsizing Generator or Affected Generator to request a modification pursuant to the applicable interconnection procedures under which the Downsizing Generator's or Affected Generator's Interconnection Request is being processed.

Section 10 Results Meeting With the CAISO and Applicable Participating TO(s)

Within ten (10) calendar days of its receipt of the Generator Downsizing Study Report, the Downsizing Generator may request a Generator Downsizing Study results meeting with the CAISO and the applicable Participating TO(s) to discuss the results of the Generator Downsizing Study.

Within fourteen (14) calendar days of its receipt of the Generator Downsizing Study Report, the Affected Generator may request a Generator Downsizing Study results meeting with the CAISO and the applicable Participating TO(s) to discuss the results of the Generator Downsizing Study.

Section 11 Participating TO Tariff Option for Generator Downsizing

To the extent that a Participating TO's tariff provides the option for customers taking interconnection service under the Participating TO's wholesale access interconnection tariff to engage in a one-time generator downsizing opportunity coincident with the time period in which the CAISO will perform the Generator Downsizing Study, the CAISO will, in coordination with the applicable Participating TO, perform the necessary studies, including deliverability studies to determine the deliverability of Participating TO interconnection customers electing such option. The CAISO shall execute any necessary agreements with the Participating TO for reimbursement of study costs and to assure cost attribution for any Network Upgrades in conjunction with such CAISO activity under this Section 11.

Section 12 Effect of Generator Downsizing on Interconnection Financial Security Requirements

If a Downsizing Generator's or Affected Generator's cost responsibility for Network Upgrades and/or Participating TOs' Interconnection Facilities changes between its earlier Interconnection Studies and the Generator Downsizing Study:

- (1) the Downsizing Generator's or Affected Generator's revised cost responsibility as established through the Generator Downsizing Study and this Appendix GG shall be used for purposes of calculating all future Interconnection Financial Security postings, pursuant to the interconnection procedures under which the Downsizing Generator or Affected Generator is being processed.
- (2) Any Interconnection Financial Security postings already made by the Downsizing Generator or Affected Generator will be revised accordingly. The CAISO will provide notice of the updated posting amounts within fifteen (15) Business Days of the issuance of the applicable Generator Downsizing Study Report. To the extent that
 - (i) a Downsizing Generator's cost responsibility for Network Upgrades or Participating TO's Interconnection Facilities either increases or decreases; or
 - (ii) an Affected Generator's cost responsibility for Network Upgrades or Participating TO's Interconnection Facilities decreases

then adjustments of the Interconnection Financial Security to conform to the updated amounts specified in the notice shall be undertaken within thirty (30) calendar days of the notice.

Section 13 Reflecting Plan of Service Changes in Generator Interconnection Agreements

Within thirty (30) calendar days after the CAISO provides the Generator Downsizing Study Report to the Downsizing Generator or Affected Generator, the applicable Participating TO(s) and the CAISO shall, if necessary, tender a draft amendment to the executed GIA, together with draft amended appendices. Any such amendment shall be in the form of CAISO Tariff Appendix HH. Concurrent with this, the Participating TOs will tender draft amendments to Affected Generators who are wholesale distribution interconnection customers pursuant to the terms of the applicable wholesale distribution tariffs. If the Downsizing Generator or Affected Generator has not yet executed a GIA, then the applicable Participating TO(s) and the CAISO shall, if necessary, tender a revised draft GIA with draft appendices within thirty (30) calendar days after the CAISO provides the Generator Downsizing Study Report. The process for providing comments, negotiation, and execution and filing of a revised GIA, or an amendment to an executed GIA, including all timeframes, shall be identical to the process set forth in Section 11 of Appendix Y, or as agreed to by the Downsizing Generator or Affected Generator or Affected Generator, CAISO, and Participating TO(s).

Section 14 Confidentiality

The provision for treatment of Confidential Information contained within the CAISO Tariff Appendix under which the Interconnection Request of the Downsizing Generator or Affected Generator is being processed shall govern.

