

## **25. Interconnection of Generating Units and Facilities**

### **25.1 Applicability**

This Section 25 applies to:

- (a) each new Generating Unit that seeks to interconnect to the CAISO Controlled Grid;
- (b) each existing Generating Unit connected to the CAISO Controlled Grid that will be modified with a resulting increase in the total capability of the power plant;
- (c) each Generating Unit connected to the CAISO Controlled Grid that will be modified without increasing the total capability of the power plan but has change the electrical characteristics of the power plant such that its re-energization may violate Applicable Reliability Criteria.
- (d) each existing Generating Unit connected to the CAISO Controlled Grid whose total Generation was previously sold to a Participating TO or on-site customer but whose Generation, or any portion thereof, will now be sold in the wholesale market, subject to Section 25.1.2;
- (e) each existing Generating Unit that is a Qualifying Facility and that is converting to a Participating Generator without repowering or reconfiguring the existing Generating Unit, subject to Section 25.1.2;
- (f) each existing Generating Unit connected to the CAISO Controlled Grid that proposes to repower its Generating Unit pursuant to Section 25.1.2; and
- (g) Generating Units interconnecting to the CAISO Controlled Grid over a Subscriber Participating TO transmission facilities using Subscriber Rights are required to apply for TP Deliverability under Section 25.1 once (1) the Subscriber Participating TO transmission facilities have completed their transmission interconnection studies with all interconnecting Transmission Owner(s), (2) Subscriber(s) have executed the Generator Interconnection Agreement, (3) the Subscriber Participating TO has committed to proceed with Construction Activities regarding the Subscriber Participating TO transmission facilities, and (4) the applicant provides a notice in writing to the applicable interconnecting Transmission Owners that it is proceeding with Construction Activities.

Once these criteria have been completed, the Generating Unit must apply as follows:

- (1) each Generating Unit possessing Subscriber Rights and receiving Deliverability from TPP-approved Network Upgrades shall apply for TP Deliverability allocation through the submission of a Subscriber Participating TO-specific deliverability allocation request [subject to Appendix DD, Section 8.9](#) and does not submit an Interconnection Request under Section 25;
- (2) each Generating Unit that does not meet the criteria under Section 25.1(g)(1) shall be treated in accordance with Section 25.1(a).

## Appendix DD

### Generator Interconnection and Deliverability Allocation Procedures (GIDAP)

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#### 6.7.4 Commercial Viability Criteria ~~for Retention of Deliverability beyond Seven Years in Queue~~

The CAISO's agreement to modifications requested by the Interconnection Customer pursuant to Section 6.7.2.3 for a Generating Facility ~~or Generating Unit~~ with a Commercial Operation Date that has exceeded or will exceed seven (7) years from the date the Interconnection Request is received by the CAISO ~~with retention of TP 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 power purchase agreement. Power purchase agreements must have the point of interconnection, capacity, fuel type, technology, ~~site location~~ ~~and deliverability status~~ 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's agreement to an extension of the proposed Commercial Operation Date does not relieve the Interconnection Customer from compliance with ~~this GIDAP or the GIA, including without limitation the requirements of any of~~ the criteria in Section 8.9.3 to retain TP Deliverability. 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 GIDAP.

~~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~~

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### ~~Interconnection Customers.~~

If an Interconnection Customer satisfies all the commercial viability criteria except criterion (b), the CAISO will postpone ~~converting-withdrawing~~ the Generating Facility to ~~Energy-Only Deliverability Status~~ for one year from the day the Interconnection Customer submits the modification request, or eight years after the CAISO received the Interconnection Request, whichever occurs later. ~~Interconnection Customers may exercise this provision only once.~~ 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 withdraw~~ 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 (downsized/withdrawn).~~

~~However, w~~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 to the amount in service and operating in the CAISO markets, it will ~~revert to be~~ Full Capacity Deliverability Status.

Interconnection Customers in Queue Cluster 7 and beyond whose Phase II Interconnection Study reports require a timeline beyond the seven-year threshold are exempt from the commercial viability criteria in this section provided that they modify their Commercial Operation Dates within six (6) months of the CAISO's publishing the Phase II Interconnection Study report. This exemption is inapplicable to report addenda or revisions required by a request from an Interconnection Customer for any reason.

#### 6.7.4.1 Annual Review

For Interconnection Customers extending their Commercial Operation Date beyond the seven-year threshold ~~and retaining their TP Deliverability~~ pursuant to Section 6.7.4, 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~~ CAISO will deem them withdrawn pursuant to Section 3.8 ~~unless, in the case of projects with TPD, the Interconnection Customer provides an Energy Only PPA for that capacity.~~ ~~Interconnection Customers will not be subject to annual review requirements in any year the Participating TO unilaterally extends their Commercial Operation Date, but will resume compliance the following year.~~

#### 6.7.5 Alignment with Power Purchase Agreements

An Interconnection Customer with an executed GIA and an executed power purchase agreement may request to automatically extend the GIA Commercial Operation Date to align with its power purchase agreement for that Generating Facility, including any extension or amendment. Interconnection Customers requesting alignment must (1) provide a copy of the power purchase agreement, and (2) confirm the power purchase agreement's standing and details in the annual TP Deliverability affidavit process. Requests to align the Commercial Operation Date with power purchase agreements are

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not exempt from the commercial viability criteria provisions in Section 6.7.4, where applicable.

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## 6.8 Revisions and Addenda to Final Interconnection Study Reports

### 6.8.1 Substantial ~~Error or Omissions~~Revisions; Revised Study Report

Should the CAISO discover, through written comments submitted by an Interconnection Customer or otherwise, that a final Phase I or Phase II Interconnection Study Report (which can mean a final Phase I or Phase II Interconnection Study Report for cluster studies or a final system impact and facilities report for the Independent Study Process) contains a substantial ~~error or omission~~revision, the CAISO will cause a revised final report to be issued to the Interconnection Customer.

A substantial ~~error or omission~~revision shall mean ~~an error or omission~~a revision that results in one or more of the following:

- (i) ~~understatement or overstatement~~an increase of the Interconnection Customer's Current Cost Responsibility, Maximum Cost Responsibility, Maximum Cost Exposure, and Participating TO Interconnection Facilities by more than five (5) percent or one million dollars (\$1,000,000), whichever is greater;
- (ii) delay of the Commercial Operation Date, In-Service Date, or requested Deliverability Status by more than one year; or
- (iii) termination of the Interconnection Customer's power purchase agreement ~~by the counterparty~~.

The CAISO will include examples of how Interconnection Customers can demonstrate power purchase agreement terminations in the Business Practice Manual. The CAISO will confirm power purchase agreement terminations with the Interconnection Customer's counterparty.

A dispute over the plan of service by an Interconnection Customer shall not be considered a substantial ~~error or omission~~revision unless the Interconnection Customer demonstrates that the plan of service was based on an invalid or erroneous study assumption that meets the criteria set forth above. Changes to Interconnection Studies resulting from Interconnection Customer requests, including without limitation, modifications, suspensions, or failures to meet GIA milestones, are not considered ~~errors or omissions~~revisions.

### 6.8.2 Other ~~Errors or Omissions~~Revisions; Addendum

If ~~an error or omission~~a revision in an Interconnection Study report (for either the cluster process or Independent Study Process) is not a substantial ~~error or omission~~revision, the CAISO shall not issue a revised final Interconnection Study report, although the ~~error or omission~~revision may result in an adjustment of the corresponding Interconnection Financial Security. Rather, the CAISO shall document such ~~error or omission~~revision and make any appropriate correction by issuing an addendum to the final report.

The CAISO and applicable Participating TO shall also incorporate, as needed, any corrected information pertinent to the terms or conditions of the GIA in the draft GIA

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provided to an Interconnection Customer pursuant to Section 13.

### 6.8.3 Only Substantial ~~Errors or Omissions~~Revisions 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. Any error or omission found after the second Interconnection Financial Security posting will not impact/increase the Interconnection Customer's assigned amount Cost Responsibility, Maximum Cost Responsibility, or Maximum Cost Exposure.~~

~~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.~~

~~An Interconnection Customer's dispute of a CAISO determination that an error or omission in a final Study report does not constitute substantial error shall not operate to change the amount of Interconnection Financial Security that the Interconnection Customer must post or to postpone the applicable deadline for the Interconnection Customer to post Interconnection Financial Security. In case of such a dispute, the Interconnection Customer shall post the amount of Interconnection Financial Security in accordance with Section 11, subject to refund in the event that the Interconnection Customer prevails in the dispute.~~

### 6.8.4 Substantial ~~Errors or Omissions~~Revisions Allowing Refunds

Notwithstanding Sections 3.5.1 and 11.4, after the Interconnection Customer has posted its Initial Interconnection Financial Security, it is eligible for a one-hundred percent (100%) refund of its remaining, unspent Interconnection Financial Security and all remaining, unspent Interconnection Study Deposit funds if:

- (i) it receives a substantial ~~error or omission~~revision; and
- (ii) it withdraws its Interconnection Request within sixty (60) days of the publication of the revised Study Report or the termination of its power purchase agreement ~~by the counterparty~~ resulting from the ~~substantial error or omission~~revision, as applicable.

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### 8.9.2 ~~Second Component: Allocating Remaining TP Deliverability~~

### ~~8.9.9 Deliverability Transfers~~

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Commented [SS8]: We are suggesting changes to this provision, and the corresponding Appendix KK provision below (see the detailed changes shown there), since this draft tariff language does not reflect IPE 5.0 changes, and these and other recent policy changes by the CAISO have left the rules here extremely unclear.

## 15.5 Disputes

If an Interconnection Customer disputes withdrawal of its Interconnection Request under Section 3.8, the CAISO will forward any information regarding the disputed withdrawal received under Section 3.8 within one (1) Business Day to the ~~GIDAP~~ ~~e~~Executive ~~d~~Dispute ~~c~~Committee, consisting of the Vice President responsible for administration of this ~~GIDAP~~, the CAISO Vice President responsible for customer affairs, and an additional Vice President. The CAISO may replace Vice Presidents unavailable during the five (5) Business Days with another CAISO Vice President. The ~~GIDAP~~ ~~e~~Executive ~~d~~Dispute ~~c~~Committee shall have five (5) Business Days to determine whether or not to restore the Interconnection Request. If the ~~GIDAP~~ ~~e~~Executive ~~d~~Dispute ~~c~~Committee concludes that the Interconnection Request should have been withdrawn, the Interconnection Customer may seek relief in accordance with the CAISO ADR Procedures.

## Appendix KK

### Resource Interconnection Standards (RIS)

#### Section 1 Objectives And Applicability

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#### 1.3 ~~[Not Used] Pre-Application~~

~~1.3.1 An Interconnection Customer with a proposed Small Generating Facility may submit a formal written request form along with a non-refundable fee of \$300 to the CAISO for a pre-application report on a proposed project at a specific site. The CAISO shall provide the pre-application data described in Section 1.3.2 to the Interconnection Customer within twenty (20) Business Days of receipt of the completed request form and payment of the \$300 fee. The CAISO shall coordinate with the Participating TO to complete the pre-application report. At the request of the CAISO, the Participating TO shall provide any readily available information necessary to complete the pre-application report. Readily available information shall mean information that the Participating TO currently has on hand. The Participating TO is not required to create new information but is required to compile, gather, and summarize information that it has on hand in a format that presents the information in a manner that informs the Interconnection Customer regarding issues related to its proposed Small Generating Facility. If providing any item in the pre-application report would require the Participating TO to perform a study or analysis beyond gathering and presenting existing information, then the information shall be deemed not readily available. The pre-application report produced by the CAISO is non-binding, does not confer any rights, and the Interconnection Customer must still successfully apply to interconnect to the CAISO's system. The written pre-application report request form shall include the information in Sections 1.3.1.1 through 1.3.1.8 below to clearly and sufficiently identify the location of the proposed Point of Interconnection that is under CAISO operational control.~~

~~1.3.1.1 Project contact information, including name, address, phone number, and email address.~~

~~1.3.1.2 Project location (street address with nearby cross streets and town).~~

~~1.3.1.3 Single proposed Point of Interconnection that is either an existing substation or a transmission line under CAISO operational control.~~

~~1.3.1.4 Generator Type (e.g., solar, wind, combined heat and power, etc.)~~

~~1.3.1.5 Size (alternating current kW/MW)~~

~~1.3.1.6 Single or three phase generator configuration~~

~~1.3.1.7 Stand-alone generator (no onsite load, not including station service— Yes or No?)~~

~~1.3.1.8 Is new service requested? Yes or No? If there is existing service,~~

include the customer account number, site minimum and maximum current or proposed electric loads in kW/MW (if available) and specify if the load is expected to change.

~~1.3.2 Subject to Section 1.3.1, the pre-application report will include the following information:~~

~~1.3.2.1 Electrical configuration of the substation, including information of transmission lines terminating in the substation, transformers, buses and other devices, if the proposed Point of Interconnection is a substation.~~

~~1.3.2.2 Existing aggregate generation capacity (in MW) interconnected to a substation or circuit (i.e., amount of generation online) likely to serve the proposed Point of Interconnection.~~

~~1.3.2.3 Aggregate queued generation capacity (in MW) for a substation or circuit (i.e., amount of generation in the queue) likely to serve the proposed Point of Interconnection.~~

~~1.3.2.4 Based on the proposed Point of Interconnection, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit issues, instability issues, facility loading issues, or voltage issues.~~

~~1.3.2.5 Available capacity on a substation or circuit likely to serve the proposed Point of Interconnection.~~

~~1.3.3 The pre-application report need only include existing data. A pre-application report request does not obligate the CAISO to conduct a study or other analysis of the proposed generator in the event that data is not readily available. If the CAISO cannot complete all or some of a pre-application report due to lack of available data, the CAISO shall provide the Interconnection Customer with a pre-application report that includes the data that is available. There are many variables studied as part of the interconnection review process, and data provided in the pre-application report may become outdated at the time of the submission of the complete Interconnection Request. Notwithstanding any of the provisions of this section, the CAISO shall, in good faith, include data in the pre-application report that represents the best available information at the time of reporting.~~

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## **2.4 Interconnection Service and Studies**

### **2.4.1 No Applicability to Transmission Service.**

Nothing in this RIS shall constitute a request for transmission service or confer upon an Interconnection Customer any right to receive transmission service.

### **2.4.2 The Product.**

Interconnection Service allows the Interconnection Customer to connect the Generating Facility to the CAISO Controlled Grid and be eligible to deliver the Generating Facility's output using the available capacity of the CAISO Controlled Grid. Interconnection Service does not in and of itself convey any right to deliver electricity to any specific customer or point of delivery or rights to any specific MW of available capacity on the CAISO Controlled Grid.

### **2.4.3 The Interconnection Studies.**

For Interconnection Requests in Queue Cluster 15 and subsequent Queue Clusters, the Interconnection Studies consist of a Cluster Study, an annual reassessment, and an Interconnection Facilities Study, and any updates to reflect the results of a reassessment conducted after the TP Deliverability allocation process for the Queue Cluster.

#### **2.4.3.1 The Cluster Studies**

The Cluster Studies for Queue Cluster Generating Facilities will include, but not be limited to, short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The Cluster Studies will identify direct Interconnection Facilities and required Reliability Network Upgrades necessary to interconnect the Generating Facility, mitigate thermal overloads and voltage violations, and address short circuit, stability, and reliability issues associated with the requested Interconnection Service. The stability and steady state studies will identify necessary upgrades to allow full output of the proposed Generating Facility, except for Generating Facilities that include at least one electric storage resource that request to use operating assumptions pursuant to Section 3.1, unless the CAISO and Participating TO determine that Good Utility Practice, including Applicable Reliability Standards, otherwise requires the use of different operating assumptions, and would also identify the maximum allowed output, at the time the study is performed, of the interconnecting Generating Facility without requiring additional Network Upgrades. The Cluster Studies will also identify LDNUs that have selected Full Capacity ~~or~~, Partial ~~and~~ Capacity Deliverability Status, as applicable. Such Network Upgrades shall be identified in accordance with the Deliverability Assessments set forth in Section 6.3.2. The Cluster Studies will also provide cost estimates for ADNUs, as described in Section 6.3.2. The Cluster Study report shall include cost estimates for RNUs, LDNUs, and ADNUs.

#### **2.4.3.2 The Reassessment**

~~Before~~ After each Cluster Study, the CAISO will conduct a reassessment, as specified in Section 7.4, to conform the Base Case and Interconnection Base Case Data to account for later conditions since the CAISO performed the Cluster Study in the prior Interconnection Study Cycle.

