

May 25, 2021

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

**Re: California Independent System Operator Corporation  
Docket No. ER21-1304-\_\_\_**

**Amendment of Compliance Filing to Reconcile Overlapping  
Commission-Approved Tariff Records**

Dear Secretary Bose:

The California Independent System Operator Corporation (CAISO)<sup>1</sup> submits this amendment (Amendment) to the filing it submitted in this proceeding on March 9, 2021 to reconcile overlapping tariff records in the Commission's eTariff system, in order to reflect the sum of revisions to the same sections of the CAISO tariff that the Commission had already accepted in different proceedings (March 9 Tariff Filing).<sup>2</sup> This Amendment revises the March 9 Tariff Filing to reconcile the individual historical tariff records with all approved tariff language per each effective date. No additional changes are proposed in this amendment filing.

## **I. Background**

In the March 9 Tariff Filing, the CAISO submitted tariff records that consolidated all tariff records as of their latest effective dates, which varied per tariff record. The CAISO proposed to reconcile the tariff records in Appendix DD—the CAISO's generator interconnection procedures—and Appendix EE—the CAISO's pro forma Large Generator Interconnection Agreement. Overlapping tariff records resulted from four proceedings:

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

<sup>2</sup> The CAISO submits this Amendment pursuant to section 205 of the Federal Power Act (FPA), 16 U.S.C. § 824d, and section 35.17(b) of the Commission's regulations, 18 C.F.R. § 35.17(b).

- Docket No. ER19-1950, in which the CAISO submitted tariff revisions to comply with Order No. 845;
- Docket No. ER19-2679, in which the CAISO submitted various tariff revisions resulting from its Interconnection Process Enhancements stakeholder initiative;
- Docket No. ER20-732, in which the CAISO submitted tariff revisions regarding its annual deliverability assessment study; and
- Docket No. ER20-2374, in which the CAISO submitted various tariff clarifications, commonly known as the “bucket filing.”

The Commission has not issued an order on the March 9 Tariff Filing.

## **II. Amendment to the March 9 Tariff Filing**

Four effective dates were included in the initial filing in this docket, October 23, 2019 (ER19-2679), February 20, 2020 (ER19-1950), March 3, 2020 (ER20-732) and September 9, 2020 (ER20-2374). No additional tariff records need to be filed the October 23, 2019 effective date since this set was primarily used as a baseline and took effect before any of the other dockets. Additional tariff records do not need to be filed for most of the February 20, 2020 date because the last filing in ER19-1950-002 incorporated the changes from ER19-2679 and are accurate in FERC’s eTariff, except for one record that was not included in the ER19-1950-002 filing. No additional tariff records need to be filed for September 9, 2020 since the initial filing in this docket reconciled all versions that were referenced as of that same date proposed in the ER20-2374 docket.

In this amendment filing, the CAISO is submitting updated tariff records for the following effective dates:

- February 20, 2020:
  - Appendix EE, Article 1
- March 3, 2020:
  - Appendix DD, Section 3
  - Appendix DD, Section 6
  - Appendix DD, Section 7
  - Appendix DD, Section 8
  - Appendix DD, Section 14

Attachment A to the initial filing consists of a detailed table describing each tariff record the CAISO proposes to reconcile, the dockets affecting that record, the original record effective date, the record versions, the effective amendment version, the effective amendment date, and the Commission order approving each amendment.<sup>3</sup>

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<sup>3</sup> See attachment A to the March 9 Tariff Filing.

Attachment A to this filing contains the clean tariff sections showing the full text of the reconciled tariff records once all the conforming changes made by this filing are incorporated by the appropriate effective date. Attachment B to this filing contains the marked redline tariff sections showing the revisions made to the effective tariff records currently on file in order to fully reflect all Commission-approved language therein.

The CAISO requests that the Commission accept the reconciled tariff records contained in this filing effective as each historical effective date previously approved by the Commission for each tariff record.

### **III. Communications**

The CAISO requests that all correspondence, pleadings, and other communications regarding this filing be served upon:

Roger E. Collanton  
General Counsel  
Sidney L. Mannheim  
Assistant General Counsel  
William H. Weaver  
Senior Counsel  
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### **IV. Service**

The CAISO has served copies of this Amendment on all parties to this proceeding, the California Public Utilities Commission, the California Energy Commission, and all parties with scheduling coordinator agreements under the CAISO tariff. In addition, the CAISO is posting this Amendment on the CAISO website.

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**V. Conclusion**

For the reasons set forth in this Amendment, the CAISO requests that the Commission accept the reconciled tariff records contained in this in addition to the reconciled tariff filings submitted in the March 9 Tariff Filing.

Respectfully submitted,

/s/ William H. Weaver

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General Counsel

Sidney L. Mannheim

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**Attachment A – Clean Tariff**  
**Reconciliation Filing – Historical Records Update**  
**California Independent System Operator Corporation**  
**May 25, 2021**

## Appendix DD

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### **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 GIDAP, including (2) an executed Generator Interconnection Study Process Agreement consistent with Appendix 3 to this GIDAP. All forms may be submitted electronically as provided on the CAISO website. Interconnection customers will submit Appendix B to the Generator Interconnection Study Process Agreement pursuant to Section 7 of this GIDAP. The CAISO will forward a copy of the Interconnection Request to the applicable Participating TO within five (5) Business Days of receipt.

The Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. The Interconnection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Interconnection Requests.

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 GIDAP. 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.

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#### **3.4 Surplus Interconnection Service**

The CAISO will allow an Interconnection Customer to utilize or transfer Surplus Interconnection Service. The Interconnection Customer will notify the CAISO that it has transferred its Surplus Interconnection Service to another entity. The total Interconnection Service Capacity of the original Interconnection Customer and the assignee of the Surplus Interconnection Capacity may not exceed the original Interconnection Customer's constructed Generating Facility Capacity, regardless of the Interconnection Service Capacity it requested in its Interconnection Request or memorialized in its GIA. The Generating Facility of the assignee must interconnect at the same Point of Interconnection as the original Interconnection Customer.

If the assignee's Generating Facility would not require a new Interconnection Request pursuant to Section 25.1.1 of the CAISO Tariff, the original Interconnection Customer may transfer Surplus Interconnection Service, and the CAISO will study the transfer, as a modification under Section 6.7.2. Otherwise, the assignee of the Surplus Interconnection Service will submit an Interconnection Request under the Independent Study Process pursuant to Section 3.5 of this GIDAP. The CAISO and Participating TO will study and treat the use of the Surplus Interconnection Service and any capacity beyond the Interconnection Service Capacity as a behind-the-meter capacity expansion consistent with Section 4.2 of this GIDAP. The Independent Study Process for Surplus Interconnection Service will identify any additional Interconnection Facilities and/or Network Upgrades necessary. Reimbursement for additional Reliability Network Upgrades will be capped pursuant to Section 14.3.2 of this GIDAP. The CAISO will use the constructed Generating Facility Capacity of the original Interconnection Customer for the MW value of the RNU reimbursement cap, and will subtract the costs of the original Interconnection Customer's Reliability Network Upgrades to determine any remaining eligible reimbursement under the cap for the assignee's Reliability Network Upgrades, if any.

Notwithstanding any other provision in this GIDAP, if the original Interconnection Customer has Full or Partial Capacity Deliverability Status, it will notify the CAISO whether its transfer of Surplus Interconnection Service includes any Deliverability currently associated with the constructed Generating Facility capacity. The transfer amount of Deliverability may not exceed the transfer amount of Surplus Interconnection Service. The transfer amount of Surplus Interconnection Service will not operate as a basis to increase the Net Qualifying Capacity of the Generating Facility (including the expansion) that pre-existed the transfer. In all cases, the original Generating Facility and the behind-the-meter capacity expansion will be metered separately from one another and be assigned separate Resource IDs. If the original Interconnection Customer's Generating Facility permanently retires, or ceases operation for three (3) years without having begun active construction of a repowered Generating Facility, both the original Interconnection Customer and the assignee of the Surplus Interconnection Service will be converted to Energy Only. At any point, the assignee may seek its own TP Deliverability allocation pursuant to Section 8.9 of this GIDAP. If the assignee receives its own TP Deliverability allocation, it will exist completely independent of the original Interconnection Customer and will not be converted to Energy Only due to the retirement or inoperability of the original Interconnection Customer, notwithstanding any other provision herein.