[Not Used] APPENDIX 1 GENERATOR DOWNSIZING REQUEST
Provide three copies of this completed form pursuant to Sections 3 and 5, below, of this Appendix GG Appendix 1.
 The undersigned Interconnection Customer submits this request to reduce the maximum net megawatt electrical output of its Generating Facility for the Interconnection Request in the CAISO Controlled Grid Generation Queue:
CAISO Controlled Grid Generation Queue No
Project Name:
If the Interconnection Request is for a new Generating Facility, provide the reduced maximum net output: Maximum net megawatt electrical output (MW):
If the Interconnection Request is for a decrease in the generating capacity of an existing Generating Facility, provide the reduced net output decrease: Net Megawatt decrease (MW):
2. Name, address, telephone number, and e-mail address of the Interconnection Customer's contact person (primary person who will be contacted):
Name:

Phone Number:
Fax Number:
Email Address:
3. Generator Downsizing Request data (set forth in Attachment A)
The Downsizing Generator shall provide to the CAISO the technical data called for in Appendix GG Appendix 1, Attachment A. Three (3) copies are required.
4. Make the cashier's or bank check for the Generator Downsizing Deposit amount of \$200,000 payable to CA/SO. Send the check to the CAISO (see section 5 for details) along with:
Appendix 1 to this Appendix GG (Generator Downsizing Request) for processing.
Attachment A to this Appendix 1 (Generator Downsizing Request Generating Facility Data).
5. This Generator Downsizing Request shall be submitted to the CAISO representative indicated below:
New Resource Interconnection
California ISO
P.O. Box 639014
Folsom, CA 95763-9014
Overnight address: California ISO, Attn: Grid Assets, 250 Outcropping Way, Folsom, CA 95630
6. This Generator Downsizing Request is submitted by:

-Lega	I name	of th	e Dov	vnsizing	Generator	-
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Ry (cignature):	
- Dy (Signature).	

-Name (type or print):_____

-Title:_____

-Date:_____

ATTACHMENT A TO APPENDIX 1

GENERATING FACILITY DATA

Provide three copies of this completed form pursuant to Section 3 of Appendix GG Appendix 1.

1. Provide two original prints and one reproducible copy (no larger than 36" x 24") of the following:

A. Site drawing to scale, showing generator location and Point of Interconnection with the CAISO Controlled Grid.

B. Single-line diagram showing applicable equipment such as generating units, step-up transformers, auxiliary transformers, switches/disconnects of the proposed interconnection, including the required protection devices and circuit breakers. For wind and photovoltaic generator plants, the one-line diagram should include the distribution lines connecting the various groups of generating units, the

	sformers and capacitor banks at the Point of Interconnection with the CAISO Controlled Grid
	List changes to the currently effective Interconnection Request Generating Facility Data forn file with the CAISO:
Eiold	s marked with * should not be changed from the original Interconnection Request. On
	changes related to downsizing are permitted.
	2. Generating Facility Information
	B. Generating Facility auxiliary Load (MW):
	C. Project net capacity (A-B)(MW):
	D. Standby Load when Generating Facility is off-line (MW):
	E. Number of Generating Units:
	(Please repeat the following items for each generator)
	F. Individual generator rated output (MW for each unit):
	G. Manufacturer:
	H. Year Manufactured:
	I. Nominal Terminal Voltage (kV):
	J. Rated Power Factor (%):
	K. Type (Induction, Synchronous, DC with Inverter)*:
	L. Phase (three phase or single phase)*:
M.	Connection (Delta, Grounded WYE, Ungrounded WYE, impedance grounded):
	N. Generator Voltage Regulation Range (+/- %):
	O. Generator Power Factor Regulation Range:

Synchronous Generator – General Information: 3. (Please repeat the following for each generator model) Rated Generator speed (rpm): A. B. Rated MVA: Rated Generator Power Factor: C. Generator Efficiency at Rated Load (%): Đ. E. Moment of Inertia (including prime mover): E_ SCR (Short-Circuit Ratio - the ratio of the field current required for rated open-circuit voltage to the field current required for rated short-circuit current): Please attach generator reactive capability curves. H____ Rated Hydrogen Cooling Pressure in psig (Steam Units only): _____ Please attach a plot of generator terminal voltage versus field current that shows the air gap line, the open-circuit saturation curve, and the saturation curve at full load and rated power factor. **Excitation System Information** (Please repeat the following for each generator model) Indicate the Manufacturer and Type of excitation system used for the generator. For exciter type, please choose from 1 to 9 below or describe the specific excitation system. (1)Rotating DC commutator exciter with continuously acting regulator. The regulator power source is independent of the generator terminal voltage and current. (2)Rotating DC commentator exciter with continuously acting regulator. The regulator power source is bus fed from the generator terminal voltage. (3) Rotating DC commutator exciter with non-continuously acting regulator (i.e., regulator adjustments are made in discrete increments). — Rotating AC Alternator Exciter with non-controlled (diode) rectifiers. The regulator power source (4)is independent of the generator terminal voltage and current (not bus-fed).

(5)	Rotating AC Alternator Exciter with controlled (thyristor) rectifiers. The regulator power source is fed from the exciter output voltage.
	(6) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers.
(7)	Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from the generator terminal voltage.
(8) corr	Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from a abination of generator terminal voltage and current (compound-source controlled rectifiers system.
	(9) Other (specify):
B.	Attach a copy of the block diagram of the excitation system from its instruction manual. The diagram should show the input, output, and all feedback loops of the excitation system.
	C. Excitation system response ratio (ASA):
	D. Full load rated exciter output voltage:
	E. Maximum exciter output voltage (ceiling voltage):
	F. Other comments regarding the excitation system?
(Ple	Power System Stabilizer Information
unles	as an exemption has been obtained from WECC. Such an exemption can be obtained for units that do not have suitable excitation systems.)
	A. Manufacturer:
	B. Is the PSS digital or analog?
	C. Note the input signal source for the PSS
	Bus frequency Shaft speed Bus Voltage
D.	Bus frequencyShaft speedBus Voltage
Ð	Bus frequency Shaft speed Bus Voltage Other (specify source) Please attach a copy of a block diagram of the PSS from the PSS Instruction Manual and the

Turbine-Governor Information
(Please repeat the following for each generator model)
Please complete Part A for steam, gas or combined-cycle turbines, Part B for hydro turbines, and Part C for both.
-A. Steam, gas or combined-cycle turbines:
(1) List type of unit (Steam, Gas, or Combined-cycle):
(2) If steam or combined-cycle, does the turbine system have a reheat process (i.e., both high and low pressure turbines)?
(3) If steam with reheat process, or if combined-cycle, indicate in the space provided, the percent of full load power produced by each turbine:
Low pressure turbine or gas turbine:%
High pressure turbine or steam turbine:%
-B. Hydro turbines:
(1) Turbine efficiency at rated load:%
(2) Length of penstock:ft
(3) Average cross-sectional area of the penstock:ft2
(4) Typical maximum head (vertical distance from the bottom of the penstock, at the gate, to the water level):ft
(5) Is the water supply run-of-the-river or reservoir:
(6) Water flow rate at the typical maximum head:ft3/sec
(7) Average energy rate:kW-hrs/acre-ft
(8) Estimated yearly energy production:kW-hrs

C. Complete this section for each machine, independent of the turbine type.
(1) Turbine manufacturer:
(2) Maximum turbine power output:MW
(3) Minimum turbine power output (while on line):MW
(4) Governor information:
(a) Droop setting (speed regulation):
(b) Is the governor mechanical-hydraulic or electro-hydraulic (Electro-hydraulic governors have an electronic speed sensor and transducer.)?
(c) Other comments regarding the turbine governor system?
7. Induction Generator Data:
7. Induction Generator Data: A. Rated Generator Power Factor at rated load:
A. Rated Generator Power Factor at rated load:
A. Rated Generator Power Factor at rated load: B. Moment of Inertia (including prime mover):
 A. Rated Generator Power Factor at rated load:
A. Rated Generator Power Factor at rated load: B. Moment of Inertia (including prime mover): C. Do you wish reclose blocking? Yes, No Note: Sufficient capacitance may be on the line now, or in the future, and the generator may self-excite unexpectedly.
A. Rated Generator Power Factor at rated load: B. Moment of Inertia (including prime mover): C. Do you wish reclose blocking? Yes, No Note: Sufficient capacitance may be on the line now, or in the future, and the generator may self-excite unexpectedly. 8. Generator Short Circuit Data
A. Rated Generator Power Factor at rated load: B. Moment of Inertia (including prime mover): C. Do you wish reclose blocking? Yes, No Note: Sufficient capacitance may be on the line now, or in the future, and the generator may self-excite unexpectedly. 8. Generator Short Circuit Data
A. Rated Generator Power Factor at rated load: B. Moment of Inertia (including prime mover): C. Do you wish reclose blocking? Yes, No Note: Sufficient capacitance may be on the line now, or in the future, and the generator may self-excite unexpectedly. 8. Generator Short Circuit Data For each generator model, provide the following reactances expressed in p.u. on the generator base:

Generator Grounding (select 1 for each model):
ASolidly grounded
B. Grounded through an impedance
(Impedance value in p.u on generator base. R:p.u.
——————————————————————————————————————
C. Ungrounded
9. Step-Up Transformer Data
For each step-up transformer, fill out the data form provided in Table 1.
10. Interconnection Facilities Line Data
There is no need to provide data for new lines that are to be constructed by the Participating TO. However, for transmission lines that are to be constructed by the generation developer, please provide the following information:
Nominal Voltage*:kV
Line Length*:miles
Line termination Points*:
Conductor Type: Size:
If bundled. Number per phase:, Bundle spacing:in.
Phase Configuration. Vertical:, Horizontal:
Phase Spacing: A-B:ft., B-C:ft., C-A:ft. o

Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, or duty of this Agreement. Termination or default of this Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this Agreement shall, if requested, be provided in writing.

Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.

12.9 Headings. The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.

12.10 Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

12.11 Amendment. The Parties may by mutual agreement amend this Agreement by a written instrument duly executed by both of the Parties.

12.12 Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations.

12.13 Reservation of Rights. The CAISO shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and

FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

12.14 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

12.15 Assignment. This Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that the Interconnection Customer shall have the right to assign this Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Generating Facility, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Section will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Section is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed. Notwithstanding the foregoing, this Agreement may be assigned to a successor in interest to the Downsizing Generator pursuant to the underlying

interconnection process under which the Downsizing Generator's Interconnection Request is being processed.
IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.
-California Independent System Operator Corporation
Ву:
Printed Name:
Title:
Date:
[Incost name of the Developing Conceptor]
-[Insert name of the Downsizing Generator]
Ву:
-Printed Name:
Title:
Date:

APPENDIX 4

AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO

GENERATOR DOWNSIZING OPPORTUNITY, GENERATOR DOWNSIZING STUDY AND AMENDMENT OF GENERATOR INTERCONNECTION AGREEMENTS

 WHEREAS, this Agreement will ensure an independent assessment of new Generating Facility impacts on the CAISO Controlled Grid at the reduced megawatt capacities requested by Downsizing Generators and take advantage of the respective expertise of the Parties to facilitate efficient and cost-effective Downsizing Generator Study procedures in a manner consistent with the Federal Energy Regulatory Commission's ("FERC") July 1, 2005 Order (112 FERC ¶ 61,009), FERC's August 26, 2005 Order (112 FERC ¶ 61,231), and prior FERC Orders recognizing that Order No. 2003 did not allocate responsibilities between transmission owners and transmission providers for the provision of Interconnection Service and suggesting those parties enter into an agreement to allocate those responsibilities. Southwest Power Pool, Inc., 106 FERC ¶ 61,254 (2004).

NOW THEREFORE, in view of the respective responsibilities assigned to the Parties and the foregoing FERC orders, and the provisions of the CAISO's Generator Downsizing Opportunity set forth in CAISO Tariff Appendix GG ("Appendix GG"), the CAISO and PTO agree to the following allocation of responsibilities for a centralized Generator Downsizing Study and amendment of Generator Interconnection Agreements under the direction and oversight of the CAISO:

1. DEFINITIONS

Unless otherwise defined herein, all capitalized terms shall have the meaning set forth in the CAISO Tariff.