#### **2.4.3.3 The Interconnection Facilities Study**

After the Cluster Study, the CAISO and Participating TO will conduct the Interconnection Facilities Study to determine a list of facilities (including the Participating TO's Interconnection Facilities and Network Upgrades as identified in the Cluster Study), 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 this RIS.

#### **2.4.3.4 Update Following TP Deliverability Allocation Process**

Following the completion of Interconnection Facilities Studies for the Queue Cluster and provision by the CAISO of the results to Interconnection Customers in the Queue Cluster, the CAISO will perform the allocation of TP Deliverability to eligible Generating Facilities in accordance with Section 8.9. Based on the results of the allocation process and the responses to those results as reported by affected Interconnection Customers to the CAISO, the CAISO will provide updates where needed to the Interconnection Study reports of affected Interconnection Customers.

## Section 3 Interconnection Requests

### 3.1 General

Pursuant to CAISO Tariff Section 25.1, a duly authorized officer or agent of the Interconnection Customer will submit to the CAISO (1) an Interconnection Request consistent with Appendix 1 to this RIS, including (2) an executed Cluster Study Agreement consistent with Appendix 3 to this RIS. -All forms may be submitted electronically as provided on the CAISO Website. Interconnection customers will submit Appendix B to the Cluster Study Agreement, the Interconnection Facilities Study Agreement, pursuant to Section 8 of this RIS. The CAISO will ~~forward a copy of~~[provide access to](#) the Interconnection Request to the applicable Participating TO within five (5) Business Days of ~~receipt~~[when the Interconnection Customer satisfies the Cluster Study criteria under Section 4 of this RIS.](#)

The Interconnection Customer shall submit a separate Interconnection Request for each site. Where multiple Generating Units share a site, the Interconnection Customer(s) may submit separate Interconnection Requests or a single Interconnection Request. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Interconnection Requests.

At the Interconnection Customer's option, the CAISO, Participating TO, and Interconnection Customer will identify alternative Point(s) of Interconnection and configurations within the Customer Engagement Window to evaluate in this process and attempt to eliminate alternatives in a reasonable fashion given resources and information available. The Interconnection Customer will select the definitive Point of Interconnection to be studied no later than ten (10) days after the close of the Cluster Application Window. For purposes of clustering Interconnection Requests, the CAISO and Participating TO may propose changes to the requested Point of Interconnection to facilitate efficient interconnection of Interconnection Customers at common Point(s) of Interconnection within the same Transmission Zone. The CAISO will notify Interconnection Customers in writing of any intended changes to the requested Point of Interconnection within the Customer Engagement Window, and the Point of Interconnection will only change upon mutual agreement.

Interconnection Customers may request Interconnection Service Capacity below the Generating Facility Capacity. The CAISO will study these requests for Interconnection Service at the level of Interconnection Service Capacity requested for purposes of Interconnection Studies, Network Upgrades, and associated costs. If the Generating Facility Capacity requires additional Network Upgrades beyond the Interconnection Service Capacity, the CAISO will provide a detailed explanation of why the additional Network Upgrades are necessary. Any Interconnection Facility and/or Network Upgrade cost required for safety and reliability will be assigned to the Interconnection Customer and eligible for reimbursement consistent with the treatment of Interconnection Facilities and Network Upgrade provided in this RIS. Interconnection Customers may be subject to additional control technologies, as well as testing and validation of those technologies consistent with Article 6 of the GIA and Article 2 of the SGIA. The necessary control technologies and protection systems shall be established in Appendix C of that executed, or requested to be filed unexecuted, GIA.

The CAISO will study Generating Units that include at least one electric storage resource using operating assumptions (*i.e.*, whether the interconnecting Generating Facility will or will not charge at peak load) that reflect the proposed charging behavior of the Generating Facility as requested by the Interconnection Customer, unless the CAISO and Participating TO determine that Good Utility Practice, including Applicable Reliability Standards, otherwise requires the use of different operating assumptions. If the CAISO and Participating TO find the Interconnection Customer's requested operating assumptions conflict with Good Utility Practice, they must provide the Interconnection Customer an explanation in writing of why the submitted operating assumptions

are insufficient or inappropriate by no later than thirty (30) calendar days before the end of the Customer Engagement Window and allow the Interconnection Customer to revise and resubmit requested operating assumptions one time at least ten (10) calendar days prior to the end of the Customer Engagement Window. The CAISO and Participating TO will study these requests for Interconnection Service, with the study costs borne by the Interconnection Customer, using the submitted operating assumptions for purposes of Interconnection Facilities, Network Upgrades, and associated costs. These requests for Interconnection Service also may be subject to other studies at the full Generating Facility Capacity to ensure safety and reliability of the system, with the study costs borne by the Interconnection Customer. The Interconnection Customer's Generating Facility may be subject to additional control technologies as well as testing and validation of such additional control technologies consistent with Article 6 of the LGIA. The necessary control technologies and protection systems will be set forth in Appendix C of the Interconnection Customer's LGIA.

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### **3.5 Processing of Interconnection Requests**

#### **3.5.1 Initiating an Interconnection Request.**

An Interconnection Customer seeking to join a Queue Cluster will submit its Interconnection Request to the CAISO within, and no later than the close of, the Cluster Application Window. Interconnection Requests submitted outside of the Cluster Application Window will not be considered. To initiate an Interconnection Request except as set forth for the Fast Track Process in Section 5, and have the Interconnection Request considered for validation under Section 3.5.2, the Interconnection Customer must submit all of the following during the Cluster Application Window:

- (i) Applicable Interconnection Study Deposit amount, pursuant to Section 3.5.1.1 of this RIS.
- (ii) A completed application in the forms of Appendix 1 and Appendix 2, including requested Deliverability statuses, requested study process (either Queue Cluster or Fast Track Study Process), preferred Point of Interconnection and voltage level, and all other required technical data, including all data requested in Attachment A to Appendix 1 in Excel format.
- (iii) Demonstration of no less than ninety percent (90%) Site Control; or (1) a signed affidavit from an officer of the company indicating that Site Control is unobtainable due to regulatory limitations as defined in the Business Practice Manuals; (2) documentation sufficiently describing and explaining the source and effects of such regulatory limitations, including a description of any conditions that must be met to satisfy the regulatory limitations and the anticipated time by which the Interconnection Customer expects to satisfy the regulatory requirements; and (3) a deposit in lieu of Site Control of \$10,000 per MW, subject to a minimum of \$500,000 and a maximum of \$2,000,000. Interconnection Requests from multiple Interconnection Customers for multiple Generating Facilities that share a site must include a contract or other agreement that allows for shared land use.
- (iv) A load flow model.
- (v) A dynamic data file.
- (vi) A reactive power capability document.

- (vii) A site drawing.
- (viii) A single-line diagram.
- (ix) A flat run plot, bump test plot, voltage reference step change test plot, frequency reference step change test, and a voltage ride-through test plot from the positive sequence transient stability simulation application.
- (x) A plot showing the requested MW at the Point of Interconnection from the positive sequence load flow application.
- ~~(xi) A Commercial Readiness Deposit submitted to the Participating TO equal to two times the study deposit described in Section 3.5.1.1 of this RIS in the form of an irrevocable letter of credit, cash, a surety bond, or other form of security that is reasonably acceptable to the Participating TO under Section 11.1 of this RIS. This Commercial Readiness Deposit is refunded to Interconnection Customer according to Section 3.8 of this RIS.~~
- (xii) If applicable, (a) the requested operating assumptions (*i.e.*, whether the interconnecting Generating Facility will or will not charge at peak load) to be used by the CAISO and Participating TO that reflect the proposed charging behavior of the Generating Facility that includes at least one electric storage resource, and (2) a description of any control technologies (software and/or hardware) that will limit the operation of the Generating Facility to the operating assumptions submitted by the Interconnection Customer.
- (xiii) All supporting documentation required for the Interconnection Customer's selections on Appendix 2, as required by Section 4 of this RIS.

The CAISO requires the foregoing information to be complete and specific to the Interconnection Request. The CAISO will first determine whether a submitted Interconnection Request is complete. The CAISO will not initiate any review of an Interconnection Request for completeness until the Interconnection Study Deposit is received by the CAISO. Consistent with Section 3.5.3, the CAISO will review each Interconnection Request and notify the Interconnection Customer whether it is complete or contains omissions within five (5) Business Days of submission. Any Interconnection Customer that has not submitted a complete Interconnection Request by October 15 (or the next Business Day if October 15 is not a Business Day) will be deemed incomplete with no opportunity to cure or otherwise be included in that year's Queue Cluster.

The CAISO requires Interconnection Study Deposits to review and validate the Interconnection Request. Notwithstanding Section 3.5.2 of this RIS or any other provision regarding validation or the ability to cure deficiencies, the CAISO will not review, process, or validate an Interconnection Request absent the Interconnection Study Deposit. Any interconnection Customer that has not submitted a complete Interconnection Study Deposit by October 15 (or the next Business Day if October 15 is not a Business Day) will be deemed invalid with no opportunity to cure or otherwise be included in that year's Queue Cluster.

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#### **3.5.1.4 Proposed Commercial Operation Date.**

In the initial Interconnection Request, the proposed Commercial Operation Date of the new Generating Facility or increase in capacity of the existing Generating Facility shall not exceed seven (7) years from the date the Interconnection Request is received by the CAISO, unless the Interconnection Customer demonstrates, and the applicable Participating TO(s) and the CAISO agree, such agreement not to be unreasonably withheld, that engineering, permitting and construction of the new Generating Facility or increase in capacity of the existing Generating Facility will take longer than the seven (7) year period. The CAISO's agreement to an extension of the proposed Commercial Operation Date does not relieve the Interconnection Customer from compliance with the requirements of any of the criteria in Section 8.9.3 for retention of TP Deliverability.

Extensions of less than three (3) cumulative years in the Commercial Operation Date of the Generating Facility to which the Interconnection Request relates are not material and should be handled through construction sequencing. For purposes of this section, the Commercial Operation Date reflected in the initial Interconnection Request will be used to calculate the permissible extension prior to Interconnection Customer executing a GIA or requesting that the GIA be filed unexecuted. After a GIA is executed or requested to be filed unexecuted, the Commercial Operation Date reflected in the GIA will be used to calculate the permissible extension. Such cumulative extensions may not exceed three (3) years including both extensions requested after execution of the GIA by Interconnection Customer or the filing of an unexecuted GIA by the CAISO and those requested prior to execution of the GIA by Interconnection Customer or the filing of an unexecuted GIA by the CAISO. [Notwithstanding, for any extension that will extend the Commercial Operation Date beyond seven \(7\) years from the date the Interconnection Request is received by the CAISO, the Interconnection Customer must satisfy the commercial viability criteria in Section 6.7.4.](#)

#### **3.5.1.5 Third-party Interconnection Facilities.**

Interconnection Customers proposing to use third-party Interconnection Facilities must provide documentation to the CAISO demonstrating they are negotiating or have secured rights on those Interconnection Facilities to be deemed valid pursuant to Section 3.5.2. Within twenty (20) days after the Cluster Study Report Meeting, such Interconnection Customers must provide documentation to the CAISO demonstrating they have secured rights on those Interconnection Facilities through their Commercial Operation Date.

#### **3.5.1.6 Commercial Readiness Deposit.**

[After notification that the Interconnection has satisfied the the Cluster Study criteria in Section 4 of this RIS, and before the close of the Customer Engagement Window, the Interconnection Customer must submit a Commercial Readiness Deposit to the Participating TO equal to two times the study deposit described in Section 3.5.1.1 of this RIS in the form of an irrevocable letter of credit, cash, a surety bond, or other form of security that is reasonably acceptable to the Participating TO under Section 11.1 of this RIS. This Commercial Readiness Deposit may be refunded to the Interconnection Customer according to Section 3.8 of this RIS.](#)

#### **3.5.2 Customer Engagement Window.**

Upon the close of each Cluster Application Window, the CAISO will open a ninety (90) calendar day period (Customer Engagement Window). During the Customer

Engagement Window, the CAISO will hold Scoping Meetings with all interested Interconnection Customers. Scoping Meetings will be segregated by Transmission Zone and Cluster Study criteria. Notwithstanding the preceding requirements and upon written consent of all Interconnection Customers within the Cluster, the CAISO may shorten the Customer Engagement Window and begin the Cluster Study. Within ten (10) Business Days of the opening of the Customer Engagement Window, the CAISO will post on its Website a list of Interconnection Requests for that Cluster. The list will identify, for each anonymized Interconnection Request: (1) the requested amount of Interconnection Service; (2) the location by county and state; (3) the station or transmission line or lines where the interconnection will be made; (4) the projected In-Service Date; (5) the Deliverability Status requested; and (6) the type of Generating Facility or Facilities to be constructed, including fuel types, such as coal, natural gas, solar, or wind. The CAISO must ensure that project information is anonymized and does not reveal the identity or commercial information of interconnection customers with submitted requests. During the Customer Engagement Window, the CAISO will provide to Interconnection Customer a non-binding updated good faith estimate of the cost and timeframe for completing the Cluster Study. Interconnection Customers can access and execute the Cluster Study Agreement through the CAISO Website. Interconnection Customers must execute the Cluster Study Agreement prior to the close of the Customer Engagement Window.

At the end of the Customer Engagement Window, all Interconnection Requests (1) deemed valid, (2) that have executed a Cluster Study Agreement in the form of Appendix 3 to this RIS, ~~and~~ (3) that have satisfied the Cluster Study criteria in Section 4, ~~and~~ (4) [that submitted a Commercial Readiness Deposit](#) will be included in the Cluster Study. Any Interconnection Requests not deemed valid at the close of the Customer Engagement Window will be deemed withdrawn (without the cure period provided under Section 3.8 of this RIS) by the CAISO, the application fee will be forfeited to the CAISO, and the CAISO will return the Interconnection Study Deposit and Commercial Readiness Deposit to the Interconnection Customer. Immediately following the Customer Engagement Window, the CAISO will initiate the Cluster Study described in Section 6 of this RIS.

For each Interconnection Request that is deemed complete pursuant to Section 3.5.1, the CAISO and Participating TO will determine whether the Interconnection Request is valid. An Interconnection Request will be deemed valid if it does not contain deficiencies that would prevent its inclusion in the Cluster Study. Deficiencies include but are not limited to modeling errors, inaccurate data, and unusable files.

The Interconnection Customer will provide the CAISO the additional requested information needed to constitute a valid request within ten (10) Business Days after receipt of such notice but no later than the end of the Customer Engagement Window. At any time, if the CAISO finds that the technical data provided by Interconnection Customer is incomplete or contains errors, the Interconnection Customer, Participating TO, and the CAISO will work expeditiously and in good faith to remedy such issues. In the event that the Interconnection Customer fails to comply with this Section, the CAISO will deem the Interconnection Request withdrawn (without the cure period provided under Section 3.8 of this RIS), the application fee is forfeited to the CAISO, and the Interconnection Study and Commercial Readiness Deposit will be returned to Interconnection Customer.

#### **3.5.2.1 Validation Process.**

The CAISO will validate Interconnection Requests that satisfy the Cluster Study criteria in Section 4 of this RIS. The CAISO and Participating TO will notify the Interconnection Customer whether its Interconnection Request is valid or contains deficiencies within ten (10) Business Days of October 15 or when the Interconnection Request satisfies the Cluster Study criteria, whichever is later.

All Interconnection Requests must be deemed valid by the end of the Customer Engagement Window to be included in that year's Queue Cluster.

#### **3.5.2.2 Deficiencies in Interconnection Request.**

If an Interconnection Request has deficiencies, the CAISO shall include in its notification to the Interconnection Customer that the Interconnection Request does not constitute a valid request and explain the deficiencies. The Interconnection Customer shall provide the CAISO the corrected requested information needed to constitute a valid request. Consistent with Section 3.5, whenever corrected requested information is provided by the Interconnection Customer, the CAISO shall notify the Interconnection Customer within five (5) Business Days of receipt of the corrected requested information whether the Interconnection Request is valid. If the Interconnection Request continues to provide deficient information, the CAISO shall include in its notification to the Interconnection Customer the reasons for such failure. If an Interconnection Request is not deemed valid, the Interconnection Customer must cure all deficiencies no later than the close of the Customer Engagement Window. Interconnection Requests with deficiencies after that date will be deemed invalid and will not be included in an Interconnection Study Cycle or otherwise studied.