The CAISO, Participating TO, and original Interconnection Customer will work in good faith to amend the original Interconnection Customer's GIA to reflect the transfer of Surplus Interconnection Service before the execution of the assignee's GIA

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### **3.6 Internet Posting**

The CAISO will maintain on the CAISO Website a list of all Interconnection Requests. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the most recent projected Commercial Operation Date; (v) the status of the Interconnection Request, including whether it is active or withdrawn; (vi) the availability of any studies related to the Interconnection Request; (vii) the date of the Interconnection Request; (viii) the type of Generating Facility to be constructed (e.g., combined cycle, combustion turbine, wind turbine, and fuel type); (ix) requested Deliverability statuses, and (x) project name.

Except in the case of an Affiliate, the list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes a GIA or requests that the applicable Participating TO(s) and the CAISO file an unexecuted GIA with FERC. The CAISO shall post on the CAISO Website an advance notice whenever a Scoping Meeting will be held with an Affiliate of a Participating TO.

The CAISO shall post to the CAISO Website any deviations from the study timelines set forth herein. The CAISO shall further post to the secure CAISO Website portions of the Phase I Interconnection Study that do not contain customer-specific information following the final Results Meeting and portions of the Phase II Interconnection Study that do not contain customer-specific information no later than publication of the final Transmission Plan under CAISO Tariff Section 24.2.5.2 (such posted information to be placed on the secure CAISO Website to protect any Critical Energy Infrastructure Information contained therein). The CAISO shall post to the secure CAISO Website any documents or other materials posted pursuant to this or a Business Practice Manual that contain Critical Energy Infrastructure Information.

#### **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 Phase I Interconnection Studies**

- (A) The number of Interconnection Requests to the CAISO Controlled Grid that had Phase I Interconnection Studies completed;
- (B) The number of Interconnection Requests to the CAISO Controlled Grid that had Phase I Interconnection Studies completed beyond the one hundred seventy (170) days planned for the Phase I Interconnection Study pursuant to Section 6.6 of this GIDAP;

- (C) The number of active, valid Interconnection Requests with ongoing incomplete Phase I Interconnection Studies that have exceeded the one hundred seventy (170) days planned for the Phase I Interconnection Study pursuant to Section 6.6 of this GIDAP;
- (D) The mean time (in days) of Phase I Interconnection Studies completed from the date when the CAISO began the annual Phase I Interconnection Study pursuant to Section 6.6 of this GIDAP to the date the CAISO provided the completed Phase I Interconnection Study to the Interconnection Customer;
- (E) The percentage of Phase I Interconnection Studies exceeding the one hundred seventy (170) days planned for the Phase I Interconnection Study pursuant to Section 6.6 of this GIDAP, calculated as the sum of (B) plus (C), divided by the sum of (A) plus (C).

### **3.6.1.2 Phase II Interconnection Studies**

- (A) The number of Interconnection Requests to the CAISO Controlled Grid that had Phase II Interconnection Studies completed;
- (B) The number of Interconnection Requests to the CAISO Controlled Grid that had Phase II Interconnection Studies completed beyond the two hundred and five (205) days planned for the Phase II Interconnection Study pursuant to Section 8.5 of this GIDAP;
- (C) The number of active, valid Interconnection Requests with ongoing incomplete Phase II Interconnection Studies that have exceeded the two hundred and five (205) days planned for the Phase II Interconnection Study pursuant to Section 8.5 of this GIDAP;
- (D) The mean time (in days) of Phase II Interconnection Studies completed from the date when the CAISO began the annual Phase II Interconnection Study pursuant to Section 8.5 of this GIDAP to the date the CAISO provided the completed Phase II Interconnection Study to the Interconnection Customer;
- (E) The percentage of Phase II Interconnection Studies exceeding the two hundred and five (205) days planned for the Phase II Interconnection Study pursuant to Section 8.5 of this GIDAP, calculated as the sum of (B) plus (C), divided by the sum of (A) plus (C).

### **3.6.1.3 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 Phase II Interconnection Study;
- (D) The number of Interconnection Requests withdrawn after executing a GIA or

before the Interconnection Customer requests filing an unexecuted, new GIA;

- (E) 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.

### **3.6.2 Retention**

The CAISO will keep the quarterly interconnection studies statistics on the CAISO Website for three (3) calendar years, commencing in the first quarter of 2020.

### **3.6.3 FERC Reporting**

In the event that any of the percentages calculated in any subparagraph E of Section 3.6.1.1 and 3.6.1.2 exceeds twenty five (25) percent for two (2) consecutive quarters, the CAISO will, for the next four quarters and until those percentages fall below twenty five (25) percent for two (2) consecutive quarters:

- (i) submit a report to FERC describing the reason for each study or group of clustered studies pursuant to an Interconnection Request that exceeded its deadline for completion (excluding any allowance for Reasonable Efforts). The CAISO will describe the reasons for each study delay and any steps taken to remedy these specific issues and, if applicable, prevent such delays in the future. The CAISO will file the report with FERC within forty five (45) days of the end of the calendar quarter.
- (ii) aggregate and publish on the CAISO Website the total number of employee-hours and third party consultant hours expended towards its Interconnection Studies. The CAISO will publish these figures within thirty (30) days of the end of the calendar quarter.

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## **Section 6 Initial Activities and Phase I of the Interconnection Study Process for Queue Clusters**

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### **6.2. Scope and Purpose of Phase I Interconnection Study**

The Phase I Interconnection Study shall:

- (i) evaluate the impact of all Interconnection Requests received during the Cluster Application Window for a particular year on the CAISO Controlled Grid;
- (ii) preliminarily identify all LDNUs, LOPNUs, and RNUs needed to address the impacts on the CAISO Controlled Grid of the Interconnection Requests, as Assigned Network Upgrades or Conditionally Assigned Network Upgrades;
- (iii) preliminarily identify for each Interconnection Request required Interconnection Facilities;
- (iv) assess the Point of Interconnection selected by each Interconnection Customer and potential alternatives to evaluate potential efficiencies in overall transmission upgrades costs;
- (v) establish the Current Cost Responsibility, Maximum Cost Responsibility, and Maximum Cost Exposure for each Interconnection Request, until the issuance of the Phase II Interconnection Study report;
- (vi) provide a good faith estimate of the cost of Interconnection Facilities for each Interconnection Request;
- (vii) provide a cost estimate of ADNUs and AOPNUs for each Generating Facility in a Queue Cluster Group Study;
- (viii) identify any Precursor Network Upgrades;
- (ix) identify RNUs as GRNUs or IRNUs; and
- (x) identify controls required for each Interconnection Request where the Interconnection Customer requested Interconnection Service Capacity lower than the Generating Facility Capacity.

The Phase I Interconnection Study will consist of a short circuit analysis, a stability analysis to the extent the CAISO and applicable Participating TO(s) reasonably expect transient or voltage stability concerns, a power flow analysis, including off-peak analysis, an On-Peak Deliverability Assessment, and an Off-Peak Deliverability Assessment for the purpose of identifying LDNUs and LOPNUs and estimating the cost of ADNUs and AOPNUs, as applicable.

The Phase I Interconnection Study will state for each Group Study or Interconnection Request studied individually (i) the assumptions upon which it is based, (ii) the results of the analyses, and (iii) the requirements or potential impediments to providing the requested Interconnection Service to all Interconnection Requests in a Group Study or to the Interconnection Request studied individually.

The Phase I Interconnection Study will provide, without regard to the requested Commercial Operation Dates of the Interconnection Requests, a list of RNUs, LOPNUs, and LDNUs to the CAISO Controlled Grid that are preliminarily identified as Assigned Network Upgrades or Conditionally Assigned Network Upgrades required as a result of the Interconnection Requests in a Group Study or as a result of any Interconnection Request studied individually and Participating TO's Interconnection Facilities associated

with each Interconnection Request, the estimated costs of ADNUs and AOPNUs, if applicable, and an estimate of any other financial impacts (i.e., on Local Furnishing Bonds). For purposes of determining necessary Interconnection Facilities and Network Upgrades, the Phase I Interconnection Study will consider the level of Interconnection Service Capacity requested by the Interconnection Customer, unless otherwise required to study the full Generating Facility Capacity due to safety or reliability concerns.