2. TERM OF AGREEMENT

This Agreement shall become effective upon the date specified in the first paragraph above and shall remain in effect until (1) terminated by all Parties in writing, or (2) with respect to the PTO, upon the

termination of that entity's status as a PTO pursuant to the Transmission Control Agreement, as amended from time to time.

3. PROVISIONS FOR ALLOCATION OF RESPONSIBILITIES BETWEEN CAISO AND PTO

3.1 Interconnection Service: The Parties acknowledge that, as the transmission provider, the CAISO is responsible for reliably operating the transmission grid. The Parties also recognize that while the CAISO is a transmission provider under the CAISO Tariff, the CAISO does not own any transmission facilities, and the PTO owns, constructs, and maintains the facilities to which Generating Facilities are to be interconnected, and that the PTO may construct or modify facilities to allow the interconnection. While the Parties recognize that the CAISO will be responsible for conducting or causing to be performed Interconnection Studies and similar studies, the PTO will participate in these studies and conduct certain portions of studies, under the direction and oversight of, and approval by, the CAISO, as provided in this Agreement. The CAISO shall not enter into any Interconnection Study agreement, such as the Downsizing Generator Payment Obligation Agreement provided in Appendix GG, with an Interconnection Customer as a Downsizing Generator under Appendix GG that is contrary to these rights.

3.2 [INTENTIONALLY LEFT BLANK]

3.3 Transmission Owners' Right to Participation in Studies, Committees and Meetings:

- **3.3.1** In the event that an Interconnection Customer proposes to interconnect a Generating Facility with the PTO's facilities, or the PTO is an owner of an Affected System, the PTO shall have the right to participate in any Interconnection Study or any other study conducted in connection with such request for Interconnection Service. "Participate" in this Section 3.3.1 means physically perform any study or portion thereof in connection with an Interconnection Request, under the direction and oversight of, and approval by, the CAISO pursuant to Section 3.4 of this Agreement; provide or receive input, data or other information regarding any study or portion thereof in connection thereof in connection with an Interconnection Request; and, when any study or portion thereof in connection with an Interconnection Request is physically performed by an entity other than the PTO, perform activities necessary to adequately review or validate, as appropriate, any results of the study or portions thereof and provide recommendations.
- **3.3.2** In the event that an Interconnection Customer proposes to interconnect a Generating Facility with the PTO's facilities, or the PTO is an owner of an Affected System, the PTO shall have the right to participate in all meetings expressly established pursuant to the CAISO Tariff Appendix GG. As

appropriate, the PTO may participate in all other material or substantive communications in connection with an Interconnection Request.

3.4 Generator Downsizing Study Responsibility Allocation: In complying with its responsibility for conducting or causing to be performed Generator Downsizing Studies, the CAISO will assign responsibility for performance of portions of the Generator Downsizing Studies to the PTO, under the direction and oversight of, and approval by, the CAISO, as set forth in Attachment A, except as specifically qualified as follows:

3.4.1 For any tasks specifically assigned to the PTO pursuant to Attachment A or otherwise mutually agreed upon by the CAISO and the PTO, the CAISO reserves the right, on a case-by-case basis, to perform or reassign to a mutually agreed upon and pre-qualified contractor such task only where: (a) the quality and accuracy of prior PTO Interconnection Study work product resulting from assigned tasks has been deemed deficient by the CAISO, the CAISO has notified the PTO pursuant to the notice provision of Section 4.15 of this Agreement in writing of the deficiency, and the deficiency has not been cured pursuant to Section 3.4.2 of this Agreement; (b) the timeliness of PTO Interconnection Study work product has been deemed deficient, and either (i) the CAISO has not been notified of the reasons and actions taken to address the timeliness of the work, or (ii) if notified, the stated reasons and actions taken are insufficient or unjustifiable and the PTO has not cured the deficiency pursuant to Section 3.4.2 of this Agreement; (c) the PTO has failed, in a mutually agreed upon timeframe, to provide the CAISO with information or data related to an Interconnection Request despite a written request by the CAISO, pursuant to Section 3.5 hereof, to do so, and such data is the responsibility of the PTO to provide to the CAISO, subject to Section 4.3 of this Agreement; (d) the PTO advises the CAISO in writing that it does not have the resources to adequately or timely perform the task according to the applicable timelines set forth in Attachment A; or (e) the estimated cost of the PTO performing the task has been determined in writing by the CAISO to significantly exceed the cost of the CAISO or mutually agreed upon contractor performing the task, inclusive of the costs that will be incurred by the PTO in exercising its review rights of the results of any such tasks performed by such third party(ies). If the CAISO deviates from the assignments set forth in Attachment A based on the foregoing factors, the CAISO will provide the PTO with a written explanation for the deviation and any associated reassignments of work. The PTO may contest the deviation pursuant to the Dispute Resolution procedures set forth in Section 4.1 of this Agreement.