Interconnection Requests deemed invalid under this Section 3.5.2.2 are not subject to Section 3.8. Interconnection Customers with invalid Interconnection Request under this Section 3.5.2.2 may seek relief under Section 15.5 by [e](#)-notifying the CAISO within two (2) Business Days of the notice of invalidity.

#### **3.5.3 Day-for-day Extensions**

To the extent the CAISO and Participating TO cannot meet any deadline in this Section 3.5.2, the Interconnection Customer will receive a day-for-day extension on all remaining deadlines requiring its response.

#### **3.5.4 Scoring Process**

Pursuant to Section 4 of this RIS, the CAISO will score Interconnection Requests to determine their eligibility for the Cluster Study. The CAISO will provide Load Serving Entities with a list of Interconnection Requests after the close of the Cluster Application Window. Load Serving Entities submitting commercial interest points must do so no later than ten (10) days after the CAISO provides the list of Interconnection Requests.

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#### **3.6.1 Interconnection Studies Statistics**

The CAISO will maintain on its Website summary statistics related to processing Interconnection Studies pursuant to Interconnection Requests, updated quarterly. The CAISO will maintain a link on OASIS to the CAISO Website with the interconnection statistics. These statistics will include:

##### **3.6.1.1 Cluster Studies**

- (A) The number of Interconnection Requests to the CAISO Controlled Grid that had Cluster Studies completed during the reporting quarter;
- (B) The number of Interconnection Requests to the CAISO Controlled Grid that had Cluster Studies completed beyond the one hundred fifty (150) Calendar Days after the close of the Customer Engagement Window;

- (C) The number of active, valid Interconnection Requests with ongoing incomplete Cluster Studies where such Interconnection Requests had executed a Cluster Study agreement received by the CAISO more than one hundred fifty (150) days before the reporting quarter end;
- (D) The mean time (in days) of Cluster Studies completed within the CAISO's coordinated region during the reporting quarter, from the date when the CAISO notifies the Interconnection Customers in the Cluster that a Cluster Restudy is required pursuant to Section 7.4.1 of this RIS to the date the CAISO provided the completed Cluster Study Report to the Interconnection Customer;
- (E) ~~The m~~Mean time (in days), Cluster Studies completed within the CAISO's coordinated region during the reporting quarter, from the close of the Cluster Application Window to the date when the CAISO provided the completed Cluster Study Report to the Interconnection Customer;
- (F) The percentage of Cluster Studies exceeding the one hundred fifty (150) days to complete this reporting quarter, calculated as the sum of Section 3.6.1.1(B) plus Section 3.6.1.1(C), divided by the sum of Section 3.6.1.1(A) plus Section 3.6.1.1(C).

#### 3.6.1.2 Cluster Restudies

- (A) The number of Interconnection Requests to the CAISO Controlled Grid that had Cluster Restudies completed;
- (B) The number of Interconnection Requests to the CAISO Controlled Grid that had Cluster Restudies completed beyond the one hundred ~~fifty-eighty~~ (1850) ~~Calendar d~~Days after the ~~close of the Customer Engagement Window~~Cluster Study Report Meeting;
- (C) The number of active, valid Interconnection Requests with ongoing incomplete Cluster Restudies where such Interconnection Requests had executed a Cluster Study agreement received by the CAISO more than one hundred fifty (150) days before the reporting quarter end;
- (D) The mean time (in days) of Cluster Restudies completed within the CAISO's coordinated region during the reporting quarter, from the date when the CAISO notifies the Interconnection Customers in the Cluster that a Cluster Restudy is required pursuant to Section 7.4.1 of this RIS to the date the CAISO provided the completed Cluster Restudy Report to the Interconnection Customer;
- (E) The mean time (in days) of Cluster Restudies completed within the CAISO's coordinated region during the reporting quarter, from the close of the Cluster Application Window to the date when the CAISO provided the completed Cluster Restudy Report to the Interconnection Customer;
- (F) The percentage of Cluster Restudies exceeding the one hundred ~~fifty-eighty~~ (1350) days to complete this reporting quarter, calculated as the sum of Section 3.6.1.2(B) plus Section 3.6.1.2(C), divided by the sum of Section 3.6.1.2(A) plus Section 3.6.1.2(C).

#### 3.6.1.3 Interconnection Facilities Studies Processing Time

- (A) The number of Interconnection Requests to the CAISO Controlled Grid that had Interconnection Facilities Studies completed;
- (B) The number of Interconnection Requests to the CAISO Controlled Grid that had Interconnection Facilities Studies completed beyond the one hundred twenty (120) days planned for the Interconnection Facilities Study pursuant to Section 8.5 of this RIS;
- (C) The number of active, valid Interconnection Requests with ongoing incomplete Interconnection Facilities Studies that have exceeded the one hundred twenty (120) days planned for the Interconnection Study pursuant to Section 8.5 of this RIS;
- (D) The mean time (in days) of Interconnection Facilities Studies completed from the date when the CAISO began the annual Interconnection Facilities Study pursuant to Section 8.5 of this RIS to the date the CAISO provided the completed Interconnection Facilities Study to the Interconnection Customer;
- (E) The mean time (in days) of Interconnection Facilities Studies completed within the CAISO's coordinated region during the reporting quarter, from the close of the Cluster Application Window to the date when the CAISO provided the completed Interconnection Facilities Study to Interconnection Customer;
- (F) Percentage of delayed Interconnection Facilities Studies this reporting quarter, calculated as the sum of Section 3.6.1.3(B) plus Section 3.6.1.3(C) divided by the sum of Section 3.6.1.3(A) plus Section 3.6.1.3(C) of this RIS.

**3.6.1.4 Interconnection Requests Withdrawn**

- (A) The number of Interconnection Requests withdrawn;
- (B) The number of Interconnection Requests withdrawn before completion of any Interconnection Studies;
- (C) The number of Interconnection Requests withdrawn before completion of their Interconnection Facilities Study;
- (D) The number of Interconnection Requests withdrawn after completion of an Interconnection Facilities Study but before execution of a GIA or before the Interconnection Customer requests filing an unexecuted, new GIA;

~~(E) Number of Interconnection Requests withdrawn from the CAISO's interconnection queue after completion of an Interconnection Facilities Study but before execution of a GIA or Interconnection Customer requests the filing of an unexecuted, new GIA.~~

(EF) The number of Interconnection Requests withdrawn from the CAISO's interconnection queue after execution of a GIA or Interconnection Customer requests the filing of an unexecuted, new GIA;

(EG) The mean time (in days), for all withdrawals, from the date when the request was determined to be valid to when the CAISO received the request to withdraw from the queue.

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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 RIS, 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.

Withdrawal shall result in the removal of the Interconnection Request from the Interconnection Study Cycle. If an Interconnection Customer disputes the withdrawal and removal from the Interconnection Study Cycle and has elected to pursue Dispute Resolution, the Interconnection Customer's Interconnection Request will not be considered in any ongoing Interconnection Study during the Dispute Resolution process.

If the Interconnection Customer withdraws its Interconnection Request or is deemed withdrawn by the CAISO under Section 3.8 of this RIS, the CAISO will (i) update the [OASIS Queue Position posting interconnection queue on the CAISO Website](#); (ii) impose the Withdrawal Penalty described in Section 3.8.1 of this RIS; and (iii) refund to the Interconnection Customer any portion of the refundable portion of Interconnection Customer's study deposit that exceeds the costs that the CAISO has incurred, including interest calculated in accordance with Section 35.19a(a)(2) of FERC's regulations. The CAISO will also refund any portion of the Commercial Readiness Deposit not applied to the Withdrawal Penalty and, if applicable, the deposit in lieu of site control.

In the event of such withdrawal, the CAISO, subject to the provisions of Sections 15.1 and 3.5.1.1, shall provide, at the Interconnection Customer's request, all information that the CAISO developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

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### 3.10 Emergency Interconnection Process

The CAISO and Participating TO(s) may conduct expedited studies to approve emergency interconnections when all of the following conditions are satisfied:

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- (g) The emergency interconnection will be ineligible for Delivery Network Upgrades or TP Deliverability except Interim Deliverability [consistent with Section 4.6 of this RIS](#), or until it can obtain TP Deliverability by submitting a subsequent Interconnection Request pursuant to Sections 3.5 or 5.1 of this RIS;

### Section 4 Cluster Study Criteria

Only those Interconnection Requests that meet the criteria in this Section 4 will proceed to the Cluster Study. Any Interconnection Requests that do not meet the criteria or otherwise fail to comply with this Section 4 will be deemed withdrawn without the cure period provided under Section 3.8 of this RIS by the CAISO, the application fee will be forfeited to the CAISO, and the

CAISO will return the Interconnection Study Deposit ~~and Commercial Readiness Deposit~~ to the Interconnection Customer.

Each Interconnection Request can proceed to the Cluster Study based on one set of criteria only: the criteria for Deliverability in Deliverable Zones, Deliverability in Merchant Zones, Energy Only eligible for cash reimbursement, or Energy Only ineligible for cash reimbursement. Interconnection Requests seeking any Deliverability for any technology or Generating Unit at the Generating Facility will be subject to the criteria for Interconnection Requests for Deliverability. Interconnection Customers may not change their selected criteria after the Cluster Application Window.

Interconnection Requests that proceed to the Cluster Study based on the criteria for Energy Only Interconnection Requests may not obtain Deliverability for that Generating Facility and any associated Generating Units thereafter, including without limitation through transfers, modifications, or the TP Deliverability allocation process. Expansions to Energy Only Generating Facilities may receive Deliverability if their Interconnection Requests proceed to the Cluster Study based on the criteria for Interconnection Requests seeking Deliverability.

All scoresheets, documentation, and bids submitted will be Confidential Information consistent with Section 15.1 of this RIS. Notwithstanding, the CAISO may confirm any information as necessary with Load Serving Entities, counterparties, or Local Regulatory Authorities. The CAISO will notify the Interconnection Customer which screen was decisive to its Interconnection Request. The CAISO may publish composite data but will not publish or disclose which criteria or screen enabled individual Interconnection Requests to proceed to the Cluster Study. The CAISO will publish on the CAISO Website the number of bids and the clearing price of all winning bids for each Transmission Zone, but will not publish the names of any Interconnection Customers in the auctions or their corresponding bids.

#### **4.1 Criteria for Requests for Deliverability in Deliverable Zones**

Interconnection Requests in Deliverable Zones seeking any Deliverability will proceed to the Cluster Study only where they pass the screens of this Section.

- 1) There must be Deliverability available at the Interconnection Customer's Point of Interconnection.
- 2) If other Interconnection Customers in the Cluster are interconnecting in the same Deliverable Zone, and pass step one, only Interconnection Customers comprising one hundred fifty percent (150%) of the available Deliverability at their relevant Transmission Constraint may proceed to the Cluster Study. Interconnection Customers' capacity relevant to the available Deliverability will be based on their requested amount of Deliverability.
- 3) If two or more Interconnection Customers would exceed the 150% limit, only the highest-scoring Interconnection Customers that reach the 150% limit proceed to the Cluster Study. The CAISO may exceed the 150% limit only for the capacity of the last Interconnection Request that qualifies to reach the limit but which also would exceed it. To determine which Interconnection Customers proceed to the Cluster Study, the CAISO will score Interconnection Customers pursuant to Section 4.1.1 of this RIS.
- 4) If Interconnection Customers with the same scores would exceed the 150% limit, the CAISO will use those Interconnection Customers with the lowest distribution factors until it reaches the 150% limit. The distribution factor is the percentage of the Interconnection Customer's incremental increase in output that flows on a particular transmission line or transformer when the displaced generation is spread proportionally across all dispatched resources in the [Control-Balancing Authority Area](#).
- 5) If Interconnection Customers with the same scores and same distribution factors would together exceed the 150% limit, the CAISO will auction the right for those Interconnection Customers to be studied pursuant to Section 4.1.2 of this RIS.

#### 4.1.1 Scoring Criteria

Each Interconnection Customer's score under Section 4.1 will be the sum of its points based on three criteria: (1) commercial interest (up to 30 points), (2) project viability (up to 35 points), and (3) system need (up to 35 points). The Interconnection Customer will submit a scoresheet providing its points in its Interconnection Request consistent with Section 3.5. Interconnection Customers will receive sub-points toward the points in the three criteria as follows:

- 1) An Interconnection Customer may receive up to 30 points for commercial interest based on its ratio of sub-points to 100. The Interconnection Customer's sub-points may consist of (a) Load Serving Entity point allocations (up to 100 sub-points) or a Load Serving Entity full allocation (100 sub-points); and (b) an affidavit from a counterparty that is not a Load Serving Entity (up to 25 sub-points). Points from multiple Load Serving Entities may be combined to achieve up to 100 sub-points. Interconnection Customers may not combine affidavits from multiple counterparties that are not Load Serving Entities, but may combine point allocations from Load Serving Entities with an affidavit from a counterparty that is not a Load Serving Entity.

Load Serving Entities will provide the CAISO their point allocations consistent with Section 3.5. The Interconnection Customers will receive up to 100 sub-points in the commercial interest category based on the ratio of its requested Interconnection Service Capacity at the Point of Interconnection to the number of points allocated to it from the Load Serving Entity.

If a Load Serving Entity lacks sufficient points to match the capacity of one project, or otherwise elects, it may indicate a full allocation to a project in lieu of allocating any of its points in that Cluster Application Window. A Load Serving Entity exercising this option can select one Interconnection Request only per Cluster Application Window, and the Interconnection Customer's Interconnection Service Capacity may not exceed [the lesser of 500 MW or 50% of the Load Serving Entity's load according to the California Energy Commission's most recent coincident peak demand forecasts of Resource Adequacy load share one hundred fifty percent \(150%\) of that Load Serving Entity's points allocation](#). Multiple Load Serving Entities may elect to exercise this option jointly for a single Interconnection Request [less than up to their aggregate maximum capacity under this provision one hundred fifty percent \(150%\) of their aggregate points](#). An Interconnection Request with a full allocation will receive 100 sub-points in the commercial interest category.

Affidavits from non-Load Serving Entities must be executed by an authorized representative. The affidavit must attest [the counterparty is supporting the Interconnection Request in support of corporate policy goals on sustainability](#); the capacity of the Interconnection Request aligns with its individual needs; the counterparty and its holding company, if any, is not affiliated with the Interconnection Customer or its holding company; and that the counterparty and its holding company and affiliates support this Interconnection Request only, and no other Interconnection Requests in this Cluster Application Window.

- 2) An Interconnection Customer may receive up to 35 points for project viability based on its ratio of sub-points to 100. The Interconnection Customer's sub-points may include up to 50 sub-points for an engineering design plan of the Generating Facility, and up to 50 sub-points for expanding a Generating Facility. The Interconnection Customers will receive up to 50 sub-points for an engineering design plan based on the percent the plan is complete, with each percentage complete comprising one sub-point, as represented in an affidavit attesting to the completeness by a professional engineer. An Interconnection Customer will receive 10 sub-points if it is an expansion of a Generating Facility that has

executed a GIA and submitted its notice to proceed and commenced Construction Activities, as confirmed by the Participating TO. Alternatively, an Interconnection Customer will receive 20 sub-points if it is an expansion of an online Generating Facility. Alternatively, an Interconnection Customer will receive 50 sub-points if it is an expansion of a Generating Facility that has executed a GIA, submitted its notice to proceed, commenced Construction Activities, as confirmed by the Participating TO, or is online, and the Generating Facility's generator tie line to the CAISO Controlled Grid has sufficient surplus capacity to accommodate the sum of the maximum capacities of the extant Generating Facility and the expansion. Interconnection Customers seeking expansion sub-points must submit documentation to describe and verify the expansion with their scoresheets.

- 3) An Interconnection Customer may receive up to 35 points for system need based on its ratio of sub-points to 100. The Interconnection Customer will receive 50 sub-points if the Generating Facility could be a Local Capacity Area Resource when the Interconnection Request is submitted, and the CAISO has projected a Local Capacity Area Resource Deficiency in that Local Capacity Area. The Interconnection Customer will receive 100 sub-points if the Generating Facility is designated by a Local Regulatory Authority as a long lead-time resource; meets the requirements of the Local Regulatory Authority resource portfolio; and corresponds to approved Network Upgrades in the Transmission Plan specifically designed to meet the long lead-time resource needs of the Local Regulatory Authority, or does not require additional transmission capacity. The CAISO will confirm eligibility for these sub-points with the applicable Local Regulatory Authority.