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## **6.5 Assigned and Contingent Facilities**

The CAISO and Participating TO will provide, upon request of the Interconnection Customer, its estimated Interconnection Facility and/or Network Upgrade costs and estimated in-service completion time of each Assigned Network Upgrade, Conditionally Assigned Network Upgrade, or Precursor Network Upgrade when this information is readily available and not commercially sensitive.

Interconnection Studies will identify when Interconnection Facilities are shared with, assigned to, or otherwise dependent upon other Interconnection Customers, such that delays could affect the Interconnection Customer's costs or timing.

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## **6.7 Phase I Interconnection Study Results Meeting**

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### **6.7.2 Modifications.**

**6.7.2.1** At any time during the course of the Interconnection Studies, the Interconnection Customer, the applicable Participating TO(s), or the CAISO may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to the applicable Participating TO(s), the CAISO, and Interconnection Customer, such acceptance not to be unreasonably

withheld, the CAISO shall modify the Point of Interconnection and/or configuration in accordance with such changes without altering the Interconnection Request's eligibility for participating in Interconnection Studies.

**6.7.2.2** At the Phase I Interconnection Study Results Meeting, the Interconnection Customer should be prepared to discuss any desired modifications to the Interconnection Request. After the issuance of the final Phase I Interconnection Study, but no later than ten (10) Business Days following the Phase I Interconnection Study Results Meeting, the Interconnection Customer shall submit to the CAISO, in writing, modifications to any information provided in the Interconnection Request. The CAISO will forward the Interconnection Customer's modification to the applicable Participating TO(s) within one (1) Business Day of receipt.

Modifications permitted under this Section shall include specifically:

- (a) a decrease in the electrical output (MW) of the proposed project; through either (1) a decrease in Generating Facility Capacity or (2) a decrease in Interconnection Service Capacity (consistent with the process described in Section 3.1) accomplished by CAISO-approved limiting equipment;
- (b) modifying the technical parameters associated with the Generating Facility technology or the Generating Facility step-up transformer impedance characteristics;
- (c) modifying the interconnection configuration;
- (d) modifying the In-Service Date, Initial Synchronization Date, Trial Operation Date, and/or Commercial Operation Date that meets the criteria set forth in Section 3.5.1.4 and is acceptable to the applicable Participating TO(s) and the CAISO, such acceptance not to be unreasonably withheld;
- (e) change in Point of Interconnection as set forth in Section 6.7.2.1;
- (f) change in Deliverability Status to Energy Only Deliverability Status, Partial Capacity Deliverability Status, or a lower fraction of Partial Capacity Deliverability Status;
- (g) change from Off-Peak Deliverability Status to Off-Peak Energy Only;
- (h) *De minimis* reductions in capacity pursuant to Section 7.5.13; and
- (i) Permissible Technological Advancements consistent with Section 6.7.2.4.

For any modification other than these, the Interconnection Customer must first request that the CAISO evaluate whether such modification is a

Material Modification. In response to the Interconnection Customer's request, the CAISO, in coordination with the affected Participating TO(s) and, if applicable, any Affected System Operator, shall evaluate the proposed modifications prior to making them and the CAISO shall inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. The CAISO may engage the services of the applicable Participating TO to assess the modification. Costs incurred by the Participating TO and CAISO (if any) shall be borne by the party making the request under Section 6.7.2, and such costs shall be included in any CAISO invoice for modification assessment activities. Any change to the Point of Interconnection, except for that specified by the CAISO in an Interconnection Study or otherwise allowed under this Section, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

The Interconnection Customer shall remain eligible for the Phase II Interconnection Study if the modifications are in accordance with this Section.

If any Interconnection Customer requested modification after the Phase II Interconnection Study report would change the scope, schedule, or cost of the Interconnection Facilities or Network Upgrades, the CAISO will issue a report to the Interconnection Customer. Potential adjustments to the Maximum Cost Responsibility or Maximum Cost Exposure for Network Upgrades for the Interconnection Customer will be determined in accordance with Section 7.4.3.

**6.7.2.3** The Interconnection Customer shall provide the CAISO a \$10,000 deposit for the modification assessment at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Interconnection Customer in writing, within forty-five (45) calendar days from the date the CAISO receives all of the following: the Interconnection Customer's written notice to modify the project, technical data required to assess the request and payment of the \$10,000 deposit. If the modification request results in a change to the Interconnection Facilities or Network Upgrades the modification assessment could take up to ninety (90) total calendar days. If the modification assessment cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

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

The Interconnection Customer will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the modification assessment. If the actual costs of the modification

assessment are less than the deposit provided by the Interconnection Customer, the Interconnection Customer will be refunded the balance. If the actual costs of the modification assessment are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer shall pay the balance within 30 days of being invoiced. The CAISO shall coordinate the modification request with the Participating TO(s). The Participating TO(s) shall invoice the CAISO for any assessment 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.

**6.7.2.4** Interconnection Customers may request Permissible Technological Advancements. Permissible Technological Advancements may include, for example, removing equipment; aligning the Commercial Operation Date with an executed power purchase agreement; adding less than 5 MW of energy storage once without increasing the net output at the Point of Interconnection; and other changes that have little or no potential to affect other Interconnection Customers or Affected Systems, require a new Interconnection Request, or otherwise require a re-study or evaluation. The CAISO will update its Business Practice Manual to list any additional Permissible Technological Advancement approved but not specifically enumerated here when identified. The Interconnection Customer's written request to evaluate technological advancements must include the technical data required to assess the request. For all Permissible Technological Advancement requests not expressly enumerated in this Section or the Business Practice Manual, the CAISO and Participating TO will determine whether such change would constitute a Material Modification. Such evaluation will include an analysis of the short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability, and impact on other Interconnection Customers. The CAISO will determine whether a Permissible Technological Advancement request is a Material Modification within thirty (30) calendar days of receipt of the request. Interconnection Customers requesting Permissible Technological Advancements must pay a non-refundable fee of \$2,500.

**6.7.2.5** Notwithstanding any other provisions in this GIDAP or the Interconnection Customer's GIA, the Interconnection Customer may not modify its fuel type, including through the addition or replacement of Generating Units, by more than the greater of five percent (5%) of its capacity or 10 MW (but by no more than twenty-five percent (25%) of its capacity), where:

- (a) the Interconnection Customer has exceeded seven (7) years from the date the CAISO received its Interconnection Request without achieving its Commercial Operation Date;

- (b) the Interconnection Customer's current Commercial Operation Date exceeds seven (7) years from the date the CAISO received its Interconnection Request; or
- (c) the change in fuel type will require the Interconnection Customer's Commercial Operation Date to exceed seven (7) years from the date the CAISO received its Interconnection Request.

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 fuel-type modifications. Interconnection Customers may request such modifications pursuant to this GIDAP.

**6.7.2.6** In addition to the options provided in this GIDAP, an Interconnection Customer may convert to Energy Only, Partial Capacity Deliverability Status, or a lower fraction of Partial Capacity Deliverability Status after the completion of its Phase II Interconnection Study. This conversion will become effective through the reassessment process described in Section 7.4. Except (i) as provided in Section 8.9.3.2 (ii) due to not receiving the requested TP Deliverability allocation, or (iii) due to declining a TP Deliverability allocation, Interconnection Customers that become Energy Only after their Phase II Interconnection Study may not reduce their cost responsibility or Interconnection Financial Security for any assigned Delivery Network Upgrades as a result of converting to Energy Only unless the CAISO and Participating TO(s) determine that the Interconnection Customer's assigned Delivery Network Upgrade(s) is no longer needed for current Interconnection Customers.

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## **Section 7      Activities in Preparation for Phase II**

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### **7.5      Generator Downsizing Process**

#### **7.5.1    Objectives and Applicability**

In accordance with the requirements set forth in this Section 7.5, the CAISO shall conduct, on an annual basis, a process for evaluating requests by Interconnection Customers to reduce Interconnection Service Capacity. In each annual cycle of this Generator Downsizing Process, the CAISO will process valid Generator Downsizing Requests submitted during the applicable Generator

Downsizing Request Window as part of the annual reassessment process set forth in Section 7.4.