Task(s) may only be reassigned in accordance with this Section 3.4.1 where the PTO has been deemed to be deficient in relation to that (those) particular task(s).

3.4.2 Cure for reassigned Generator Downsizing Study work

The CAISO shall not reassign task(s) without the opportunity to cure, as specified in Section 3.4.1 of this Agreement. The following actions will serve to cure the
deficiencies and result in restoring the assignment(s) as provided in Attachment A:

- (a) The CAISO and PTO shall negotiate in good faith and agree to a corrective action plan proposed by the PTO, including a reasonably adequate cure period, and the corrective action plan is satisfactorily implemented.
- (b) The CAISO determines the deficiency is cured without an action plan.
- **3.4.3** Assessment of prior PTO Generator Downsizing Study work shall only be based on work conducted under the process that becomes effective concurrent with the effective date of this Agreement. Further, assessment of prior PTO Interconnection Study work shall be based on work conducted no earlier than the eighteen (18) month period prior to the date of the CAISO notice of deviation from assignments set forth in Attachment A.
- **3.5** Information Exchange: The PTO shall provide the CAISO, subject to confidentiality requirements in Section 4.3 of this Agreement, with any documentation or data requested by the CAISO reasonably necessary to permit the CAISO to perform, review, validate and approve any Interconnection Study, or portion thereof, performed by the PTO. The CAISO shall provide the PTO with any documentation or data requested by the PTO, subject to confidentiality requirements in Section 4.3 of this Agreement, reasonably necessary to perform.
- **3.6** Consistency with Provisions for Centralized Interconnection Study Process: The CAISO and PTO have determined that the processes and allocation of responsibilities in Section 3.4 of this Agreement ensure that impacts to the CAISO Controlled Grid are independently assessed and that the assignment of responsibilities minimizes handoffs, takes advantage of non-transferable skills, and promotes the efficiency and cost-effectiveness of the centralized Interconnection Study processes, consistent with Appendix GG Section 2.2.
- **3.7** Re-Studies: If any re-studies are required, the CAISO will confer with the PTO as to the need for a re-study. The CAISO will make the final determination regarding the need for a re-study, subject to dispute resolution procedures.
- **3.8** Use of Contractors: Nothing in this Agreement shall prevent either the CAISO or the PTO from using qualified, mutually agreed upon third party contractors to meet that Party's rights or obligations under this Agreement or Appendix GG. To promote the

efficiency of the process, the CAISO and PTO will collaborate to identify a list of the mutually agreed upon qualified contractors available to the Parties.

- **3.9** Performance Standards: Each Party shall perform all of its obligations under the Appendix GG, this Agreement, and any FERC approved Interconnection Study procedures that may be adopted by the CAISO to implement Appendix GG, or this Agreement, in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice.
- **3.10** Recovery of Costs: The PTO shall recover study expenses pursuant to Sections 2.10 and 2.12 of Appendix GG, including costs incurred in exercising its right to review, and make recommendations on the Generator Downsizing Study or portions thereof performed by the CAISO and/or contractors under Section 3.8 of this Agreement. The PTO shall receive funds to apply to its expenses incurred in amending Generator Interconnection Agreements pursuant to Section 2.11 of Appendix GG.