#### **4.1.1.1 Load Serving Entity Points**

To allocate commercial interest points to Interconnection Customers, a Load Serving Entity must do the following at least two months prior to the Cluster Application Window's opening:

- 1) Provide the CAISO written, electronic notice of intent to participate in the points allocation. The notice must include (a) the publicly accessible website used by the Load Serving Entity; and (b) the contact information for the person or department conducting the points allocation for the Load Serving Entity.
- 2) Publish on the publicly accessible website (a) the selection criteria or consideration factors for awarding points; and (b) the contact information for the person or department conducting the points allocation for the Load Serving Entity. Public websites requiring registration are permissible.

Within five (5) Business Days after the deadline for Load Serving Entities to provide their notices, the CAISO will publish on the CAISO Website the contact information, website, and points allocation for each participating Load Serving Entity. To determine available Deliverable Option commercial interest points for allocation, the CAISO will take the aggregate available MW of Deliverability in each Transmission Zone and multiply it by a scaling factor of 0.5. The CAISO will then allocate shares of points to each Load Serving Entity based upon on their relative load ratio shares in the most recent coincident peak demand forecast from the California Energy Commission. Load Serving Entities are not required to allocate all of their allocated points. The CAISO will not redistribute forgone or otherwise unused points to other Load Serving Entities.

For each Cluster Application Window, a Load Serving Entity may allocate points to the greater of three (3) Interconnection Requests from Affiliates, or no more than twenty-five percent (25%) of its points to Interconnection Requests from Affiliates based on their requested Interconnection Service Capacity.

#### **4.1.2 Auction Process**

After the points assessment and distribution factor analysis, the CAISO will notify any still tied

Interconnection Customers required to win an auction to be included in the Cluster Study. Those Interconnection Customers may submit a single, sealed bid of a \$/MW value of aggregate Generating Facility Capacity at the Point of Interconnection, or withdraw. The CAISO will consider bids based on the dollar per MW bid value only, and not the product of the dollar value and the Generating Facility capacity. The CAISO will accept the highest bid(s) for the Cluster Study until it reaches the one hundred fifty percent (150%) limit.

Interconnection Customers that win an auction and proceed to the Cluster Study must post an auction deposit by the end of the Cluster Engagement Window. The auction deposit may be in any form or combination of forms under Section 11.1. The value of the auction deposit is the product of the dollar value of the lowest winning bid in that Transmission Zone and the MW capacity of the Interconnection Customer's own Generating Facility at the Point of Interconnection. The CAISO and Participating TO will release or refund with any interest the auction deposit when the [Interconnection Customer Generating Facility](#) achieves Commercial Operation. If an Interconnection Customer withdraws its Interconnection Request, or is deemed withdrawn, it will lose the following portion of the auction deposit:

- a) Fifteen percent (15%) prior to the commencement of the Cluster Restudy, or if no Cluster Restudy for that Queue Cluster takes place, the Interconnection Facilities Study;
- b) Thirty percent (30%) between commencement of the Cluster Restudy, or if no Cluster Restudy takes place then the end of the Cluster Study, and commencement of the Interconnection Facility Study;
- c) Fifty percent (50%) between commencement of the Interconnection Facilities Study and execution or the filing of an unexecuted GIA for the Interconnection Customer;
- d) One hundred percent (100%) after the Interconnection Customer executes a GIA or an unexecuted GIA is filed on its behalf.

The CAISO and Participating TO will process any non-refundable auction deposit funds pursuant to Section 7.6 of this RIS.

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## Section 5 Fast Track Process

### 5.1 Applicability and Initiation of Fast Track Process Request

Applicability to a proposed Generating Facility. An Interconnection Customer may request interconnection of a proposed Generating Facility to the CAISO Controlled Grid under the Fast Track Process if the Generating Facility is no larger than 5 MW and is requesting Energy-Only Deliverability Status and if the Interconnection Customer's proposed Generating Facility meets the codes, standards, and certification requirements of Appendices 9 and 10 of this RIS, or if the applicable Participating TO notifies the CAISO that it has reviewed the design for or tested the proposed Small Generating Facility and has determined that the proposed Generating Facility may interconnect consistent with Reliability Criteria and Good Utility Practice. [Fast Track Interconnection Requests may not obtain Deliverability for that Generating Facility and any associated Generating Units thereafter, including without limitation through transfers, modifications, or the TP Deliverability allocation process.](#)

Applicability to an existing Generating Facility. If the Interconnection of an existing Generating Facility meets the qualifications for Interconnection under CAISO Tariff Section 25.1(d) or (e) but, at the same time, the Interconnection Customer also seeks to repower or reconfigure the existing Generating Facility in a manner that increases the gross generating capacity by not more than 5 MW, then the Interconnection Customer may request that the Fast Track Process be applied with respect to the repowering or reconfiguration of the existing Generating Facility that results in the incremental increase in MW.

Initiating the Fast Track Interconnection Request. To initiate an Interconnection Request under the Fast Track Process, and have the Interconnection Request considered for validation the Interconnection Customer must provide the CAISO with:

- (i) a completed Interconnection Request as set forth in Appendix 1;
- (ii) a non-refundable processing fee of \$500; and
- (iii) a demonstration of Site Control. For the Fast Track Process, such demonstration may include documentation reasonably demonstrating a right to locate the Generating Facility on real estate or real property improvements owned, leased, or otherwise legally held by another.

The CAISO shall review and validate the Fast Track Process Interconnection Request pursuant to Section 5.2.

In the event of a conflict between this Section 5 and another provision of this RIS, Section 5 shall govern.

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**5.5.4.3 Safety and Reliability Screen:** The location of the proposed Generating Facility and the aggregate generation capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without studying the Generating Facility in ~~either the Queue Cluster or Independent Study processes.~~ The CAISO and Participating TO shall give due consideration to the following and other factors in determining potential impacts to safety and reliability in applying this screen.

**5.5.4.3.1** Whether the line section has significant minimum loading levels dominated by a small number of customers (e.g., several large commercial customers).

**5.5.4.3.2** Whether the loading along the line section uniform or even.

**5.5.4.3.3** Whether the proposed Generating Facility is located in close proximity to the substation (i.e., less than 2.5 electrical circuit miles), and whether the line section from the substation to the Point of Interconnection is a Mainline rated for normal and emergency ampacity. For purposes of this screen, a Mainline is the three-phase backbone of a circuit and will typically constitute lines with wire sizes of 4/0 American wire gauge, 336.4 kcmil, 397.5 kcmil, 477 kcmil and 795 kcmil.

**5.5.4.3.4** Whether the proposed Generating Facility incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.

**5.5.4.3.5** Whether operational flexibility is reduced by the proposed Generating Facility, such that transfer of the line section(s) of the Generating Facility to a neighboring circuit/substation may trigger overloads or voltage issues.

**5.5.4.3.6** Whether the proposed Generating Facility employs equipment or

systems certified by a recognized standards organization to address technical issues such as, but not limited to, islanding, reverse power flow, or voltage quality.

...

**6.7.2.3** The Interconnection Customer shall provide the CAISO a \$~~340,000~~ 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-fivesixty~~ (6045) 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 \$~~430,000~~ deposit. Any request for modification of the Interconnection Request must be accompanied by any resulting updates to the models described in Attachment A to Appendix 1 of this RIS. If the modification request results in a change to the Interconnection Facilities or Network Upgrades the modification assessment could take up to ~~ninety-one hundred twenty~~ (1290) 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 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 ~~thirty~~ (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 KK 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.

...

**6.7.2.7** Interconnection Customers may request to downsize their Interconnection Service Capacity pursuant to Section 6.7.2.3. Interconnection Customers with Network Upgrades requesting to downsize will not see the impacts to their Network Upgrades or cost responsibility until the CAISO publishes the reassessment results that include the downsized capacity pursuant to Section

7.4 unless the CAISO can determine the impacts prior to the reassessment. Interconnection Customers with Network Upgrades must submit downsizing requests, including the \$340,000 deposit, by May 30 to be included in the following annual reassessment. Once the CAISO publishes the reassessment results, the Participating TO will tender a draft amendment to the Interconnection Customer's Generator Interconnection Agreement to incorporate any required changes. If an Interconnection withdraws or is deemed withdrawn, any partial recovery of deposits or penalties will be calculated based on the Generating Facility's most recent MW capacity prior to its downsizing request.

A downsizing generator will continue to be obligated to finance the costs of (1) Network Upgrades that its Generating Facility previously triggered, and (2) Network Upgrades that are alternatives to the previously triggered Network Upgrades, if such previously triggered Network Upgrades or alternative Network Upgrades are needed by Interconnection Customers in the same Queue Cluster or later-queued Interconnection Customers, up to the Maximum Cost Exposure of the downsizing generator as determined by the CAISO Tariff interconnection study procedures applicable to the downsizing generator. For determining any changes to a downsizing generator's Network Upgrade cost responsibilities as a result of a reassessment process conducted pursuant to Section 7.4, the CAISO will reallocate the costs of Network Upgrades that are still needed based on the downsizing generator's pre-downsizing share of the original cost allocation.

...

### 6.7.3 [Not Used]

### 6.7.4 Commercial Viability Criteria ~~for Retention of Deliverability beyond Seven Years in Queue~~

The CAISO's agreement to modifications requested by the Interconnection Customer pursuant to Section 6.7.2.3 for a Generating Facility ~~or Generating Unit~~ with a Commercial Operation Date that has exceeded or will exceed seven (7) years from the date the Interconnection Request is received by the CAISO ~~with retention of TP 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 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 Control for 100% of the property necessary to construct the facility through the Commercial Operation Date requested in the modification request. A Site Control 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.

The CAISO's agreement to an extension of the proposed Commercial Operation Date does not relieve the Interconnection Customer from compliance with [this RIS or the GIA, including without limitation the requirements of any of](#) the criteria in Section 8.9.3 to retain TP Deliverability. 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 RIS.

~~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 Commercial Readiness Deposit or GIA Deposit 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/withdrawing~~ the Generating Facility ~~to Energy Only Deliverability Status~~ for one year from the day the Interconnection Customer submits the modification request, or eight years after the CAISO received the Interconnection Request, whichever occurs later. ~~Interconnection Customers may exercise this provision only once.~~ 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/withdraw~~ the portion of the Generating Facility that is in service and operating in the CAISO ~~M~~markets. Instead, the portion of the Generating Facility that has not been developed will be ~~converted to Energy Only Deliverability Status/downsized/withdrawn~~ resulting in Partial Capacity Deliverability Status for the Generating Facility. However

Commented [SS10]: See comment above.

~~W~~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 to the amount in service and operating in the CAISO ~~M~~markets, it will ~~revert to be~~ Full Capacity Deliverability Status.

~~Interconnection Customers in Queue Cluster 7 and beyond whose Cluster Study reports require a timeline beyond the seven-year threshold are exempt from the commercial viability criteria in this section provided that they modify their Commercial Operation Dates within six (6) months of the CAISO's publishing the Interconnection Study report. This exemption is inapplicable to report addenda or revisions required by a request from an Interconnection Customer for any reason.~~

#### 6.7.4.1 Annual Review

For Interconnection Customers extending their Commercial Operation Date beyond the seven-year threshold ~~and retaining their TP Deliverability~~ pursuant to Section 6.7.4, 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~~ CAISO will deem them withdrawn pursuant to Section 3.8. Interconnection Customers will not be subject to annual review requirements in any year the Participating TO unilaterally extends their Commercial Operation Date, but will resume compliance the following year.

#### 6.7.5 Alignment with Power Purchase Agreements

An Interconnection Customer with an executed GIA and an executed power purchase agreement may request to automatically extend the GIA Commercial Operation Date to align with its power purchase agreement for that Generating Facility, including any extension or amendment. Interconnection Customers requesting alignment must (1) provide a copy of the power purchase agreement, and (2) confirm the power purchase agreement's standing and details in the annual TP Deliverability affidavit process. Requests to align the Commercial Operation Date with power purchase agreements are not exempt from the commercial viability criteria provisions in Section 6.7.4, where applicable.

### 6.8 Revisions and Addenda to Final Interconnection Study Reports

#### 6.8.1 Substantial ~~Error or Omissions~~Revisions; Revised Study Report

Should the CAISO discover, through written comments submitted by an Interconnection Customer or otherwise, that a final Interconnection Study Report (which can mean a final Cluster Study report or Interconnection Facilities Study report) contains a substantial ~~error or omission~~revision, the CAISO will cause a revised final report to be issued to the Interconnection Customer.

A substantial ~~error or omission~~revision shall mean ~~an error or omission~~a revision that results in one or more of the following:

- (i) ~~understatement or overstatement of an increase to~~ the Interconnection Customer's Current Cost Responsibility, Maximum Cost Responsibility, Maximum Cost Exposure, and Participating TO Interconnection Facilities, as set by the Interconnection Facilities Study, by more than five (5) percent or one million dollars (\$1,000,000), whichever is greater;
- (ii) delay of the Commercial Operation Date, In-Service Date, or requested Deliverability Status by more than one year; or
- (iii) termination of the Interconnection Customer's power purchase agreement ~~by the counterparty~~.

The CAISO will include examples of how Interconnection Customers can demonstrate power purchase agreement terminations in the Business Practice Manual. The CAISO will confirm power purchase agreement terminations with the Interconnection Customer's counterparty.

A dispute over the plan of service by an Interconnection Customer shall not be considered a ~~substantial error or omission~~revision unless the Interconnection Customer demonstrates that the plan of service was based on an invalid or erroneous study assumption that meets the criteria set forth above. Changes to Interconnection Studies resulting from Interconnection Customer requests, including without limitation, modifications, suspensions, or failures to meet GIA milestones, are not considered ~~errors~~.

Commented [SS11]: See comment above.

~~or omissions/~~revisions.

#### 6.8.2 Other ~~Errors or Omissions~~Revisions; Addendum

If ~~an error or omission~~ revision in an Interconnection Study report is not a substantial ~~error or omission~~revision, the CAISO shall not issue a revised final Interconnection Study report. Rather, the CAISO shall document such ~~error or omission~~revision and make any appropriate correction by issuing an addendum to the final report.

The CAISO and applicable Participating TO shall also incorporate, as needed, any corrected information pertinent to the terms or conditions of the GIA in the draft GIA provided to an Interconnection Customer pursuant to Section 13.

#### 6.8.3 ~~[Not Used] Only Substantial Errors or Omissions Adjust Posting Dates~~

~~For Clusters 14 and previous: Only substantial errors and omissions related to the Interconnection 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. Any error or omission found after the second Interconnecting Financial Security posting will not impact the Interconnection Customer's Assigned Cost Responsibility, Maximum Cost Responsibility, or Maximum Cost Exposure.~~

~~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. In the case of a substantial error or omission resulting in the issuance of a revised final 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.~~

~~An Interconnection Customer's dispute of a CAISO determination that an error or omission in a final Study Report does not constitute substantial error shall not operate to change the amount of Interconnection Financial Security that the Interconnection Customer must post or to postpone the applicable deadline for the Interconnection Customer to post Interconnection Financial Security. In case of such a dispute, the Interconnection Customer shall post the amount of Interconnection Financial Security in accordance with this RIS, subject to refund in the event that the Interconnection Customer prevails in the dispute.~~

#### 6.8.4 Substantial ~~Errors or Omissions~~Revisions Allowing Refunds

Notwithstanding Section 3.5.1, after the Interconnection Customer has posted its second Commercial Readiness Deposit, it is eligible for a one-hundred percent (100%) refund of its remaining, unspent Commercial Readiness Deposit and all remaining, unspent Study Deposit funds if:

- (i) it receives a substantial ~~error or omission~~revision; and
- (ii) it withdraws its Interconnection Request within sixty (60) days of the publication of the revised Study Report or the termination of its power purchase agreement by the counterparty resulting from the substantial ~~error or omission~~revision, as applicable.

Commented [SS12]: Please explain the reason for these deletions.

...

#### 7.4.1 Cluster Study Restudy

The CAISO will conduct the Cluster Study Restudy as part of the annual reassessment of the Base Case pursuant to Section 7.4.

- (1) Within twenty (20) days after the Cluster Study Report Meeting, the Interconnection Customer must provide the following:
  - (a) Demonstration of continued Site Control pursuant to Section 3.5.1 of this RIS; and
  - (b) An additional deposit that brings the total Commercial Readiness Deposit submitted to the PTO to five percent (5%) of the Interconnection Customer's Network Upgrade cost assignment identified in the Cluster Study in the form of an irrevocable letter of credit or cash. The CAISO will refund the deposit to the Interconnection Customer upon withdrawal in accordance with Section 3.8 of this RIS.