All reductions to Interconnection Service Capacity by Interconnection Customers shall utilize this annual Generator Downsizing Process unless explicitly exempted. Specifically, beginning on the date of the opening of the first Generator Downsizing Request Window, all proposed reductions of Interconnection Service Capacity by Interconnection Customers shall, regardless of the dates of the Interconnection Customer's Interconnection Request(s), be subject to the requirements and procedures of the Generator Downsizing Process set forth in Section 7.5, except for MW capacity reductions made pursuant to the following: (1) the provisions of the CAISO's interconnection procedures that permit Interconnection Customers to reduce the size of their Generating Facilities between the Phase I and Phase II Interconnection Studies, as set forth in Section 6.7.2; (2) specific non-conforming provisions of an Interconnection Customer's Generator Interconnection Agreement that provide the Interconnection Customer with an explicit right to reduce the capacity of its Generating Facility through a partial termination of its Generator Interconnection Agreement; (3) the *de minimis* threshold set forth in Section 7.5.13.1; (4) the parking options set forth in Sections 8.9.4, 8.9.5, and 8.9.6; and (5) modifications made pursuant to Section 6.7.2 to reduce Generating Facility Capacity without decreasing Interconnection Service Capacity where the Generating Facility Capacity still exceeds the Interconnection Service Capacity.

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

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## **Section 8 Phase II Interconnection Study and TP Deliverability Allocation Processes**

The provisions of this Section 8 shall apply to all Interconnection Requests under this GIDAP except those processed under the Independent Study Process selecting Energy Only Deliverability Status, the Fast Track Process, or the 10 kW inverter process.

### **8.1 Scope of Phase II Interconnection Study**

#### **8.1.1 Purpose of the Phase II Interconnection Study**

The CAISO, in coordination with the applicable Participating TO(s), will conduct a Phase II Interconnection Study that will incorporate eligible Interconnection Requests from the previous Phase I Interconnection Study. The Phase II Interconnection Study shall:

- (i) update, as necessary, analyses performed in the Phase I Interconnection Studies to account for the withdrawal of Interconnection Requests from the current Queue Cluster;

- (ii) identify final GRNUs and IRNUs needed in order to achieve Commercial Operation status for the Generating Facilities and provide final cost estimates;
- (iii) identify final LDNUs needed to interconnect those Generating Facilities selecting Full Capacity or Partial Capacity Deliverability Status and provide final cost estimates;
- (iv) identify final ADNUs for Interconnection Customers selecting Option (B), as provided below and provide revised cost estimates;
- (v) identify, for each Interconnection Request, the Participating TO's Interconnection Facilities for the final Point of Interconnection and provide a +/-20% cost estimate;
- (vi) coordinate in-service timing requirements based on operational studies in order to facilitate achievement of the Commercial Operation Dates of the Generating Facilities;
- (vii) update the Interconnection Customer's Current Cost Responsibility, Maximum Cost Responsibility, and Maximum Cost Exposure, as applicable;
- (viii) provide updated Precursor Network Upgrades needed to achieve the Commercial Operation status and Deliverability Status for the Generating Facilities;
- (ix) identify LOPNUs needed for Generating Facilities selecting Off-Peak Deliverability Status, and provide final cost estimates; and
- (x) identify any potential control equipment for each Interconnection Request where the Interconnection Customer requested Interconnection Service Capacity lower than the Generating Facility Capacity.

The Phase II Interconnection Study report shall set forth the applicable cost estimates for Network Upgrades and Participating TOs Interconnection Facilities that shall be the basis for Interconnection Financial Security Postings under Section 11.3. Where the Maximum Cost Responsibility is based upon the Phase I Interconnection Study (because it is lower under Section 10.1), the Phase II Interconnection Study report shall recite this fact.

To the extent the CAISO determines that previously identified Conditionally Assigned Network Upgrades become Precursor Network Upgrades pursuant to Section 14.2.2, or are otherwise removed, the CAISO will reduce the Interconnection Customer's Maximum Cost Exposure, as applicable. To the extent the CAISO determines that a Conditionally Assigned Network Upgrade becomes an Assigned Network Upgrade, the CAISO will adjust the Interconnection Customer's Current Cost Responsibility and Maximum Cost Responsibility.

\* \* \* \* \*

#### **8.4 Cost Responsibility for Delivery Network Upgrades**

The cost responsibility for Local Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of the Phase II Interconnection Study shall be assigned to all Interconnection Requests selecting Full Capacity or Partial Capacity Deliverability Status, regardless of whether the Interconnection Customer has selected Option (A) or (B), based on the flow impact of each such Generating Facility on each Local Delivery Network Upgrade as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

The cost responsibility for Area Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of Phase II Interconnection Study shall be assigned to Interconnection Customers who have selected Option (B) Full Capacity or Partial Capacity Deliverability Status based on the flow impact of each such Generating Facility on each Area Delivery Network Upgrade as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

The Current Cost Responsibility provided in the Phase II Interconnection Study shall establish the basis for the second Interconnection Financial Security Posting for Interconnection Customers selecting Option (B).

The Current Cost Responsibility of Local Off-Peak Network Upgrades identified in the Off-Peak Deliverability Assessment will be assigned or conditionally assigned to Interconnection Requests selecting Off-Peak Deliverability Status based on the flow impact of each such Generating Facility on the Off-Peak Network Upgrades as determined by the Generation distribution factor methodology set forth in the Off-Peak Deliverability Assessment methodology.

\* \* \* \* \*

### **Section 14 PTOs Interconnection Facilities and Network Upgrades**

\* \* \* \* \*

#### **14.2.4 Limited Operation Study**

**14.2.4.1** Pursuant to Article 5.9 of the Large Generator Interconnection Agreement set forth in Appendices V, BB, CC, and EE, Generating Facilities may request a limited operation study. The Participating TO and/or the CAISO, as applicable, will, upon the request and at the expense of the Interconnection Customer, perform operating studies on a

timely basis to determine the extent to which the Generating Unit and the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Participating TO's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice. The Participating TO and the CAISO will permit the Interconnection Customer to operate the Generating Unit and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies. To the extent study assumptions change, the CAISO and Participating TO will update study results as needed.

\* \* \* \* \*

## **Appendix EE**

### **Article 1. Definitions**

\* \* \* \* \*

**Area Delivery Network Upgrade** shall mean a transmission upgrade or addition identified by the CAISO to relieve an Area Deliverability Constraint.

**Assigned Network Upgrade (ANU)** shall mean Reliability Network Upgrades and Local Delivery Network Upgrades currently assigned to the Interconnection Customer. Assigned Network Upgrades exclude Conditionally Assigned Network Upgrades unless they become Assigned Network Upgrades.

**Asynchronous Generating Facility** shall mean an induction, doubly-fed, or electronic power generating unit(s) that produces 60 Hz (nominal) alternating current.

\* \* \* \* \*

**Commercial Operation Date** of an Electric Generating Unit or project phase shall mean the date on which the Electric Generating Unit or project phase at the Generating Facility commences Commercial Operation as agreed to by the applicable Participating TO, the CAISO, and the Interconnection Customer pursuant to Appendix E to this LGIA, and in accordance with the implementation plan agreed to by the Participating TO and the CAISO for multiple individual Electric Generating Units or project phases at a Generating Facility where an Interconnection

Customer intends to establish separate Commercial Operation Dates for those Electric Generating Units or project phases.

**Conditionally Assigned Network Upgrade (CANU)** shall mean Reliability Network Upgrades and Local Delivery Network Upgrades currently assigned to an earlier Interconnection Customer, but which may be assigned to the Interconnection Customer.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Article 22.1.2.

**Current Cost Responsibility (CCR)** shall mean the Interconnection Customer's current allocated costs for Assigned Network Upgrades, not to exceed the Maximum Cost Responsibility. This cost is used to calculate the Interconnection Customer's Interconnection Financial Security requirement.

**Deliverability** shall mean (1) The annual Net Qualifying Capacity of a Generating Facility, as verified through a Deliverability Assessment and measured in MW, which specifies the amount of resource adequacy capacity the Generating Facility is eligible to provide. (2) The annual Maximum Import Capability of an Intertie which specifies the amount of resource adequacy capacity measured in MW, that load-serving entities collectively can procure from imports at that Intertie to meet their resource adequacy requirements.

\* \* \* \* \*

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**General Reliability Network Upgrade (GRNU)** shall mean Reliability Network Upgrades that are not Interconnection Reliability Network Upgrades.

**Generating Facility** shall mean the Interconnection Customer's Electric Generating Unit(s) used for the production and/or storage for later injection of electricity identified in the Interconnection Customer's Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

\* \* \* \* \*

**Interconnection Financial Security (IFS)** shall mean any of the financial instruments listed in Section 11.1 of the GIDAP that are posted by an Interconnection Customer to finance the construction of facilities or Network Upgrades.