GENERAL TERMS AND CONDITIONS

- **4.1** Dispute Resolution: In the event any dispute regarding the terms, conditions, and performance of this Agreement is not settled informally, the Parties shall follow the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff.
- **4.2** Liability: No Party to this Agreement shall be liable to any other Party for any direct, indirect, special, incidental or consequential losses, damages, claims, liabilities, costs or expenses (including attorneys' fees and court costs) arising from the performance or non-performance of its obligations under this Agreement regardless of the cause (including intentional action, willful action, gross or ordinary negligence, or force majeure); provided, however, that a Party may seek equitable or other non-monetary relief as may be necessary to enforce this Agreement and that damages for which a Party may be liable to

another Party under another agreement will not be considered damages under this Agreement.

- **4.3** Confidentiality: Confidential Information shall be treated in accordance with the confidentiality provision of the CAISO Tariff Appendix under which the Downsizing Generator's Interconnection Request is being processed.
- **4.4** Binding Effect: This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- **4.5** Conflicts: In the event of a conflict between the body of this Agreement and any attachments, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.
- Rules of Interpretation: This Agreement, unless a clear contrary intention appears, shall 4.6 be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section, Attachment, or Appendix means such Article or Section of this Agreement or such Attachment or Appendix to this Agreement, or such Section of Appendix GG or such Appendix to Appendix GG, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article or Section; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".
- 4.7 Entire Agreement: This Agreement, including all Attachments hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, among the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants, which constitute any

part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.

- **4.8** No Third Party Beneficiaries: This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- **4.9** Waiver: The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party. Any waiver at any time by a Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, or duty of this Agreement. Any waiver of this Agreement shall, if requested, be provided in writing. Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver with respect to any default shall not constitute or be deemed a waiver with respect to any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- **4.10** Headings: The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- **4.11** Multiple Counterparts: This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 4.12 Modification by the Parties: The Parties may amend this Agreement and any Appendices to this Agreement only (1) by mutual agreement of the Parties by a written instrument duly executed by the Parties, subject to FERC approval or (2) upon the issuance of a FERC order, pursuant to Section 206 of the Federal Power Act. It is the Parties' intent that FERC's right to change any provision of this Agreement shall be limited to the maximum extent permissible by law and that any such change, if permissible, shall be in accordance with the Mobile-Sierra public interest standard applicable to fixed rate agreements. United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956). Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations. Notwithstanding the foregoing, Attachment B (Notices) may be modified as set forth in Section 4.15 of this Agreement, and the CAISO and the PTO may from time to time mutually agree to deviate from Attachment A in accordance with the provisions of this Agreement, however, such

deviation shall be subject to Section 4.9 of this Agreement and not considered a course of dealing.

- **4.13** No Partnership: This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- **4.14** Assignment: This Agreement may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.
- **4.15** Notices: Any notice, demand, or request provided in this Agreement, or served, given, or made in connection with it, will be in writing and deemed properly served, given, or made if delivered in person, transmitted by facsimile, or sent by United States mail, postage prepaid, to the persons specified in Attachment B hereto unless otherwise provided in this Agreement. Any Party may at any time, by notice to all other Parties, change the

designation or address of the person specified in Attachment B as the person who receives notices pursuant to this Agreement.
IN WITNESS WHEREOF, the Parties have executed this Agreement in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.
California Independent System Operator Corporation
Ву:
Printed Name:
Title:
Date:
{NAME OF PTO}
Ву:
Printed Name:
Title:
Date:

ATTACHMENT A TO APPENDIX 4

GENERATOR DOWNSIZING INTERCONNECTION STUDY RESPONSIBILITY ALLOCATION

Description of Generator Interconnection Process: Roles and Responsibilities of CAISO and PTOs.

Purpose: This Attachment A to the "Agreement for the Allocation of Responsibilities with Regard to Generator Downsizing Opportunity, Generator Downsizing Study, and Amendment of Generator Interconnection Agreements" serves as further clarification of the roles and responsibilities of the parties to this Agreement. The CAISO will assign responsibility for performance of portions of the Generator Downsizing Study to the relevant PTOs, under the direction and oversight of, and approval by, the CAISO, as set forth in this Attachment A. This document serves as a general overview of only the roles and responsibilities as between the CAISO and PTOs. This Agreement does not include the process steps, involvement or obligations of the Interconnection Customer (IC). This Agreement is not inclusive of all procedures necessary to comply with all provisions of Appendix GG and the Downsizing Generator Payment Obligation Agreement.