The Interconnection Customer will promptly inform the CAISO of any material change to its demonstration of Site Control under Section 3.5.1 of this RIS. Upon the CAISO determining that Interconnection Customer no longer satisfies the Site Control requirement, the CAISO will notify Interconnection Customer. Within ten (10) Business Days of such notification, Interconnection Customer must demonstrate compliance with the applicable requirement subject to the CAISO's approval, not to be unreasonably withheld. Absent such demonstration, the CAISO will deem the subject Interconnection Request withdrawn pursuant to Section 3.8 of this RIS.

...

#### 7.5 [Not Used]

#### 7.6 Application of Withdrawal Penalties and Non-Refundable Amounts

In conjunction with each reassessment, the CAISO will calculate and disburse withdrawal penalties and non-refundable deposits from Interconnection Requests subject to this RIS as follows:

- (a) Withdrawal Period

The CAISO shall calculate Withdrawal Penalties based on the period during which the interconnection customer withdrew its interconnection request or terminated its generator interconnection agreement, pursuant to Section 3.8.1.

For each withdrawal period, the CAISO shall calculate and disburse available Withdrawal Penalties in conjunction with the annual reassessment performed during the year that the withdrawal period ends.

- (b) Disbursement of Withdrawal Penalties Assessed Prior to Cluster Study Results

For any Withdrawal Penalties assessed pursuant to 3.8.1.1(a) and for an Interconnection Customer that withdraws or is deemed withdrawn during the Cluster Study but before the

receipt of a Cluster Study Report, the CAISO will use such funds to offset the costs of the Cluster Restudy on an equal basis for all Interconnection Customers studied in the restudy.

(c) Calculation and Disbursement of Withdrawal Penalties for Still-Needed Network Upgrades At or Above \$100,000 Threshold

For each interconnection customer that withdrew its interconnection request or terminated its generator interconnection agreement after the Cluster Study results, the CAISO shall calculate the proportion of the Withdrawal Penalty that is attributable to Network Upgrades that the CAISO determines will still be needed by remaining Interconnection Customers. For each such still-needed Network Upgrade, the CAISO will divide the Interconnection Customer's Current Cost Responsibility for the Network Upgrade by the Interconnection Customer's total Current Cost Responsibility for all Network Upgrades and multiply this result by the Interconnection Customer's total amount of Withdrawal Penalty.

If the amount of Withdrawal Penalty attributable to a still-needed Network Upgrade, for all Interconnection Customers that withdrew during the same withdrawal period, is equal to or greater than \$100,000, then the portion of such amount held or received by the CAISO prior to the stage of the applicable annual reassessment in which the CAISO reallocates cost responsibility for remaining Network Upgrades shall: (a) be disbursed to the applicable Participating TO(s) as a contribution in aid of construction of the still-needed Network Upgrade, and (b) be reflected as a reduction in the cost of this Network Upgrade for purposes of reallocating the cost responsibility for this Network Upgrade. Any portions of such amounts that the CAISO receives after reallocating cost responsibility for remaining Network Upgrades during the applicable annual reassessment shall be disbursed by the CAISO in the same manner in a subsequent reassessment, based on the date of collection, unless the applicable Network Upgrade is no longer needed, in which case such amounts will be disbursed pursuant to Section 7.6(d).

If a Network Upgrade for which the CAISO disburses funds as a contribution in aid of construction under this Section 7.6(b) is determined, in a subsequent reassessment, to be no longer needed, such funds will be promptly returned to the CAISO by the applicable Participating TO and re-disbursed by the CAISO pursuant to Section 7.6(d).

(d) Calculation and Disbursement of Other Non-Refundable Security and Study Deposits

For each Interconnection Customer that withdrew its Interconnection Request or terminated its Generator Interconnection Agreement during a withdrawal period, any Withdrawal Penalty, as well as any non-refundable deposit not disbursed pursuant to subsection (b) above, shall be applied to offset Regional Transmission Revenue Requirements, as recovered through the CAISO's Transmission Access Charge, and to offset Local Transmission Revenue Requirements.

This offset shall be performed by first allocating these Withdrawal Penalties and non-refundable deposit amounts to the following three categories in proportion to the Interconnection Customer's most recent Current Cost Responsibility, prior to withdrawal or termination, for Network Upgrades whose costs would be recovered through each of the following categories: (1) a Regional Transmission Revenue Requirement, (2) the Local Transmission Revenue Requirement of the Participating TO to which the interconnection customer had proposed to interconnect, and (3) the Local Transmission Revenue Requirement of any other Participating TO on whose system the interconnection customer was responsible for funding Network Upgrades recovered through a Local Transmission Revenue Requirement.

Each year, prior to the cutoff date for including annual regional TRBA adjustments in Regional Transmission Revenue Requirements, the CAISO will disburse to each Participating TO's Transmission Revenue Balancing Account: (a) a share of the total funds held or received by the CAISO from category (1) above in proportion to the ratio of each Participating TO's most recent Regional Transmission Revenue Requirement to the total of all Participating TOs' most recent Regional Transmission Revenue Requirements, and (b) all funds held or received by the CAISO in categories (2) and (3) applicable to that Participating TO.

- (e) Disbursement of Funds by CAISO; Participating TO Responsibility for Collection

The CAISO shall disburse, in accordance with the rules set forth in this Section 7.6, only those amounts that it holds or has received. The applicable Participating TO shall have the exclusive obligation to administer the collection of any Withdrawal Penalty where the applicable Participating TO is a beneficiary. The applicable Participating TO has the responsibility to manage the financial security and to transmit to the CAISO the non-refundable amounts in cash or equivalent within [seventy-five \(75\)](#) days of the CAISO's submission to the Participating TO of the financial security liquidation form. This deadline can be modified by mutual agreement of the CAISO and applicable Participating TO.

## Section 8 Interconnection Facilities Study and TP Deliverability Allocation Processes

### 8.1 Interconnection Facilities Study

#### 8.1.1 Interconnection Facilities Study Agreement

Within five (5) Business Days following the CAISO's notifying each Interconnection Customer within the Cluster that no further Cluster Restudy is required (per Section 7.4), the CAISO will provide to Interconnection Customer an Interconnection Facilities Study Agreement in the form of Appendix B to this RIS. The Interconnection Customer will compensate the CAISO and Participating TO for the actual cost of the Interconnection Facilities Study. Within five (5) Business Days following the Cluster Report Meeting or Cluster Restudy Report Meeting if applicable, the CAISO will provide to Interconnection Customer a non-binding good faith estimate of the cost and timeframe for completing the Interconnection Facilities Study.

The Interconnection Customer will execute the Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to the CAISO within thirty (30) days after its receipt, together with:

- (1) any required technical data;
- (2) Demonstration of one hundred percent (100%) Site Control or demonstration of a regulatory limitation and applicable deposit in lieu of Site Control provided to the CAISO in accordance with Section 3.5.1.3 of this RIS; and
- (3) An additional deposit that brings the total Commercial Readiness Deposit submitted to the PTO to ten percent (10%) of the Interconnection Customer's Network Upgrade cost assignment identified in the Cluster Study or Cluster Restudy, if applicable, ~~in the form of an irrevocable letter of credit or cash~~. The CAISO will refund the deposit to [the](#) Interconnection Customer upon withdrawal in accordance with Section 3.8 of this RIS.

The Interconnection Customer will promptly inform the CAISO of any material change to Interconnection Customer's demonstration of Site Control under Section 3.5.1(iii) of this RIS. Upon the CAISO determining separately that Interconnection Customer no longer satisfies the Site Control requirement, the CAISO will notify Interconnection Customer. Within ten (10)

Business Days of such notification, Interconnection Customer must demonstrate compliance with the applicable requirement subject to the CAISO's approval, not to be unreasonably withheld. Absent such demonstration, the CAISO will deem the subject Interconnection Request withdrawn pursuant to Section 3.8 of this RIS.

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#### 8.9.1 First Component: Representing TP Deliverability Used by Prior Commitments

The CAISO will identify the following commitments that will utilize MW quantities of TP Deliverability:

- (a) The proposed Generating Facilities corresponding to earlier queued Interconnection Requests meeting the criteria set forth below:
  - (i) proposed Generating Facilities in Queue Cluster 4 or earlier that have executed PPAs with Load-Serving Entities and have GIAs that are in good standing.
  - (ii) proposed Generating Facilities in Queue Cluster 5 and subsequent Queue Clusters that were previously allocated TP Deliverability and have met the criteria to retain the allocation set forth in Section 8.9.3.
- (b) any Maximum Import Capability included as a planning objective in the Transmission Plan and a Subscriber Participating TO that is a non-contiguous portion of the CAISO BAA can use Maximum Import Capability made available by Participating Generators and System Resources if such allocation is made available in accordance with Section 40.4.6.2.1 (Step 13) of the CAISO Tariff; the available Maximum Import Capability made available by the Load Serving Entities that have access to Subscriber Rights until the Load Serving Entity(ies) cease using this Maximum Import Capability allocation or Delivery Network Upgrade(s) pursuant to Section 4.3A4.2(b) of the CAISO Tariff is completed to support the Subscriber Rights and then the TP Deliverability will be awarded to such Subscriber consistent with Section 8.9.1(c) of this [GIDAPRIS](#);
- (c) any other commitments having a basis in the Transmission Plan, including without limitation, long lead-time resources with corresponding transmission solutions, and any commitments established due to a Subscriber's exercise of its first option to acquire Deliverability made possible by Delivery Network Upgrades pursuant to Section 4.3A.4.2(a) of the CAISO Tariff, provided this first option has been exercised before the Subscriber is no longer eligible to apply for TP Deliverability allocation under Section 8.9 of this [GIDAPRIS](#). Generating Units possessing Subscriber Rights seeking to receive TP Deliverability must submit a request and will be subject to Sections 8.9.2 and 8.9.3 of this [GIDAPRIS](#). For each Subscriber that submits a TP Deliverability request, the CAISO will provide the Subscriber with a Queue Position. The CAISO will reserve TP Deliverability for long lead-time resources specified in the Transmission Plan up to the lower of (a) the capacity of deliverable long lead-time resources in the approved Local Regulatory Authority portfolios submitted to the CAISO for the most recent Transmission Plan, or (b) the transmission capacity created by the Category 1 policy-driven transmission solutions and available on existing transmission for the long lead-time resources.

This first component is performed for the purpose of determining the amount of TP Deliverability available for allocation to the current queue cluster in accordance with section 8.9.2, and shall not affect the rights and obligations of proposed Generating

Facilities in Queue Cluster 4 or earlier with respect to the construction and funding of Network Upgrades identified for such Generating Facilities, or their requested Deliverability Status. Such rights and obligations will continue to be determined pursuant to the GIP and the Generating Facility's GIA.

### 8.9.3 Second Component: Allocating Remaining 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. **Eligibility for TP Deliverability allocations includes both (1) Cluster 15 and later clusters that requested Deliverability in their Interconnection Requests for the three allocation cycles after completion of their Interconnection Studies; and (2) Energy Only projects that have reached Commercial Operation.**

(A) **PFA Group.** To Interconnection Customers that have executed power purchase agreements, and to Interconnection Customers in the current Queue Cluster that are Load Serving Entities serving their own Load.

~~(B)~~ **To Interconnection Customers that are actively negotiating a power purchase agreement or an active short list to receive a power purchase agreement.**

~~(C)~~(B) **Conditional Group.** To Interconnection Customers that have achieved Commercial Operation for the capacity seeking TP Deliverability.

~~(D)~~ **To Interconnection Customers seeking to be subject to Section 8.9.3.1.**

Energy Only capacity seeking TP Deliverability may not trigger the construction of Delivery Network Upgrades pursuant to Section 6.3.2. This includes, without limitation, capacity expansions effected through modification requests and capacity converted to Energy Only after failing to receive or retain a TP Deliverability allocation. The CAISO will allocate TP Deliverability to Energy Only Interconnection Customers requesting Deliverability after FCDS and PCDS Interconnection Customers within its allocation group and 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 TP Deliverability allocation.

Interconnection Customers requesting Deliverability for Energy Only capacity must submit to the CAISO a non-refundable \$5,000 fee for each Interconnection Request seeking TP Deliverability.

For an Interconnection Customer seeking to receive or retain TP Deliverability to represent that it has, ~~is negotiating, or is shortlisted for~~ a power purchase agreement

### 8.9.9 Deliverability Transfers

**Commented [SS13]:** We did not see any draft tariff language addressing the proposed TPD allocation group changes and so recommend including these changes for IPE 5.0. The same changes are recommended for Appendix DD above.

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**Commented [SS14]:** We are suggesting changes to this provision, and the corresponding Appendix DD provision above, since this draft tariff language does not reflect IPE 5.0 changes, and these and other recent policy changes by the CAISO have left the rules here extremely unclear.

We are using this terminology for clarification:

- "Reallocation" of deliverability for transfers within projects, which appears to be the CAISO's existing term.

- "Transferring" and "receiving" deliverability for transfers between projects.

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 at any time. An Interconnection Customer expanding its project capacity behind-the-meter pursuant to Section 4.2.1.2 also may transfer Deliverability as part of that process, or subsequently under the other processes in this Section.

Commented [SS15]: Moved from below, since this would simply be an intra-project transfer.

~~An Interconnection Customer may transfer its Generating Facility's Deliverability and to other Interconnection Customers Generating Facilities interconnected at the same CAISO substation and at the same voltage level, after both the transferring and receiving capacity have reached Commercial Operation. The transferring or receiving 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.~~

Commented [SS16]: To distinguish this from projects sharing a project substation.

Unless the Interconnection Customer for the transferring Generating Facility provides the CAISO with an executed Energy Only power purchase agreement for the capacity losing Deliverability at the time it requests the Deliverability transfer, the assignor capacity must be removed from queue by withdrawal or downsizing the Generating Facility. The CAISO will not accept Energy Only power purchase agreements that require Deliverability or include a Resource Adequacy obligation. 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.

~~An Interconnection Customer may request to reallocate its Deliverability among its Generating Units and to other Interconnection Customers interconnected at the same substation and at the same voltage level pursuant to Section 6.7.2.2 of this GIDAP, Article 5.19 of the LGIA, and Article 3.4.5 of the SGIA, as applicable. A repowering Interconnection Customer may transfer Deliverability as part of the repowering process pursuant to Section 25.1.2 of the CAISO Tariff. An Interconnection Customer expanding its capacity behind-the-meter pursuant to Section 4.2.1.2 also may transfer Deliverability as part of that process, or subsequently under the other processes in this Section.~~

Commented [SS17]: This section appears to be duplicative of the above language, and the reference to Section 6.7.2.2 seems to be mistaken.

The assignee of a Deliverability transfer does not need to submit a modification request to receive a transfer.

Following a Deliverability reallocation or transfer, the assignee-receiving capacity inherits any requirements, restrictions, or obligations the assignor-transferring capacity had as a result of receiving the Deliverability allocation or to retain the Deliverability, including without limitation requirements under Sections 6.7.4, 8.9.2.2, 8.9.2.3, and 8.9.3.]

Commented [SS18]: Insert clarification here about the relative CODs of the transferring and receiving capacity, including the requirement to comply with CVC if the receiving capacity does not have a COD more than 7 years from IR submittal.

## Section 9 Additional Deliverability Assessment Options

9.1 [Intentionally Omitted]

9.2 [Intentionally Omitted]

9.3 PTO Tariff Option for Full Capacity Deliverability Status

To the extent that a Participating TO's tariff provides the option for customers taking interconnection service under the Participating TO's tariff to obtain Full or Partial Capacity Deliverability Status, the CAISO will, in coordination with the applicable Participating TO, perform the necessary Deliverability studies to determine the Deliverability of customers electing such option. The CAISO shall execute any necessary agreements for reimbursement of study costs it incurs and to assure cost attribution for any Network Upgrades relating to any Deliverability status conferred to such customers under the Participating TO's tariff. The CAISO will include all Generating Facilities subject to this provision, including predecessor studies, in its determination

of available Deliverability pursuant to Sections 3.6 and 4 without limitation.