**Interconnection Handbook** shall mean a handbook, developed by the Participating TO and posted on the Participating TO's web site or otherwise made available by the Participating TO, describing technical and operational requirements for wholesale generators and loads connected to the Participating TO's portion of the CAISO Controlled Grid, as such handbook may be modified or superseded from time to time. Participating TO's standards contained in the Interconnection Handbook shall be deemed consistent with Good Utility Practice and Applicable Reliability Standards. In the event of a conflict between the terms of this LGIA and the terms of the Participating TO's Interconnection Handbook, the terms in this LGIA shall apply.

**Interconnection Reliability Network Upgrades (IRNU)** shall mean Reliability Network Upgrades at the Point of Interconnection to accomplish the physical interconnection of the Generating Facility to the CAISO Controlled Grid. IRNUs are treated as Reliability Network Upgrades unless otherwise noted.

\* \* \* \* \*

**Material Modification** shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.

**Maximum Cost Exposure (MCE)** shall mean, pursuant to Appendix DD, the sum of (1) the Interconnection Customer's Maximum Cost Responsibility and (2) the Conditionally Assigned Network Upgrades from its Phase I or Phase II Interconnection Study.

**Maximum Cost Responsibility (MCR)** shall mean, pursuant to Appendix DD, the lower sum of the Interconnection Customer's (1) full cost of assigned Interconnection Reliability Network Upgrades and (2) allocated costs for all other Assigned Network Upgrades, from its Phase I or Phase II Interconnection Studies, not to exceed the Maximum Cost Exposure.

**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 GIDAP, and Sections 24.4.6.1 and 36.11 of the CAISO Tariff.

\* \* \* \* \*

**Point of Interconnection** shall mean the point, as set forth in Appendix A to this LGIA, where the Interconnection Facilities connect to the Participating TO's Transmission System.

**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, Operating Procedures, or Special Protection Systems 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.

\* \* \* \* \*

**Attachment B – Marked Tariff**  
**Reconciliation Filing – Historical Records Update**  
**California Independent System Operator Corporation**  
**May 25, 2021**

## Appendix DD

\* \* \* \* \*

### **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 GIDAP, including (2) an executed Generator Interconnection Study Process Agreement consistent with Appendix 3 to this GIDAP. All forms may be submitted electronically as provided on the CAISO website. Interconnection customers will submit Appendix B to the Generator Interconnection Study Process Agreement pursuant to Section 7 of this GIDAP. The CAISO will forward a copy of the Interconnection Request to the applicable Participating TO within five (5) Business Days of receipt.

The Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. The Interconnection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Interconnection Requests.

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 GIDAP.

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.

~~An Interconnection Customer with a proposed Small Generating Facility shall be evaluated using the maximum rated capacity that the Small Generating Facility is capable of injecting into the CAISO's electric system. However, if the maximum capacity that the Small Generating Facility is capable of injecting into the CAISO's electric system is limited (e.g., through use of a control system, power relay(s), or other similar device settings or adjustments), then the Interconnection Customer must obtain the CAISO's agreement, with such agreement not to be unreasonably withheld, that the manner in which the Interconnection Customer proposes to implement such a limit will not~~

~~adversely affect the safety and reliability of the CAISO's system. If the CAISO does not so agree, then the Interconnection Request must be withdrawn or revised to specify the maximum capacity that the Small Generating Facility is capable of injecting into the CAISO's electric system without such limitations. Furthermore, nothing in this section shall prevent the CAISO from considering an output higher than the limited output, if appropriate, when evaluating system protection impacts.~~

\* \* \* \* \*

### **3.4 Surplus Interconnection Service [Not Used]**

The CAISO will allow an Interconnection Customer to utilize or transfer Surplus Interconnection Service. The Interconnection Customer will notify the CAISO that it has transferred its Surplus Interconnection Service to another entity. The total Interconnection Service Capacity of the original Interconnection Customer and the assignee of the Surplus Interconnection Capacity may not exceed the original Interconnection Customer's constructed Generating Facility Capacity, regardless of the Interconnection Service Capacity it requested in its Interconnection Request or memorialized in its GIA. The Generating Facility of the assignee must interconnect at the same Point of Interconnection as the original Interconnection Customer.

If the assignee's Generating Facility would not require a new Interconnection Request pursuant to Section 25.1.1 of the CAISO Tariff, the original Interconnection Customer may transfer Surplus Interconnection Service, and the CAISO will study the transfer, as a modification under Section 6.7.2. Otherwise, the assignee of the Surplus Interconnection Service will submit an Interconnection Request under the Independent Study Process pursuant to Section 3.5 of this GIDAP. The CAISO and Participating TO will study and treat the use of the Surplus Interconnection Service and any capacity beyond the Interconnection Service Capacity as a behind-the-meter capacity expansion consistent with Section 4.2 of this GIDAP. The Independent Study Process for Surplus Interconnection Service will identify any additional Interconnection Facilities and/or Network Upgrades necessary. Reimbursement for additional Reliability Network Upgrades will be capped pursuant to Section 14.3.2 of this GIDAP. The CAISO will use the constructed Generating Facility Capacity of the original Interconnection Customer for the MW value of the RNU reimbursement cap, and will subtract the costs of the original Interconnection Customer's Reliability Network Upgrades to determine any remaining eligible reimbursement under the cap for the assignee's Reliability Network Upgrades, if any.

Notwithstanding any other provision in this GIDAP, if the original Interconnection Customer has Full or Partial Capacity Deliverability Status, it will notify the CAISO whether its transfer of Surplus Interconnection Service includes any Deliverability currently associated with the constructed Generating Facility capacity. The transfer amount of Deliverability may not exceed the transfer amount of Surplus Interconnection Service. The transfer amount of Surplus Interconnection Service will not operate as a basis to increase the Net Qualifying Capacity of the Generating Facility (including the expansion) that pre-existed the transfer. In all cases, the original Generating Facility

and the behind-the-meter capacity expansion will be metered separately from one another and be assigned separate Resource IDs. If the original Interconnection Customer's Generating Facility permanently retires, or ceases operation for three (3) years without having begun active construction of a repowered Generating Facility, both the original Interconnection Customer and the assignee of the Surplus Interconnection Service will be converted to Energy Only. At any point, the assignee may seek its own TP Deliverability allocation pursuant to Section 8.9 of this GIDAP. If the assignee receives its own TP Deliverability allocation, it will exist completely independent of the original Interconnection Customer and will not be converted to Energy Only due to the retirement or inoperability of the original Interconnection Customer, notwithstanding any other provision herein.

The CAISO, Participating TO, and original Interconnection Customer will work in good faith to amend the original Interconnection Customer's GIA to reflect the transfer of Surplus Interconnection Service before the execution of the assignee's GIA

\* \* \* \* \*

### **3.6 Internet Posting**

The CAISO will maintain on the CAISO Website a list of all Interconnection Requests. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the most recent projected Commercial Operation Date; (v) the status of the Interconnection Request, including whether it is active or withdrawn; (vi) the availability of any studies related to the Interconnection Request; (vii) the date of the Interconnection Request; (viii) the type of Generating Facility to be constructed (e.g., combined cycle, combustion turbine, wind turbine, and fuel type); (ix) requested Deliverability statuses, and (x) project name.

Except in the case of an Affiliate, the list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes a GIA or requests that the applicable Participating TO(s) and the CAISO file an unexecuted GIA with FERC. The CAISO shall post on the CAISO Website an advance notice whenever a Scoping Meeting will be held with an Affiliate of a Participating TO.

The CAISO shall post to the CAISO Website any deviations from the study timelines set forth herein. The CAISO shall further post to the secure CAISO Website portions of the Phase I Interconnection Study that do not contain customer-specific information following the final Results Meeting and portions of the Phase II Interconnection Study that do not contain customer-specific information no later than publication of the final Transmission Plan under CAISO Tariff Section 24.2.5.2 (such posted information to be placed on the secure CAISO Website to protect any Critical Energy Infrastructure Information contained therein). The CAISO shall post to the secure CAISO Website any documents or other materials posted pursuant to this or a Business Practice Manual that contain Critical Energy Infrastructure Information.