Generator Downsizing Request (GDR) Process

1. CAISO forwards the GDR to the PTO within three (3) Business Days (BD) of CAISO receipt of the GDR

2. PTO(s) provides any feedback regarding GDR to CAISO within three (3) BD

Generator Downsizing Study Timeline

Line	Generator Downsizing Study	Typical Calendar Days	Timeline (Days)		
4	CAISO and PTOs confirm initial Generating Facility groups for initial Dispatch assumptions and cost allocation purposes (except for thermal overload and short circuit mitigation).	4	4		
2	PTOs update Base Cases, each representing all Generating Facilities of the Downsizing Generators and potential Affected Generators.	7	2-8		
3	PTOs update contingency lists.	4	9-12		
4	CAISO reviews and approves Base Cases and contingency lists.	7	9-15		
5	CAISO performs on-peak Deliverability Assessment.	21	16-36		
6	At the CAISO's direction, the PTOs perform the off-peak Load Flow, and summer peak and off-peak Post Transient and Stability analyses, and submit results for CAISO review.	21	16-36		
7	CAISO proposes network upgrades. The PTO develops mitigation plans to supplement CAISO proposed mitigation plans for consideration, as appropriate, and submits to CAISO for review and direction.	14	37-50		
8	CAISO retests Deliverability Assessment results with proposed Delivery Network Upgrades and Reliability Network Upgrades. PTOs review and comment on retest results.	7	51-57		
9	CAISO assigns cost responsibility of Delivery Network Upgrades to generators.	14	58-71		
10	PTOs assign cost responsibility of Reliability Network Upgrades to generators.	14	58-71		
	Short Circuit Duty				

11	CAISO directs PTOs to update Base Cases	4 9	1-50			
12	PTOs perform SCD analyses	14	51-64			
13	PTOs update short circuit duty mitigation and submit to CAISO for review	14	65-78			
Facility cost e	Facility cost estimates and schedules					
44	At the CAISO's direction, PTO(s) prepares cost estimates and schedules for modified or substituted direct assignment facilities and Network Upgrades.	120	1-120			
Generator Dov	Generator Downsizing Study Report					
15	At the CAISO's direction, PTOs prepare draft report for modified or substituted Network Upgrades and the PTO's Interconnection Facilities.	50	79-128			
16	CAISO reviews draft report and submits comments, recommendations and direction to the PTOs.	10	129-138			
47	PTOs incorporate CAISO's directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and the PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report.	7	139-145			
18	PTOs submit final draft report to the CAISO. The CAISO will finalize the report and tender the CAISO approved report to the ICs.	5	146-150			

[Footnote 1: In accordance with the WECC Short Circuit Duty Procedure]

Generator Downsizing Interconnection Agreement Amendment Process

Line	GIA Amendment Activity	Typical Calendar Days	Timeline (Days)
19	At CAISO's direction, PTO prepares and tenders amendment to Interconnection Agreement, in the form of Appendix HH, or revised Interconnection Agreement, as applicable	30	151-180
20	PTO, with CAISO input, negotiates amended or revised Interconnection Agreement as	60 days (App. U)	151-240 (Арр. U)
	necessary with Downsizing Generator or Affected Generator (all parties can agree to	30 days (App. S)	151-211 (App. S)
	extend timeline)	90 days (App. Y)	151-271 (App. Y)
21	CAISO and PTO finalize and file Interconnection Agreement or amendment to	60 days (App. U)	151-240 (App. U)
	Interconnection Agreement under respective tariffs. (all parties can agree to extend	30 days (App. S)	151-211 (App. S)
	timeline)	90 days (App. Y)	151-271 (App. Y)

ATTACHMENT B TO APPENDIX 4

CONTACTS FOR NOTICES

[Section 4.15]

CAISO

Manager, Transmission Engineering 250 Outcropping Way

Folsom, CA 95630

Phone: 916.351.2104

Fax: 916.351.2264

[NAME OF PTO]

[Address of PTO]