The Generating Facility seeking Full or Partial Capacity Deliverability Status under the CAISO Tariff must submit a request to the CAISO to study it for such Status. Such study request will be in the form of the CAISO's pro forma Interconnection Request, including Cluster Study criteria under Section 4 of this RIS. The Interconnection Request must be submitted during the Cluster Application Window and must include the Generating Facility's intended Point of Delivery to the CAISO Controlled Grid. The CAISO will determine the Transmission Zone eligibility and include the Generating Facility in the Cluster Study criteria process and Deliverability assessments based upon the Participating TO's interconnection to the CAISO Controlled Grid. The Generating Facility will be eligible for Deliverability where it satisfies the criteria in this RIS.

Except for the financial requirements described in Section 4 of this RIS, the Generating Facility will be subject to the interconnection fee, deposit, and financing requirements of the Participating TO tariff and not the CAISO Tariff. Generating Facilities sharing Delivery Network Upgrades will be subject to Section 13.6, and must provide security and authorization to their Participating TOs by the same deadlines as CAISO Interconnection Customers sharing upgrades.

The Generating Facility may withdraw its CAISO study request at any time pursuant to Section 3.8. If at any time the Generating Facility no longer has an active Interconnection Request under the Participating TO tariff, the CAISO will deem it withdrawn pursuant to Section 3.8.

Following the Interconnection Facility Study for the Generating Facility deliverability study, the Participating TO will tender a draft GIA or GIA amendment pursuant to the Participating TO's tariff. Generating Facilities assigned shared Network Upgrades will be subject to the requirements of Section 13.6 of this RIS.

...

## Section 10 Cost Responsibility for Interconnection Customers

### 10.1 Interconnection Customers in a Queue Cluster.

- (a) RNUs and LDNUs. The Interconnection Studies will establish Interconnection Customers' Current Cost Responsibility, Maximum Cost Responsibility, and Maximum Cost Exposure consistent with the cost allocations described in Section 8. The CAISO will adjust Interconnection Customers' cost responsibilities as described in this RIS. Interconnection Customers will post Commercial Readiness Deposit and GIA Deposit based on their Current Cost Responsibility.
- (b) ADNUs. Interconnection Customers selecting the Deliverable Option do not include ADNUs in the Commercial Readiness Deposit and GIA Deposit. The Current Cost Responsibility provided in the Cluster Studies establishes the basis for the initial Commercial Readiness Deposit. For Interconnection Customers selecting the Merchant Option, the Interconnection Facilities Study and annual reassessment shall refresh the Current Cost Responsibility for ADNUs.

The ADNU cost estimates provided in any Interconnection Study report are estimates only and do not provide a maximum value for cost responsibility to an Interconnection Customer for ADNUs. However, subsequent to the Interconnection Customer's receipt of its Interconnection Facilities Study report, an Interconnection Customer having selected the Merchant Option may have its ADNUs adjusted in the reassessment process undertaken under Section 7.4. Accordingly, for such Interconnection Customers, the most recent annual reassessment undertaken under Section 7.4 shall provide the most recent cost estimates for the Interconnection Customer's ADNUs.

**Commented [SS19]:** This seems like a completely new requirement. Currently, the IC submits the IR to the PTO, and the PTO forwards the IR to the CAISO if the project is seeking deliverability. Submitting two separate IRs will create complications, e.g., if the CAISO or PTO (but not both) finds a deficiency requiring correction, which would then require re-submittal to the other entity, etc. This issue was not discussed in the stakeholder process at all.

**Commented [SS20]:** So, they have to submit the IR to the CAISO tariff also, but there are no financial obligations or requirements to follow the rest of the CAISO tariff?

## 10.2 [Not Used]

### Section 11 Commercial Readiness Deposit and GIA Deposit

#### 11.1 Types of Commercial Readiness Deposit and GIA Deposit

The Commercial Readiness Deposit and GIA Deposit posted by an Interconnection Customer may be any combination of the following types of Commercial Readiness Deposit or GIA Deposit:

- (a) an irrevocable and unconditional letter of credit issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;
- (b) an irrevocable and unconditional surety bond issued by an insurance company that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;
- (c) an unconditional and irrevocable guaranty issued by a company has a credit rating of A or better by Standard and Poors or A2 or better by Moody's;
- (d) a cash deposit standing to the credit of the applicable Participating TO(s) in an interest-bearing escrow account maintained at a bank or financial institution that is reasonably acceptable to the applicable Participating TO(s);
- (e) a certificate of deposit in the name of the applicable Participating TO(s) issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's; or
- (f) a payment bond certificate in the name of the applicable Participating TO(s) issued by a bank or financial institution that has a credit rating of A or better by Standard and Poors or A2 or better by Moody's.

Commercial Readiness Deposit and GIA Deposit instruments as listed above shall be in such form as the CAISO and applicable Participating TO(s) may reasonably require from time to time by notice to Interconnection Customers or in such other form as has been evaluated and approved as reasonably acceptable by the CAISO and applicable Participating TO(s).

The CAISO shall publish and maintain standardized forms related to the types of deposits listed above which shall be accessible on the CAISO Website. The CAISO shall require the use of standardized forms of Commercial Readiness Deposit and GIA Deposit to the greatest extent possible. If at any time the guarantor of the Commercial Readiness Deposit or GIA Deposit fails to maintain the credit rating required by this Section, the Interconnection Customer shall provide to the applicable Participating TO(s) replacement Commercial Readiness Deposit or GIA Deposit meeting the requirements of this Section within five (5) Business Days of the change in credit rating.

The Participating TO shall, upon receipt, deposit all Commercial Readiness Deposit, GIA Deposit, and other deposit amounts in an interest-bearing account at a bank or financial institution designated by the Participating TO. Interest on a cash deposit standing to the credit of the applicable Participating TO(s) in an interest-bearing escrow account under subpart (d) of this Section will accrue to the Interconnection Customer's benefit and will be added to the Interconnection Customer's account on a monthly basis. Any interest earned on such amounts, based on the actual rate of the account, shall be allocated and disbursed in the same manner as the principal, in accordance with the methodology set forth in this Section 7.6.

Notwithstanding any other provision, Interconnection Customers owned by Participating TOs, and interconnecting to their own Participating TO service area, are not required to post Commercial Readiness Deposits or GIA Deposits to themselves. If the Interconnection Customer withdraws, it must remit all funds that would have been forfeited upon withdrawal or termination absent this exemption.

Commented [SS21]: Meaning what? They don't have to post, but they would have to make a payment equal to the forfeit to themselves?

...

### 13.3 Execution and Filing

The Interconnection Customer shall either: (i) execute the appropriate number of originals of the tendered GIA as specified in the directions provided by the CAISO and return them to the CAISO, as directed, for completion of the execution process; or (ii) request in writing that the applicable Participating TO(s) and CAISO file with FERC a GIA in unexecuted form. The GIA shall be considered executed as of the date that all three Parties have signed the GIA. As soon as practicable, but not later than ten (10) Business Days after receiving either the executed originals of the tendered GIA (if it does not conform with a FERC-approved standard form of interconnection agreement) or the request to file an unexecuted GIA, the applicable Participating TO(s) and CAISO shall file the GIA with FERC, as necessary, together with an explanation of any matters as to which the Interconnection Customer and the applicable Participating TO(s) or CAISO disagree and support for the costs that the applicable Participating TO(s) propose to charge to the Interconnection Customer under the GIA. An unexecuted GIA should contain terms and conditions deemed appropriate by the applicable Participating TO(s) and CAISO for the Interconnection Request. If the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted GIA, they may proceed pending FERC action.

Simultaneously with submitting the executed GIA, or within ten (10) Business Days after the Interconnection Customer requests that the CAISO file the GIA unexecuted at FERC, the Interconnection Customer shall provide the following: (1) demonstration of continued Site Control pursuant to Section 8.1.1(2) of this RIS provided to the CAISO; and (2) the GIA Deposit provided to the Participating TO equal to twenty percent (20%) of Interconnection Customer's estimated Network Upgrade costs identified in the draft GIA minus the total amount of Commercial Readiness Deposits that Interconnection Customer has provided to the Participating TO for its Interconnection Request. The Participating TO shall use the GIA Deposit as (or as a portion of) the Interconnection Customer's security required under GIA Article 11.5. The Interconnection Customer may not request to suspend its GIA under GIA Article 5.16 until Interconnection Customer has provided (1) and (2) to the CAISO and Participating TO. If the Interconnection Customer fails to provide (1) and (2) to the CAISO and Participating TO within the thirty (30) days allowed for returning the executed GIA and appendices under RIS Section 13.1.1, or within ten (10) Business Days after the Interconnection Customer requests that the CAISO file the GIA unexecuted at FERC as allowed in this Section 13.3 of this RIS, the Interconnection Request will be deemed withdrawn pursuant to Section 3.8 of this RIS.

#### 13.3.1 Implementation Deposit

Within thirty (30) days of the effective date of the GIA, the Interconnection Customer will provide the CAISO with a \$35,000 implementation deposit. Generating Facilities interconnecting pursuant to a Participating TO tariff must submit a \$6,000 implementation deposit at the commencement of the CAISO new resource implementation process. The CAISO will deposit the implementation deposit in an interest bearing account at a bank or financial institution designated by the CAISO. The implementation deposit will be applied to pay for prudent costs incurred by the CAISO or third parties at the direction of the CAISO to manage the Interconnection Request between GIA execution and the Commercial Operation Date, including without limitation executing GIA amendments, modeling and testing for synchronization, preparing for metering and telemetry, and

incorporating the Generating Units into the CAISO Markets. The CAISO will not use implementation deposit funds to offset or obviate processes that require separate deposits under this RIS, including without limitation Material Modification Assessments, Permissible Technological Advancements, and Limited Operation Studies.

The Interconnection Customer will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s). If the actual costs are less than the deposit provided by the Interconnection Customer, the Interconnection Customer will be refunded the balance, including interest earned. If the actual costs are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer will pay the balance within thirty (30) days of being invoiced. The Participating TO(s) will invoice the CAISO for any work within seventy-five (75) days of the Commercial Operation Date or withdrawal, 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.

#### 13.4 Commencement of Interconnection Activities

If the Interconnection Customer executes the final GIA, the applicable Participating TO(s), CAISO and the Interconnection Customer shall perform their respective obligations in accordance with the terms of the GIA, subject to modification by FERC. Upon submission of an unexecuted GIA, the Interconnection Customer, applicable Participating TO(s) and CAISO may proceed to comply with the unexecuted GIA, pending FERC action.

#### 13.5 Interconnection Customer to Meet PTO Handbook Requirements

The Interconnection Customer's Interconnection Facilities shall be designed, constructed, operated and maintained in accordance with the applicable Participating TO's Interconnection Handbook.

#### 13.6 Shared Network Upgrades

Interconnection Studies and GIAs will identify when Network Upgrades are shared, and their estimated construction timelines. Once identified in the Interconnection Studies, or no later than when the first Interconnection Customer sharing the Assigned Network Upgrade executes its GIA with for the Assigned Network Upgrade, the CAISO and Participating TO will notify the other Interconnection Customers sharing the Assigned Network Upgrade when their provision of security under Article 11.5 of the GIA will be required based on the construction timeline required to meet the earliest In-Service Date of the Interconnection Customers sharing the Assigned Network Upgrade. All Interconnection Customers sharing the Assigned Network Upgrade must submit (a) their authorizations to proceed with design and procurement of the shared Network Upgrade and (b) their provision of security under Article 11.5 of the GIA for the shared Network Upgrade, by the same deadline. Interconnection Customers and Participating TOs may have separate posting and authorization deadlines for each shared Network Upgrade and other non-shared Network Upgrades, but Interconnection Customers sharing Assigned Network Upgrades must have the same deadlines for them. At all times, Interconnection Customers must have sufficient Commercial Readiness Deposit, GIA Deposit, and provision of security under Article 11.5 of the GIA to meet the requirements of this RIS and the GIA.

All Interconnection Customers sharing the Assigned Network Upgrade must execute an engineering and procurement agreement under Section 12 or a GIA prior to submitting their security for the shared Network Upgrade. Where any Interconnection Customer sharing the Assigned Network Upgrade has not executed either agreement, the Participating TO will tender (1) a draft engineering and procurement agreement if the Interconnection Customer is parked, or (2) a draft GIA or GIA amendment, to the Interconnection Customer no later than one-hundred twenty (120) days before the provision of security deadline. The Interconnection Customer must execute the engineering and procurement agreement or GIA or request that the GIA be filed

**Commented [SS22]:** Addition of this provision to the RIS was not discussed at all in the stakeholder process. The RIS adheres closely to the FERC Order 2023 framework, and the CAISO should not be adding this substantial provision without examination of how it fits into the rest of the framework.

This is a significant change that should not be made "on the fly" like this.

**Commented [SS23]:** Here is one example, Article 11.5 states "The Participating TO must use the GIA Deposit required in Section 13.3 of the RIS before requiring Interconnection Customer to submit security in addition to that GIA Deposit." At a minimum, then, the security already provided should be used before this additional posting would be due.

unexecuted prior to the deadline to post. The failure by an Interconnection Customer to timely (a) execute an engineering and procurement agreement or GIA or request an unexecuted filing, (b) submit the authorization to proceed, or (c) submit the provision of security for the shared Assigned Network Upgrade, under this Section, will result in the Interconnection Request being deemed withdrawn and subject to Section 3.8. The Interconnection Customer will provide the CAISO and the Participating TO with written notice that it has posted the required security no later than the applicable final day for posting.

No later than thirty (30) days after each Interconnection Customer sharing the Assigned Network Upgrade complies with this Section, the Participating TO will commence Construction Activities on the shared Assigned Network Upgrade.

Commented [SS24]: We have yet to see any CAISO enforcement of this provision, or penalties for its violation.

## 15.5 Disputes

If an Interconnection Customer disputes withdrawal of its Interconnection Request under Section 3.8, the CAISO will forward any information regarding the disputed withdrawal received under Section 3.8 within one (1) Business Day to the ~~GIDAP~~ ~~e~~Executive ~~d~~Dispute ~~c~~Committee, consisting of the Vice President responsible for administration of this RIS, the CAISO Vice President responsible for customer affairs, and an additional Vice President. The ~~GIDAP~~ ~~e~~Executive ~~d~~Dispute ~~c~~Committee shall have five (5) Business Days to determine whether or not to restore the Interconnection Request. The CAISO may replace Vice Presidents unavailable during the five (5) Business Days with another CAISO Vice President. If the ~~GIDAP~~ ~~e~~Executive ~~d~~Dispute ~~c~~Committee concludes that the Interconnection Request should have been withdrawn, the Interconnection Customer may seek relief in accordance with the CAISO ADR Procedures.

All disputes, other than those arising from Section 3.8, arising out of or in connection with this RIS whereby relief is sought by or from the CAISO shall be settled in accordance with the CAISO ADR Procedures.

Disputes arising out of or in connection with this RIS not subject to the CAISO ADR Procedures shall be resolved as follows:

**Appendix 3**  
**CLUSTER STUDY AGREEMENT**  
**FOR QUEUE CLUSTERS**

...

11.0 In accordance with Section 3.8 of the RIS, the Interconnection Customer may withdraw its Interconnection Request at any time by written notice to the CAISO. Upon receipt of such notice, this Agreement shall terminate, ~~subject to the requirements of Section 3.5.1 and 11.4 of the RIS.~~

...

**Appendix B**  
**INTERCONNECTION FACILITIES STUDY AGREEMENT AND**  
**DATA FORM TO BE PROVIDED BY THE INTERCONNECTION CUSTOMER**  
**PRIOR TO COMMENCEMENT OF THE INTERCONNECTION FACILITIES STUDY**

...

**DATA FORM TO BE PROVIDED BY THE INTERCONNECTION CUSTOMER**  
**PRIOR TO COMMENCEMENT OF THE INTERCONNECTION FACILITIES STUDY**

Generating Facility size (MW): \_\_\_\_\_

Provide two copies of this completed form and other required plans and diagrams in accordance with Section 8.1 of the RIS.

Provide location plan and one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

One set of metering is required for each generation connection to the new bus or existing CAISO Controlled Grid station. Number of generation connections: \_\_\_\_\_

On the one line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)

On the one line indicate the location of auxiliary power. (Minimum load on CT/PT)

Will an alternate source of auxiliary power be available during CT/PT maintenance? \_\_\_\_\_ Yes  
\_\_\_\_\_ No

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes No  
(Please indicate on one line).

What type of control system or PLC will be located at the Interconnection Customer's Generating Facility?