### **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 Phase I Interconnection Studies**

- (A) The number of Interconnection Requests to the CAISO Controlled Grid that had Phase I Interconnection Studies completed;
- (B) The number of Interconnection Requests to the CAISO Controlled Grid that had Phase I Interconnection Studies completed beyond the one hundred seventy (170) days planned for the Phase I Interconnection Study pursuant to Section 6.6 of this GIDAP;
- (C) The number of active, valid Interconnection Requests with ongoing incomplete Phase I Interconnection Studies that have exceeded the one hundred seventy (170) days planned for the Phase I Interconnection Study pursuant to Section 6.6 of this GIDAP;
- (D) The mean time (in days) of Phase I Interconnection Studies completed from the date when the CAISO began the annual Phase I Interconnection Study pursuant to Section 6.6 of this GIDAP to the date the CAISO provided the completed Phase I Interconnection Study to the Interconnection Customer;
- (E) The percentage of Phase I Interconnection Studies exceeding the one hundred seventy (170) days planned for the Phase I Interconnection Study pursuant to Section 6.6 of this GIDAP, calculated as the sum of (B) plus (C), divided by the sum of (A) plus (C).

#### **3.6.1.2 Phase II Interconnection Studies**

- (A) The number of Interconnection Requests to the CAISO Controlled Grid that had Phase II Interconnection Studies completed;
- (B) The number of Interconnection Requests to the CAISO Controlled Grid that had Phase II Interconnection Studies completed beyond the two hundred and five (205) days planned for the Phase II Interconnection Study pursuant to Section 8.5 of this GIDAP;
- (C) The number of active, valid Interconnection Requests with ongoing incomplete Phase II Interconnection Studies that have exceeded the two hundred and five (205) days planned for the Phase II Interconnection Study pursuant to Section 8.5 of this GIDAP;
- (D) The mean time (in days) of Phase II Interconnection Studies completed from the date when the CAISO began the annual Phase II Interconnection Study pursuant to Section 8.5 of this GIDAP to the date the CAISO provided the completed Phase II Interconnection Study to the Interconnection Customer;

(E) The percentage of Phase II Interconnection Studies exceeding the two hundred and five (205) days planned for the Phase II Interconnection Study pursuant to Section 8.5 of this GIDAP, calculated as the sum of (B) plus (C), divided by the sum of (A) plus (C).

### **3.6.1.3 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 Phase II Interconnection Study;

(D) The number of Interconnection Requests withdrawn after executing a GIA or before the Interconnection Customer requests filing an unexecuted, new GIA;

(E) 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.

### **3.6.2 Retention**

The CAISO will keep the quarterly interconnection studies statistics on the CAISO Website for three (3) calendar years, commencing in the first quarter of 2020.

### **3.6.3 FERC Reporting**

In the event that any of the percentages calculated in any subparagraph E of Section 3.6.1.1 and 3.6.1.2 exceeds twenty five (25) percent for two (2) consecutive quarters, the CAISO will, for the next four quarters and until those percentages fall below twenty five (25) percent for two (2) consecutive quarters:

(i) submit a report to FERC describing the reason for each study or group of clustered studies pursuant to an Interconnection Request that exceeded its deadline for completion (excluding any allowance for Reasonable Efforts). The CAISO will describe the reasons for each study delay and any steps taken to remedy these specific issues and, if applicable, prevent such delays in the future. The CAISO will file the report with FERC within forty five (45) days of the end of the calendar quarter.

(ii) aggregate and publish on the CAISO Website the total number of employee-hours and third party consultant hours expended towards its Interconnection Studies. The CAISO will publish these figures within thirty (30) days of the end of the calendar quarter.

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## Section 6 Initial Activities and Phase I of the Interconnection Study Process for Queue Clusters

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### 6.2. Scope and Purpose of Phase I Interconnection Study

The Phase I Interconnection Study shall:

- (i) evaluate the impact of all Interconnection Requests received during the Cluster Application Window for a particular year on the CAISO Controlled Grid;
- (ii) preliminarily identify all LDNUs, LOPNUs, and RNUs needed to address the impacts on the CAISO Controlled Grid of the Interconnection Requests, as Assigned Network Upgrades or Conditionally Assigned Network Upgrades;
- (iii) preliminarily identify for each Interconnection Request required Interconnection Facilities;
- (iv) assess the Point of Interconnection selected by each Interconnection Customer and potential alternatives to evaluate potential efficiencies in overall transmission upgrades costs;
- (v) establish the Current Cost Responsibility, Maximum Cost Responsibility, and Maximum Cost Exposure for each Interconnection Request, until the issuance of the Phase II Interconnection Study report;
- (vi) provide a good faith estimate of the cost of Interconnection Facilities for each Interconnection Request;
- (vii) provide a cost estimate of ADNUs and AOPNUs for each Generating Facility in a Queue Cluster Group Study;
- (viii) identify any Precursor Network Upgrades; ~~and~~
- (ix) identify RNUs as GRNUs or IRNUs; ~~and~~
- (x) identify controls required for each Interconnection Request where the Interconnection Customer requested Interconnection Service Capacity lower than the Generating Facility Capacity.

The Phase I Interconnection Study will consist of a short circuit analysis, a stability analysis to the extent the CAISO and applicable Participating TO(s) reasonably expect

transient or voltage stability concerns, a power flow analysis, including off-peak analysis, an On-Peak Deliverability Assessment, and an Off-Peak Deliverability Assessment for the purpose of identifying LDNUs and LOPNUs and estimating the cost of ADNUs and AOPNUs, as applicable.

The Phase I Interconnection Study will state for each Group Study or Interconnection Request studied individually (i) the assumptions upon which it is based, (ii) the results of the analyses, and (iii) the requirements or potential impediments to providing the requested Interconnection Service to all Interconnection Requests in a Group Study or to the Interconnection Request studied individually.

The Phase I Interconnection Study will provide, without regard to the requested Commercial Operation Dates of the Interconnection Requests, a list of RNUs, LOPNUs, and LDNUs to the CAISO Controlled Grid that are preliminarily identified as Assigned Network Upgrades or Conditionally Assigned Network Upgrades required as a result of the Interconnection Requests in a Group Study or as a result of any Interconnection Request studied individually and Participating TO's Interconnection Facilities associated with each Interconnection Request, the estimated costs of ADNUs and AOPNUs, if applicable, and an estimate of any other financial impacts (i.e., on Local Furnishing Bonds). For purposes of determining necessary Interconnection Facilities and Network Upgrades, the Phase I Interconnection Study will consider the level of Interconnection Service Capacity requested by the Interconnection Customer, unless otherwise required to study the full Generating Facility Capacity due to safety or reliability concerns.

\* \* \* \* \*

## **6.5 Assigned and Contingent Facilities**

The CAISO and Participating TO will provide, upon request of the Interconnection Customer, its estimated Interconnection Facility and/or Network Upgrade costs and estimated in-service completion time of each Assigned Network Upgrade, Conditionally Assigned Network Upgrade, or Precursor Network Upgrade when this information is readily available and not commercially sensitive.

Interconnection Studies will identify when Interconnection Facilities are shared with, assigned to, or otherwise dependent upon other Interconnection Customers, such that delays could affect the Interconnection Customer's costs or timing.

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## 6.7 Phase I Interconnection Study Results Meeting

\* \* \* \* \*

### 6.7.2 Modifications.

**6.7.2.1** At any time during the course of the Interconnection Studies, the Interconnection Customer, the applicable Participating TO(s), or the CAISO may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to the applicable Participating TO(s), the CAISO, and Interconnection Customer, such acceptance not to be unreasonably withheld, the CAISO shall modify the Point of Interconnection and/or configuration in accordance with such changes without altering the Interconnection Request's eligibility for participating in Interconnection Studies.

**6.7.2.2** At the Phase I Interconnection Study Results Meeting, the Interconnection Customer should be prepared to discuss any desired modifications to the Interconnection Request. After the issuance of the final Phase I Interconnection Study, but no later than ten (10) Business Days following the Phase I Interconnection Study Results Meeting, the Interconnection Customer shall submit to the CAISO, in writing, modifications to any information provided in the Interconnection Request. The CAISO will forward the Interconnection Customer's modification to the applicable Participating TO(s) within one (1) Business Day of receipt.

Modifications permitted under this Section shall include specifically:

- (a) \_\_\_ a decrease in the electrical output (MW) of the proposed project; through either (1) a decrease in Generating Facility Capacity or (2) a decrease in Interconnection Service Capacity (consistent with the process described in Section 3.1) accomplished by CAISO-approved limiting equipment;
- (b) \_\_\_ modifying the technical parameters associated with the Generating Facility technology or the Generating Facility step-up transformer impedance characteristics;
- (c) \_\_\_ modifying the interconnection configuration;
- (d) \_\_\_ modifying the In-Service Date, Initial Synchronization Date, Trial Operation Date, and/or Commercial Operation Date that meets the criteria set forth in Section 3.5.1.4 and is acceptable to the applicable Participating TO(s) and the CAISO, such acceptance

not to be unreasonably withheld;

- (e) \_\_\_ change in Point of Interconnection as set forth in Section 6.7.2.1;
- (f) \_\_\_ change in Deliverability Status to Energy Only Deliverability Status, Partial Capacity Deliverability Status, or a lower fraction of Partial Capacity Deliverability Status; ~~and~~
- (g) \_\_\_ change from Off-Peak Deliverability Status to Off-Peak Energy Only;
- (h) *De minimis* reductions in capacity pursuant to Section 7.5.13; and
- (i) Permissible Technological Advancements consistent with Section 6.7.2.4.

For any modification other than these, the Interconnection Customer must first request that the CAISO evaluate whether such modification is a Material Modification. In response to the Interconnection Customer's request, the CAISO, in coordination with the affected Participating TO(s) and, if applicable, any Affected System Operator, shall evaluate the proposed modifications prior to making them and the CAISO shall inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. The CAISO may engage the services of the applicable Participating TO to assess the modification. Costs incurred by the Participating TO and CAISO (if any) shall be borne by the party making the request under Section 6.7.2, and such costs shall be included in any CAISO invoice for modification assessment activities. Any change to the Point of Interconnection, except for that specified by the CAISO in an Interconnection Study or otherwise allowed under this Section, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

The Interconnection Customer shall remain eligible for the Phase II Interconnection Study if the modifications are in accordance with this Section.

If any Interconnection Customer requested modification after the Phase II Interconnection Study report would change the scope, schedule, or cost of the Interconnection Facilities or Network Upgrades, the CAISO will issue a report to the Interconnection Customer. Potential adjustments to the Maximum Cost Responsibility or Maximum Cost Exposure for Network Upgrades for the Interconnection Customer will be determined in accordance with Section 7.4.3.

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

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

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

The Interconnection Customer will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the modification assessment. If the actual costs of the modification assessment are less than the deposit provided by the Interconnection Customer, the Interconnection Customer will be refunded the balance. If the actual costs of the modification assessment are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer shall pay the balance within 30 days of being invoiced. The CAISO shall coordinate the modification request with the Participating TO(s). The Participating TO(s) shall invoice the CAISO for any assessment 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.

**6.7.2.4** Interconnection Customers may request Permissible Technological Advancements. Permissible Technological Advancements may include, for example, removing equipment; aligning the Commercial Operation Date with an executed power purchase agreement; adding less than 5 MW of energy storage once without increasing the net output at the Point of Interconnection; and other changes that have little or no potential to affect other Interconnection Customers or Affected Systems, require a new Interconnection Request, or otherwise require a re-study or evaluation. The CAISO will update its Business Practice Manual to list any additional Permissible Technological Advancement approved but not specifically enumerated here when identified. The Interconnection Customer's written request to evaluate technological advancements must include the technical data required to assess the request. For all Permissible Technological Advancement requests not expressly enumerated in this Section or the Business Practice Manual, the CAISO and Participating TO will determine whether such change would constitute a Material Modification. Such evaluation will include an

analysis of the short circuit capability limits, steady-state thermal and voltage limits, or dynamic system stability, and impact on other Interconnection Customers. The CAISO will determine whether a Permissible Technological Advancement request is a Material Modification within thirty (30) calendar days of receipt of the request. Interconnection Customers requesting Permissible Technological Advancements must pay a non-refundable fee of \$2,500.

**6.7.2.5** Notwithstanding any other provisions in this GIDAP or the Interconnection Customer's GIA, the Interconnection Customer may not modify its fuel type, including through the addition or replacement of Generating Units, by more than the greater of five percent (5%) of its capacity or 10 MW (but by no more than twenty-five percent (25%) of its capacity), where:

- (a) the Interconnection Customer has exceeded seven (7) years from the date the CAISO received its Interconnection Request without achieving its Commercial Operation Date;
- (b) the Interconnection Customer's current Commercial Operation Date exceeds seven (7) years from the date the CAISO received its Interconnection Request; or
- (c) the change in fuel type will require the Interconnection Customer's Commercial Operation Date to exceed seven (7) years from the date the CAISO received its Interconnection Request.

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 fuel-type modifications. Interconnection Customers may request such modifications pursuant to this GIDAP.

**6.7.2.65** In addition to the options provided in this GIDAP, an Interconnection Customer may convert to Energy Only, Partial Capacity Deliverability Status, or a lower fraction of Partial Capacity Deliverability Status after the completion of its Phase II Interconnection Study. This conversion will become effective through the reassessment process described in Section 7.4. Except (i) as provided in Section 8.9.3.2 (ii) due to not receiving the requested TP Deliverability allocation, or (iii) due to declining a TP Deliverability allocation, Interconnection Customers that become Energy Only after their Phase II Interconnection Study may not reduce their cost responsibility or Interconnection Financial Security for any assigned Delivery Network Upgrades as a result of converting to Energy Only unless the CAISO and Participating TO(s) determine that the Interconnection Customer's assigned Delivery Network Upgrade(s) is no longer needed for current Interconnection Customers.

\* \* \* \* \*

## Section 7      Activities in Preparation for Phase II

\* \* \* \* \*

### 7.5      Generator Downsizing Process

#### 7.5.1    Objectives and Applicability

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

All reductions to ~~the megawatt generating capacity of Generating Facilities~~ Interconnection Service Capacity by Interconnection Customers shall utilize this annual Generator Downsizing Process unless explicitly exempted. Specifically, beginning on the date of the opening of the first Generator Downsizing Request Window, all proposed reductions of ~~Interconnection Service Capacity megawatt generating capacity~~ by Interconnection Customers shall, regardless of the dates of the Interconnection Customer's Interconnection Request(s), be subject to the requirements and procedures of the Generator Downsizing Process set forth in Section 7.5, except for MW capacity reductions made pursuant to the following: (1) the provisions of the CAISO's interconnection procedures that permit Interconnection Customers to reduce the size of their Generating Facilities between the Phase I and Phase II Interconnection Studies, as set forth in Section 6.7.2; (2) specific non-conforming provisions of an Interconnection Customer's Generator Interconnection Agreement that provide the Interconnection Customer with an explicit right to reduce the capacity of its Generating Facility through a partial termination of its Generator Interconnection Agreement; (3) the *de minimis* threshold set forth in Section 7.5.13.1; ~~and~~ (4) the parking options set forth in Sections 8.9.4, 8.9.5, and 8.9.6; and (5) modifications made pursuant to Section 6.7.2 to reduce Generating Facility Capacity without decreasing Interconnection Service Capacity where the Generating Facility Capacity still exceeds the Interconnection Service Capacity.

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

\* \* \* \* \*

## Section 8 Phase II Interconnection Study and TP Deliverability Allocation Processes

The provisions of this Section 8 shall apply to all Interconnection Requests under this GIDAP except those processed under the Independent Study Process selecting Energy Only Deliverability Status, the Fast Track Process, or the 10 kW inverter process.

### 8.1 Scope of Phase II Interconnection Study

#### 8.1.1 Purpose of the Phase II Interconnection Study

The CAISO, in coordination with the applicable Participating TO(s), will conduct a Phase II Interconnection Study that will incorporate eligible Interconnection Requests from the previous Phase I Interconnection Study. The Phase II Interconnection Study shall:

- (i) update, as necessary, analyses performed in the Phase I Interconnection Studies to account for the withdrawal of Interconnection Requests from the current Queue Cluster;
- (ii) identify final GRNUs and IRNUs needed in order to achieve Commercial Operation status for the Generating Facilities and provide final cost estimates;
- (iii) identify final LDNUs needed to interconnect those Generating Facilities selecting Full Capacity or Partial Capacity Deliverability Status and provide final cost estimates;
- (iv) identify final ADNUs for Interconnection Customers selecting Option (B), as provided below and provide revised cost estimates;
- (v) identify, for each Interconnection Request, the Participating TO's Interconnection Facilities for the final Point of Interconnection and provide a +/-20% cost estimate;
- (vi) coordinate in-service timing requirements based on operational studies in order to facilitate achievement of the Commercial Operation Dates of the Generating Facilities;
- (vii) update the Interconnection Customer's Current Cost Responsibility, Maximum Cost Responsibility, and Maximum Cost Exposure, as applicable; ~~and~~
- (viii) provide updated Precursor Network Upgrades needed to achieve the Commercial Operation status and Deliverability Status for the Generating Facilities; ~~and~~
- (ix) ~~and~~ identify LOPNUs needed for Generating Facilities selecting Off-Peak Deliverability Status, and provide final cost estimates; ~~and~~
- (x) identify any potential control equipment for each Interconnection Request where the Interconnection Customer requested Interconnection Service

Capacity lower than the Generating Facility Capacity.