\_\_\_\_\_

\_\_\_\_\_

What protocol does the control system or PLC use?

\_\_\_\_\_

\_\_\_\_\_

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.

Physical dimensions of the proposed interconnection station:

Bus length from generation to interconnection station:

Line length from interconnection station to the Participating TO's transmission line.

Tower number observed in the field. (Painted on tower leg)\*

Number of third party easements required for transmission lines\*:

\* To be completed in coordination with the Participating TO or CAISO.

Is the Generating Facility in the Participating TO's service area?

Yes      No

Local service provider for auxiliary and other power: \_\_\_\_\_

Point of Interconnection: \_\_\_\_\_

Please provide proposed schedule dates:

Environmental survey start: \_\_\_\_\_

Environmental impact report submittal: \_\_\_\_\_

Procurement of project equipment: \_\_\_\_\_

Begin Construction Date: \_\_\_\_\_

In-Service Date: \_\_\_\_\_

Trial Operation Date: \_\_\_\_\_

Commercial Operation Date: \_\_\_\_\_

Level of Deliverability: Choose one of the following:

\_\_\_\_\_ Energy Only

\_\_\_\_\_ Full Capacity

~~TP Deliverability: Choose one of the following:~~

~~\_\_\_\_\_ Option (A), which means that the Generating Facility requires TP Deliverability to be able to continue to commercial operation.~~

~~\_\_\_\_\_ Option (B), which means that the Interconnection Customer will continue to commercial operation without an allocation of TP Deliverability.~~

The CAISO and Participating TO will complete the Interconnection Facilities Study and issue a draft Interconnection Facilities Study Report to the Interconnection Customer within one hundred twenty (120) days after receipt of an executed copy of this Interconnection Facilities Study Agreement.

Please provide any additional modification request pursuant to Section 6.7.2.2 [opf](#) Appendix KK.

#### Appendix 4

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

...

- 4.3 Confidentiality: Confidential Information shall be treated in accordance with Section [154.1](#) of the RIS.

## Appendix EE

### Large Generator Interconnection Agreement

#### for Interconnection Requests Processed under the Generator Interconnection and Deliverability

#### Allocation Procedures (Appendix DD of the CAISO Tariff)

...

**5.16 Suspension.** The Interconnection Customer may request to suspend at any time all work associated with the construction and installation of the Participating TO's Interconnection Facilities, Network Upgrades, and/or Distribution Upgrades required under this LGIA, other than Network Upgrades identified in the Phase II Interconnection Study as common to multiple generating facilities. Interconnection Customers seeking to suspend construction will provide the CAISO and Participating TO a request for assessment pursuant to Section 6.7.2 of the GIDAP, a modification assessment deposit, and an anticipated end date of the suspension. Interconnection Customers may request a suspension for the maximum amount of time in lieu of providing an anticipated end date. The CAISO and Participating TO will approve suspension requests where:

- (a) the Participating TO's electrical system and the CAISO Controlled Grid can be left in a safe and reliable condition in accordance with Good Utility Practice, the Participating TO's safety and reliability criteria, and Applicable Reliability Standards; and
- (b) the CAISO and Participating TO determine the suspension will not result in a Material Modification.

[For any suspension that will extend the Commercial Operation Date beyond seven \(7\) years from the date the Interconnection Request is received by the CAISO, the Interconnection Customer must satisfy the commercial viability criteria in Section 6.7.4 of the GIDAP.](#)

During suspension, the Interconnection Customer may request to extend or shorten their suspension period, consistent with the maximum period provided in this Article. The CAISO and Participating TO will approve such requests where they meet criteria (a) and (b), above. Requests to extend or shorten extensions will require a new modification assessment request and deposit. The Interconnection Customer shall be responsible for all reasonable and necessary costs for suspension for which the Participating TO (i) has incurred pursuant to this LGIA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Participating TO's electric system during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which the Participating TO cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, the Participating TO shall obtain Interconnection Customer's authorization to do so.

Network Upgrades common to multiple generating facilities, and to which the Interconnection Customer's right of suspension shall not extend, consist of Network Upgrades identified for:

- (i) generating facilities which are the subject of all Interconnection Requests made prior to the Interconnection Customer's Interconnection Request;
- (ii) generating facilities which are the subject of Interconnection Requests within the Interconnection Customer's queue cluster; and

- (iii) generating facilities that are the subject of Interconnection Requests that were made after the Interconnection Customer's Interconnection Request but no later than the date on which the Interconnection Customer's Phase II Interconnection Study Report is issued, and have been modeled in the Base Case at the time the Interconnection Customer seeks to exercise its suspension rights under this Article.

The Participating TO shall invoice the Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. In the event Interconnection Customer suspends work required under this LGIA pursuant to this Article 5.16, and has not requested the Participating TO to recommence the work or has not itself recommenced work required under this LGIA in time to ensure that the new projected Commercial Operation Date for the full Generating Facility Capacity of the Large Generating Facility is no more than three (3) years from the Commercial Operation Date identified in Appendix B hereto, this LGIA shall be deemed terminated and the Interconnection Customer's responsibility for costs will be determined in accordance with Article 2.4 of this LGIA. The suspension period shall begin on the date the Interconnection Customer provides in its request, if approved. Ninety (90) days before the anticipated end date of the suspension, the Participating TO and the CAISO will tender an amended draft LGIA with new construction milestones. The Parties agree to negotiate the amended draft LGIA in good faith such that it can be executed by the end of the suspension.

Interconnection Customer subject to Section 8.9.2.2 of Appendix DD may not request suspension.

...

#### ~~11.4.1.4 [Not Used] Failure to Achieve Commercial Operation~~

~~If the Large Generating Facility fails to achieve Commercial Operation, but it or another generating facility is later constructed and makes use of the Network Upgrades, the Participating TO shall at that time reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying and demonstrating to the Participating TO the appropriate entity to which reimbursement must be made in order to implement the intent of this reimbursement obligation.~~

Commented [SS25]: Not included in the stakeholder process at all, or in the Board review.

## Appendix LL

### Large Generator Interconnection Agreement

#### for Interconnection Requests Processed under the Resource Interconnection Standards

#### (Appendix KK to the CAISO Tariff)

...

**Local Deliverability Constraint** shall mean a transmission system operating limit modeled in the [GIDAP](#) study process that would be exceeded if the CAISO were to assign full capacity or partial capacity deliverability status to one or more additional generating facilities interconnecting to the CAISO Controlled Grid in a specific local area, and that is not an Area Deliverability Constraint.

**Local Delivery Network Upgrade** shall mean a transmission upgrade or addition identified by the CAISO in the [GIDAP](#) study process to relieve a Local Deliverability Constraint.

...

**Merchant Network Upgrades** - Network Upgrades constructed and owned by an Interconnection Customer or a third party pursuant to Article 5.1.5 of this LGIA, Section 14.3 of the [GIDAPRIS](#), and Sections 24.4.6.1 and 36.11 of the CAISO Tariff.

...

~~**Option (A) Generating Facilities** shall mean a Generating Facility for which the Interconnection Customer has selected Option (A) as the Deliverability option under Section 7.2 of Appendix DD or KK.~~

~~**Option (B) Generating Facilities** shall mean a Generating Facility for which the Interconnection Customer has selected Option (B) as the Deliverability option under Section 7.2 of Appendix DD or KK.~~

...

**Precursor Network Upgrades (PNU)** shall mean Network Upgrades required for the Interconnection Customer consisting of (1) Network Upgrades assigned to an earlier Interconnection Customer in an earlier Queue Cluster, Independent Study Process, or Fast Track Process, that has executed its GIA pursuant to [Section 14.2.2 of the GIDAP](#); and (2) Network Upgrades in the approved CAISO Transmission Plan.

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under this LGIA, 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.

**RNU** shall mean Reliability Network Upgrades.

**Reliability Network Upgrades (RNU)** shall mean the transmission facilities at or beyond the Point of Interconnection identified in the Interconnection Studies as necessary to interconnect one or more Generating Facility(ies) safely and reliably to the CAISO Controlled Grid, which would not have been necessary but for the interconnection of one or more Generating Facility(ies), including Network Upgrades necessary to remedy short circuit or stability problems, or thermal overloads. Reliability Network Upgrades shall only be deemed necessary for system operating limits, occurring under any system condition, which cannot be adequately mitigated through Congestion Management or Operating Procedures based on the characteristics of the Generating Facilities included in the Interconnection

Studies, limitations on market models, systems, or information, or other factors specifically identified in the Interconnection Studies. Reliability Network Upgrades also include, consistent with WECC practice, the facilities necessary to mitigate any adverse impact the Generating Facility's interconnection may have on a path's WECC rating. Reliability Network Upgrades include Interconnection Reliability Network Upgrades and General Reliability Network Upgrades.

**Resource Interconnection Standards (RIS)** shall mean Appendix KK to the CAISO Tariff.

**Scoping Meeting** shall mean the meeting among representatives of the Interconnection Customer, the applicable Participating TO(s), and the CAISO conducted for the purpose of discussing the proposed Interconnection Request and any alternative interconnection options, exchanging information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, refining information and models provided by Interconnection Customer(s), discussing the Cluster Study materials posted to OASIS pursuant to Section 3.5 of the [GIDAPRIS](#), and analyzing such information.

...

**2.4 Termination Costs.** Immediately upon the other Parties' receipt of a notice of the termination of this LGIA pursuant to Article 2.3 above, the CAISO and the Participating TO will determine the total cost responsibility of the Interconnection Customer. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already paid its share of Network Upgrade costs, as set forth in Appendix G to this LGIA, the Participating TO will liquidate the Interconnection Customer's GIA Deposit associated with its cost responsibility for Network Upgrades, in accordance with Section 3.8 of the [GIDAPRIS](#).

The Interconnection Customer will also be responsible for all costs incurred or irrevocably committed to be incurred in association with the construction of the Participating TO's Interconnection Facilities (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) and other such expenses, including any Distribution Upgrades for which the Participating TO or CAISO has incurred expenses or has irrevocably committed to incur expenses and has not been reimbursed by the Interconnection Customer, as of the date of the other Parties' receipt of the notice of termination, subject to the limitations set forth in this Article 2.4. Nothing in this Article 2.4 shall limit the Parties' rights under Article 17. If, as of the date of the other Parties' receipt of the notice of termination, the Interconnection Customer has not already reimbursed the Participating TO and the CAISO for costs incurred to construct the Participating TO's Interconnection Facilities, the Participating TO will liquidate the Interconnection Customer's GIA Deposit associated with the construction of the Participating TO's Interconnection Facilities, in accordance with Section 3.8 of the [GIDAPRIS](#). If the amount of the GIA Deposit liquidated by the Participating TO under this Article 2.4 is insufficient to compensate the CAISO and the Participating TO for actual costs associated with the construction of the Participating TO's Interconnection Facilities contemplated in this Article, any additional amounts will be the responsibility of the Interconnection Customer, subject to the provisions of Section 3.8 of the [GIDAPRIS](#). Any such additional amounts due from the Interconnection Customer beyond the amounts covered by its GIA Deposit will be due to the Participating TO immediately upon termination of this LGIA in accordance with Section 3.8 of the [GIDAPRIS](#).

If the amount of the GIA Deposit exceeds the Interconnection Customer's cost responsibility under Section 3.8 of the [GIDAPRIS](#), any excess amount will be released to the Interconnection Customer in accordance with Section 3.8 of the [GIDAPRIS](#).

...

**3.2 Agreement Subject to CAISO Tariff.** The Interconnection Customer will comply with all applicable provisions of the CAISO Tariff, including the [GIDAPRIS](#).

...

**4.6 TP Deliverability.** To the extent that an Interconnection Customer is eligible for and has been allocated TP Deliverability pursuant to [Section 8.9 of the GIDAP](#), the Interconnection Customer's retention of such allocated TP Deliverability shall be contingent upon satisfying the obligations set forth in Section 8.9.3 of the [GIDAPRIS](#). In the event that the Interconnection does not retain allocated TP Deliverability with regard to any portion of the Generating Facility, such portion of the Generating Facility shall be deemed to receive Interconnection Service under this LGIA as Energy Only Deliverability Status.

...

**5.1.5 Merchant Option.** In addition to any Option to Build set forth in Article 5.1.3 of this LGIA, an Interconnection Customer [having an Option \(B\) Generating Facility under Section 4.2 of the RIS](#) may elect to have a party other than the applicable Participating TO construct some or all of the LDNU and ADNU for which the Interconnection Customer has the obligation to fund and which are not subject to reimbursement. Such LDNU and ADNU will be constructed and incorporated into the CAISO Controlled Grid pursuant to the provisions for Merchant Transmission Facilities in CAISO Tariff Sections 24.4.6.1 and 36.11.

...

**5.10 Interconnection Customer's Interconnection Facilities.** The Interconnection Customer shall, at its expense, design, procure, construct, own and install the Interconnection Customer's Interconnection Facilities, as set forth in Appendix A.

**5.10.1 Large Generating Facility and Interconnection Customer's Interconnection Facilities Specifications.** In addition to the Interconnection Customer's responsibility to submit technical data with its Interconnection Request [as required by Section 3.5.1 of the GIDAP](#), the Interconnection Customer shall submit all remaining necessary specifications for the Interconnection Customer's Interconnection Facilities and Large Generating Facility, including System Protection Facilities, to the Participating TO and the CAISO at least one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date; and final specifications for review and comment at least ninety (90) Calendar Days prior to the Initial Synchronization Date. The Participating TO and the CAISO shall review such specifications pursuant to this LGIA and the [GIDAP-RIS](#) to ensure that the Interconnection Customer's Interconnection Facilities and Large Generating Facility are compatible with the technical specifications, operational control, safety requirements, and any other applicable requirements of the Participating TO and the CAISO and comment on such specifications within thirty (30) Calendar Days of the Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

**5.10.2 Participating TO's and CAISO's Review.** The Participating TO's and the CAISO's review of the Interconnection Customer's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the Large Generating Facility, or the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall make such changes to the Interconnection Customer's Interconnection Facilities as may reasonably be required by the Participating TO or the CAISO, in accordance with Good Utility Practice, to ensure that the Interconnection Customer's Interconnection Facilities are compatible with the technical specifications, Operational Control, and safety requirements of the Participating TO or the CAISO.

**5.10.3 Interconnection Customer's Interconnection Facilities Construction.** The Interconnection Customer's Interconnection Facilities shall be designed and constructed

in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Participating TO and Interconnection Customer agree on another mutually acceptable deadline, the Interconnection Customer shall deliver to the Participating TO and CAISO "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities and the Electric Generating Unit(s), such as: a one-line diagram, a site plan showing the Large Generating Facility and the Interconnection Customer's Interconnection Facilities, plan and elevation drawings showing the layout of the Interconnection Customer's Interconnection Facilities, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Interconnection Customer's step-up transformers, the facilities connecting the Large Generating Facility to the step-up transformers and the Interconnection Customer's Interconnection Facilities, and the impedances (determined by factory tests) for the associated step-up transformers and the Electric Generating Units. The Interconnection Customer shall provide the Participating TO and the CAISO specifications for the excitation system, automatic voltage regulator, Large Generating Facility control and protection settings, transformer tap settings, and communications, if applicable. Any deviations from the relay settings, machine specifications, and other specifications originally submitted by the Interconnection Customer shall be assessed by the Participating TO and the CAISO pursuant to the appropriate provisions of this LGIA and the [GIDAPRIS](#).

**5.10.4 Interconnection Customer to Meet Requirements of the Participating TO's Interconnection Handbook.** The Interconnection Customer shall comply with the Participating TO's Interconnection Handbook.

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**5.16 Suspension.** The Interconnection Customer may request to suspend at any time all work associated with the construction and installation of the Participating TO's Interconnection Facilities, Network Upgrades, and/or Distribution Upgrades required under this LGIA, other than Network Upgrades identified in the Interconnection Facilities Study as common to multiple generating facilities. Interconnection Customers seeking to suspend construction will provide the CAISO and Participating TO a request for assessment pursuant to Section 6.7.2 of the [GIDAPRIS](#), a modification assessment deposit, and an anticipated end date of the suspension. Interconnection Customers may request a suspension for the maximum amount of time in lieu of providing an anticipated end date. The CAISO and Participating TO will approve suspension requests where:

- (a) the Participating TO's electrical system and the CAISO Controlled Grid can be left in a safe and reliable condition in accordance with Good Utility Practice, the Participating TO's safety and reliability criteria, and Applicable Reliability Standards; and
- (b) the CAISO and Participating TO determine the suspension will not result in a Material Modification.