The Phase II Interconnection Study report shall set forth the applicable cost estimates for Network Upgrades and Participating TOs Interconnection Facilities that shall be the basis for Interconnection Financial Security Postings under Section 11.3. Where the Maximum Cost Responsibility is based upon the Phase I Interconnection Study (because it is lower under Section 10.1), the Phase II Interconnection Study report shall recite this fact.

To the extent the CAISO determines that previously identified Conditionally Assigned Network Upgrades become Precursor Network Upgrades pursuant to Section 14.2.2, or are otherwise removed, the CAISO will reduce the Interconnection Customer's Maximum Cost Exposure, as applicable. To the extent the CAISO determines that a Conditionally Assigned Network Upgrade becomes an Assigned Network Upgrade, the CAISO will adjust the Interconnection Customer's Current Cost Responsibility and Maximum Cost Responsibility.

\* \* \* \* \*

**8.4 Cost Responsibility for Delivery Network Upgrades**

The cost responsibility for Local Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of the Phase II Interconnection Study shall be assigned to all Interconnection Requests selecting Full Capacity or Partial Capacity Deliverability Status, regardless of whether the Interconnection Customer has selected Option (A) or (B), based on the flow impact of each such Generating Facility on each Local Delivery Network Upgrade as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

The cost responsibility for Area Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of Phase II Interconnection Study shall be assigned to Interconnection Customers who have selected Option (B) Full Capacity or Partial Capacity Deliverability Status based on the flow impact of each such Generating Facility on each Area Delivery Network Upgrade as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

The Current Cost Responsibility provided in the Phase II Interconnection Study shall establish the basis for the second Interconnection Financial Security Posting for Interconnection Customers selecting Option (B).

~~8.4.1 Cost Responsibility for Local Off-Peak Network Upgrades~~

The ~~estimated costs~~Current Cost Responsibility of Local Off-Peak Network Upgrades identified in the Off-Peak Deliverability Assessment will be assigned or conditionally assigned to Interconnection Requests selecting Off-Peak Deliverability Status based on the flow impact of each such Generating Facility

on the Off-Peak Network Upgrades as determined by the Generation distribution factor methodology set forth in the Off-Peak Deliverability Assessment methodology.

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## Section 14 PTOs Interconnection Facilities and Network Upgrades

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### 14.2.4 Limited Operation Study

14.2.4.1 Pursuant to Article 5.9 of the Large Generator Interconnection Agreement set forth in Appendices V, BB, CC, and EE, Generating Facilities may request a limited operation study ~~if any of the Participating TO's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Generating Unit.~~ The Participating TO and/or the CAISO, as applicable, will, upon the request and at the expense of the Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Generating Unit and the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Participating TO's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice. The Participating TO and the CAISO will permit the Interconnection Customer to operate the Generating Unit and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies. To the extent study assumptions change, the CAISO and Participating TO will update study results as needed.

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## Appendix EE

### Article 1. Definitions

\* \* \* \* \*

**Area Delivery Network Upgrade** shall mean a transmission upgrade or addition identified by the CAISO to relieve an Area Deliverability Constraint.

**Assigned Network Upgrade (ANU)** shall mean Reliability Network Upgrades and Local Delivery Network Upgrades currently assigned to the Interconnection Customer. Assigned Network Upgrades exclude Conditionally Assigned Network Upgrades unless they become Assigned Network Upgrades.

**Asynchronous Generating Facility** shall mean an induction, doubly-fed, or electronic power generating unit(s) that produces 60 Hz (nominal) alternating current.

\* \* \* \* \*

**Commercial Operation Date** of an Electric Generating Unit or project phase shall mean the date on which the Electric Generating Unit or project phase at the Generating Facility commences Commercial Operation as agreed to by the applicable Participating TO, the CAISO, and the Interconnection Customer pursuant to Appendix E to this LGIA, and in accordance with the implementation plan agreed to by the Participating TO and the CAISO for multiple individual Electric Generating Units or project phases at a Generating Facility where an Interconnection Customer intends to establish separate Commercial Operation Dates for those Electric Generating Units or project phases.

**Conditionally Assigned Network Upgrade (CANU)** shall mean Reliability Network Upgrades and Local Delivery Network Upgrades currently assigned to an earlier Interconnection Customer, but which may be assigned to the Interconnection Customer.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to Article 22.1.2.

**Current Cost Responsibility (CCR)** shall mean the Interconnection Customer's current allocated costs for Assigned Network Upgrades, not to exceed the Maximum Cost Responsibility. This cost is used to calculate the Interconnection Customer's Interconnection Financial Security requirement.

**Deliverability** shall mean (1) The annual Net Qualifying Capacity of a Generating Facility, as verified through a Deliverability Assessment and measured in MW, which specifies the amount of resource adequacy capacity the Generating Facility is eligible to provide. (2) The annual Maximum Import Capability of an Intertie which specifies the amount of resource adequacy capacity measured in MW, that load-serving entities collectively can procure from imports at that Intertie to meet their resource adequacy requirements.

\* \* \* \* \*

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**General Reliability Network Upgrade (GRNU)** shall mean Reliability Network Upgrades that are not Interconnection Reliability Network Upgrades.

**Generating Facility** shall mean the Interconnection Customer's Electric Generating Unit(s) used for the production and/or storage for later injection of electricity identified in the Interconnection Customer's Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

\* \* \* \* \*

**Interconnection Financial Security (IFS)** shall mean any of the financial instruments listed in Section 11.1 of the GIDAP that are posted by an Interconnection Customer to finance the construction of facilities or Network Upgrades.

**Interconnection Handbook** shall mean a handbook, developed by the Participating TO and posted on the Participating TO's web site or otherwise made available by the Participating TO, describing technical and operational requirements for wholesale generators and loads connected to the Participating TO's portion of the CAISO Controlled Grid, as such handbook may be modified or superseded from time to time. Participating TO's standards contained in the Interconnection Handbook shall be deemed consistent with Good Utility Practice and Applicable Reliability Standards. In the event of a conflict between the terms of this LGIA and the terms of the Participating TO's Interconnection Handbook, the terms in this LGIA shall apply.

**Interconnection Reliability Network Upgrades (IRNU)** shall mean Reliability Network Upgrades at the Point of Interconnection to accomplish the physical interconnection of the Generating Facility to the CAISO Controlled Grid. IRNUs are treated as Reliability Network Upgrades unless otherwise noted.

\* \* \* \* \*

**Material Modification** shall mean those modifications that have a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.

**Maximum Cost Exposure (MCE)** shall mean, pursuant to Appendix DD, the sum of (1) the Interconnection Customer's Maximum Cost Responsibility and (2) the Conditionally Assigned Network Upgrades from its Phase I or Phase II Interconnection Study.

**Maximum Cost Responsibility (MCR)** shall mean, pursuant to Appendix DD, the lower sum of the Interconnection Customer's (1) full cost of assigned Interconnection Reliability Network Upgrades and (2) allocated costs for all other Assigned Network Upgrades, from its Phase I or Phase II Interconnection Studies, not to exceed the Maximum Cost Exposure.

**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 GIDAP, and Sections 24.4.6.1 and 36.11 of the CAISO Tariff.

\* \* \* \* \*

**Point of Interconnection** shall mean the point, as set forth in Appendix A to this LGIA, where the Interconnection Facilities connect to the Participating TO's Transmission System.

**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 ~~such system operating limits~~ cannot be adequately mitigated through Congestion Management, Operating Procedures, or Special Protection Systems 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.

\* \* \* \* \*