[For any suspension that will extend the Commercial Operation Date beyond seven \(7\) years from the date the Interconnection Request is received by the CAISO, the Interconnection Customer must satisfy the commercial viability criteria in Section 6.7.4 of the RIS.](#)

During suspension, the Interconnection Customer may request to extend or shorten their suspension period, consistent with the maximum period provided in this Article. The CAISO and Participating TO will approve such requests where they meet criteria (a) and (b), above. Requests to extend or shorten extensions will require a new modification assessment request

and deposit. The Interconnection Customer shall be responsible for all reasonable and necessary costs for suspension for which the Participating TO (i) has incurred pursuant to this LGIA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the Participating TO's electric system during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which the Participating TO cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, the Participating TO shall obtain Interconnection Customer's authorization to do so.

Network Upgrades common to multiple generating facilities, and to which the Interconnection Customer's right of suspension shall not extend, consist of Network Upgrades identified for:

- (i) generating facilities which are the subject of all Interconnection Requests made prior to the Interconnection Customer's Interconnection Request;
- (ii) generating facilities which are the subject of Interconnection Requests within the Interconnection Customer's queue cluster; and
- (iii) generating facilities that are the subject of Interconnection Requests that were made after the Interconnection Customer's Interconnection Request but no later than the date on which the Interconnection Customer's Interconnection Facilities Study Report is issued, and have been modeled in the Base Case at the time the Interconnection Customer seeks to exercise its suspension rights under this Article.

The Participating TO shall invoice the Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. In the event Interconnection Customer suspends work required under this LGIA pursuant to this Article 5.16, and has not requested the Participating TO to recommence the work or has not itself recommenced work required under this LGIA in time to ensure that the new projected Commercial Operation Date for the full Generating Facility Capacity of the Large Generating Facility is no more than three (3) years from the Commercial Operation Date identified in Appendix B hereto, this LGIA shall be deemed terminated and the Interconnection Customer's responsibility for costs will be determined in accordance with Article 2.4 of this LGIA. The suspension period shall begin on the date the Interconnection Customer provides in its request, if approved. Ninety (90) days before the anticipated end date of the suspension, the Participating TO and the CAISO will tender an amended draft LGIA with new construction milestones. The Parties agree to negotiate the amended draft LGIA in good faith such that it can be executed by the end of the suspension.

~~[Interconnection Customer subject to Section 8.9.2.2 of Appendix DD may not request suspension.](#)~~

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**5.20 Annual Reassessment Process.** In accordance with Section 7 of the [GIDAPRIS](#), the CAISO will perform an annual reassessment, as part of a queue cluster interconnection study cycle, in which it will update certain base case data. As set forth in Section 7, the CAISO may determine through this assessment that Delivery Network Upgrades and Off-Peak Network Upgrades already identified and included in executed generator interconnection agreements should be modified in order to reflect the current circumstances of interconnection customers in the queue, including any withdrawals therefrom, and any additions and upgrades approved in the CAISO's most recent TPP cycle. To the extent that this determination modifies the scope or characteristics of, or the cost responsibility for, any Delivery Network Upgrades and Off-Peak Network Upgrades set forth in Appendix A to this LGIA, such modification(s) will be reflected through an amendment to this LGIA.

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**11.3 Network Upgrades and Distribution Upgrades.** The Participating TO shall design, procure, construct, install, and own the Network Upgrades and Distribution Upgrades described in Appendix A, except for Stand Alone Network Upgrades, which will be constructed, and if agreed to by the Parties owned by the Interconnection Customer, and Merchant Network Upgrades. The Interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Network Upgrades shall be funded by the Interconnection Customer, which for Interconnection Customers processed under Section 6 of the [GIDAP-RIS](#) (in Queue Clusters) shall be in an amount determined pursuant to the methodology set forth in Section 6.3 of the [GIDAP-RIS](#). This specific amount is set forth in Appendix G to this LGIA. For costs associated with Area Delivery Network Upgrades, any amounts set forth in Appendix G will be advisory estimates only, and will not operate to establishing any cap or Maximum Cost Exposure on the cost responsibility of the Interconnection Customer for Area Delivery Network Upgrades.

**11.4 Transmission Credits.** No later than thirty (30) Calendar Days prior to the Commercial Operation Date, the Interconnection Customer may make a one-time election by written notice to the CAISO and the Participating TO to (a) receive Congestion Revenue Rights as defined in and as available under the CAISO Tariff at the time of the election in accordance with the CAISO Tariff, in lieu of a repayment of the cost of Network Upgrades in accordance with Article 11.4.1, and/or (b) decline all or part of a refund of the cost of Network Upgrades entitled to the Interconnection Customer in accordance with Article 11.4.1.

**11.4.1 Repayment of Amounts Advanced for Network Upgrades.**

**11.4.1.1 Repayment of Amounts Advanced Regarding Non-Phased Generating Facilities**

An Interconnection Customer with a non-Phased Generating Facility shall be entitled to repayment for the Interconnection Customer's contribution to the cost of Network Upgrades placed in service on or before the Commercial Operation Date of its Generating Facility, commencing upon the Commercial Operation Date of the Generating Facility. Repayment for the Interconnection Customer's contribution to the cost of Network Upgrades placed into service after the Commercial Operation Date of its Generating Facility shall, for each of these Network Upgrades, commence no later than the later of: (i) the first month of the calendar year following the year in which the Network Upgrade is placed into service or (ii) 90 days after the Network Upgrade is placed into service.

Unless an Interconnection Customer has provided written notice to the CAISO that it is declining all or part of such repayment, such amounts shall include any tax gross-up or other tax-related payments associated with Network Upgrades not refunded to the Interconnection Customer pursuant to Article 5.17.8 or otherwise, and shall be paid to the Interconnection Customer by the Participating TO on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the applicable date as provided for in this Article 11.4.1.1; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years of the applicable commencement date. Notwithstanding the foregoing, if this LGIA terminates within five (5) years of the applicable commencement date, the Participating TO's obligation to pay refunds to the Interconnection Customer shall cease as of the date of termination

Where the Interconnection Customer finances the construction of Network Upgrades for more than one Participating TO, the cost allocation, GIA Deposit,

and repayment will be conducted pursuant to Section 14.4.1 of the RIS, and set forth in Appendix G.

An Interconnection Customer subject to this Article 11.4.1.1 shall be entitled to repayment for its contribution to the cost of Network Upgrades as follows:

- (a) For Reliability Network Upgrades, the Interconnection Customer shall be entitled to a repayment of the amount paid by the Interconnection Customer for Reliability Network Upgrades as set forth in Appendix G, up to a maximum amount established in Section 14.3.2.1 of the RIS. Interconnection Customers interconnecting pursuant to Section 4.4 of the RIS are ineligible for cash repayment. For purposes of this determination, generating capacity will be based on the capacity of the Interconnection Customer's Generating Facility at the time it achieves Commercial Operation. To the extent that such repayment does not cover all of the costs of Interconnection Customer's Reliability Network Upgrades, including for Interconnection Customers interconnecting pursuant to Section 4.4 of the RIS, the Interconnection Customer shall receive Merchant Transmission CRRs for that portion of its Reliability Network Upgrades that are not covered by cash repayment.
- (b) For Local Delivery Network Upgrades: if the Interconnection Customer is an Option (B) Interconnection Customer and has been allocated and continues to be eligible to receive TP Deliverability pursuant to the RIS, the Interconnection Customer shall be entitled to repayment of a portion of the total amount paid to the Participating TO for the costs of Local Delivery Network Upgrades for which it is responsible, as set forth in Appendix G. The repayment amount shall be determined by dividing the amount of TP Deliverability received by the amount of deliverability requested by the Interconnection Customer, and multiplying that percentage by the total amount paid to the Participating TO by the Interconnection Customer for Local Delivery Network Upgrades
  - ii. If the Generating Facility is an Option (B) Generating Facility and has not been allocated any TP Deliverability, the Interconnection Customer shall not be entitled to repayment for the costs of Local Delivery Network Upgrades.
  - iii. If the Generating Facility is an Option (A) Generating Facility, the Interconnection Customer shall be entitled to a repayment equal to the total amount paid to the Participating TO for the costs of Local Delivery Network Upgrades for which it is responsible, as set forth in Appendix G.
- (c) For Area Delivery Network Upgrades, the Interconnection Customer shall not be entitled to repayment for the costs of Area Delivery Network Upgrades. An Interconnection Customer interconnecting pursuant to Section 4.2 of the RIS that financed Area Delivery Network Upgrades will be eligible for Merchant Transmission CRRs pursuant to Section 36.11 of the CAISO Tariff.
- (d) If an Interconnection Customer having a Option (B) Generating Facility, and is eligible, to construct and owns Network Upgrades pursuant to the Merchant Option set forth in Article 5.15 of this LGIA, then the Interconnection Customer shall not be entitled to any repayment pursuant to this LGIA.

(e) For Local Off-Peak Network Upgrades, the Interconnection Customer will

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be entitled to a repayment equal to the total amount paid to the Participating TO for the costs of Local Delivery Network Upgrades for which it is responsible, as set forth in Appendix G.

Unless an Interconnection Customer has provided written notice to the CAISO that it is declining all or part of such repayment, such amounts shall include any tax gross-up or other tax-related payments associated with Network Upgrades not refunded to the Interconnection Customer pursuant to Article 5.17.8 or otherwise, and shall be paid to the Interconnection Customer by the Participating TO on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the applicable date as provided for in this Article 11.4.1.1; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years of the applicable commencement date. Notwithstanding the foregoing, if this LGIA terminates within five (5) years of the applicable commencement date, the Participating TO's obligation to pay refunds to the Interconnection Customer shall cease as of the date of termination.

- (f) Where the Interconnection Customer finances the construction of Network Upgrades for more than one Participating TO, the cost allocation, GIA Deposit, and repayment will be conducted pursuant to Section 14.4.1 of the RIS, and set forth in Appendix G.

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#### 11.4.1.4 [Not Used] Failure to Achieve Commercial Operation

If the Large Generating Facility fails to achieve Commercial Operation, but it or another generating facility is later constructed and makes use of the Network Upgrades, the Participating TO shall at that time reimburse Interconnection Customer for the amounts advanced for the Network Upgrades. Before any such reimbursement can occur, the Interconnection Customer, or the entity that ultimately constructs the generating facility, if different, is responsible for identifying and demonstrating to the Participating TO the appropriate entity to which reimbursement must be made in order to implement the intent of this reimbursement obligation.

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## Appendix H

### INTERCONNECTION REQUIREMENTS FOR AN ASYNCHRONOUS GENERATING FACILITY

Appendix H sets forth interconnection requirements specific to all Asynchronous Generating Facilities. Except as provided in Section 25.4.2 of the CAISO tariff, existing individual generating units of an Asynchronous Generating Facility that are, or have been, interconnected to the CAISO Controlled Grid at the same location are exempt from the requirements of this Appendix H for the remaining life of the existing generating unit.

#### A. Technical Requirements Applicable to Asynchronous Generating Facilities

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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

##### Inverter Level:

- (1) Frequency, current, and voltage during frequency ride-through events
- (2) Voltage and current during momentary cessation for transient high voltage events (when used)
- (3) Voltage and current during reactive current injection for transient low or high voltage events
- (4) Inverter alarm and fault codes
- (5) DC current
- (6) DC voltage

The data must be time synchronized, using a GPS clock or similar device, to a one millisecond level of resolution. All data except phase angle measuring unit data must be sampled at least every ten (10) milliseconds. Data recording must be triggered upon detecting a frequency ride-through event, a transient low voltage disturbance that initiated reactive current injection, momentary cessation or reactive current injection for a transient high voltage disturbance, or an inverter trip. Each recording will include as a minimum one hundred fifty (150) milliseconds of data prior to the triggering event, and 1000 milliseconds of data after the event trigger. The Asynchronous Generating Facility must store this data for a minimum of thirty (30) days. The Asynchronous Generating Facility will provide all data within ten (10) calendar days of a request from the CAISO or the Participating TO.

The Asynchronous Generating Facility must install and maintain a phase angle measuring unit or functional equivalent at the entrance to the facility or at the Generating Facility's main substation transformer. The phase angle measuring unit must have a resolution of at least 30-16 samples per second cycle. The Asynchronous Generating Facility will store this data for a minimum of thirty (30) days. The Asynchronous Generating Facility will provide all phase angle measuring unit data within ten (10) calendar days of a request from the CAISO or the Participating TO.

**Appendix MM**  
**Small Generator Interconnection Agreement for Interconnection Requests Processed Under the**  
**Resource Interconnection Standards**  
**(Appendix KK to the CAISO Tariff)**

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**Attachment 7**

**Interconnection Requirements for an Asynchronous Small Generating Facility**

Attachment 7 sets forth requirements and provisions specific to all Asynchronous Generating Facilities. All other requirements of this Agreement continue to apply to all Asynchronous Generating Facility interconnections consistent with Section 25.4.2 of the CAISO tariff. Except as provided in Section 25.4.2 of the CAISO Tariff, existing individual Generating Units of an Asynchronous Generating Facility that are, or have been, interconnected to the CAISO Controlled Grid at the same location are exempt from the requirements of this Attachment 7 for the remaining life of the existing Generating Unit.

**A. Technical Standards Applicable to Asynchronous Generating Facilities**

**i. Low Voltage Ride-Through (LVRT) Capability**

An Asynchronous Generating Facility shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the requirements below.

1. An Asynchronous Generating Facility shall remain online for the voltage disturbance caused by any fault on the transmission grid, or within the Asynchronous Generating Facility between the Point of Interconnection and the high voltage terminals of the Asynchronous Generating Facility's step up transformer, having a duration equal to the lesser of the normal three-phase fault clearing time (4-9 cycles) or one-hundred fifty (150) milliseconds, plus any subsequent post-fault voltage recovery to the final steady-state post-fault voltage unless clearing the fault effectively disconnects the generator from the system. Clearing time shall be based on the maximum normal clearing time associated with any three-phase fault location that reduces the voltage at the Asynchronous Generating Facility's Point of Interconnection to 0.2 per-unit of nominal voltage or less, independent of any fault current contribution from the Asynchronous Generating Facility.
2. An Asynchronous Generating Facility shall remain online for any voltage disturbance caused by a single-phase fault on the transmission grid, or within the Asynchronous Generating Facility between the Point of Interconnection and the high voltage terminals of the Asynchronous Generating Facility's step up transformer, with delayed clearing, plus any subsequent post-fault voltage recovery to the final steady-state post-fault voltage unless clearing the fault effectively disconnects the generator from the system. Clearing time shall be based on the maximum backup clearing time associated with a single point of failure (protection or breaker failure) for any single-phase fault location that reduces any phase-to-ground or phase-to-phase voltage at the Asynchronous Generating Facility's Point of Interconnection to 0.2 per-unit of nominal voltage or less, independent of any fault current contribution from the Asynchronous Generating Facility.

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**vi. Transient Data Recording Equipment for Facilities**

Asynchronous Generating Facilities 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

**Inverter Level:**

- (1) Frequency, current, and voltage during frequency ride-through events
- (2) Voltage and current during momentary cessation for transient high voltage events (when used)
- (3) Voltage and current during reactive current injection for transient low or high voltage events
- (4) Inverter alarm and fault codes
- (5) DC current
- (6) DC voltage

The data must be time synchronized, using a GPS clock or similar device, to a one millisecond level of resolution. All data except phase angle measuring unit data must be sampled at least every 10 milliseconds. Data recording must be triggered upon detecting a frequency ride-through event, a transient low voltage disturbance that initiated reactive current injection, momentary cessation or reactive current injection for a transient high voltage disturbance, or an inverter trip. Each recording will include as a minimum 150 milliseconds of data prior to the triggering event, and 1000 milliseconds of data after the event trigger. The Asynchronous Generating Facility must store this data for a minimum of 30 days. The Asynchronous Generating Facility will provide all data within 10 calendar days of a request from the CAISO or the Participating TO.

The Asynchronous Generating Facility must install and maintain a phase angle measuring unit or functional equivalent at the entrance to the facility or at the Generating Facility's main substation transformer. The phase angle measuring unit must have a resolution of at least sixteen (16) samples per cycle. The Asynchronous Generating Facility will store this data for a minimum of thirty (30) days. The Asynchronous Generating Facility will provide all phase angle measuring unit data within 10 calendar days of a request from the CAISO or the Participating TO.