

**COMMENTS OF EDF-RENEWBLES ON  
DRAFT CAISO COMPLIANCE TARIFF LANGUAGE FOR FERC ORDER 845**

**Summary of major substantive points**

- **Use of transferred Surplus Interconnection Service (SIS):** Should not require another Interconnection Request (Independent Study or otherwise), because:
  - **This would not be a capacity expansion or addition**, i.e., the presence of that capacity was already studied in the original project Interconnection Studies; and
  - **Use of the same service by the original IC would not require a new IR or study.** Possible exception where the fuel technology of the SIS capacity would be different than the original technology, but only to the extent that an additional study would have been required for use of the SIS with a different technology by the original SC.
- **Retention of Deliverability with retirement of constructed original Generating Facility Capacity:** Not clear why this would not be allowed, even if the original facility is not repowering.
- **Study clarification:** The discussion of “different studies” that would assume the Generating Facility Capacity and the Interconnection Service Capacity is confusing. The CAISO should clarify that (like the current process), the different capacity assumptions might be used in GIDAP Interconnection Studies, and that the changes would not add some completely new set of studies.

**Remaining comments:** The remainder of EDF-R’s comments below (in **green highlight**, to distinguish them from the CAISO’s mark-ups) are intended to help clarify the new provisions.

**Appendix A**

**- Generating Facility Capacity**

Maximum output of requested or installed Generating Facility equipment.

**- Interconnection Service Capacity**

The maximum output at the Point of Interconnection in an Interconnection Request.

**- Permissible Technological Advancement**

Changes to Generating Facilities that do not require a Material Modification assessment because they have little or no potential to affect other Interconnection Customers or Affected Systems, require a new Interconnection Request, or otherwise require re-study or evaluation, because they have little or no potential to affect other Interconnection Customers or Affected Systems.

**Commented [SRS1]:** Suggested additional definitions to support the “Surplus Interconnection Service” definition.

**Commented [SRS2]:** Suggested clarification.

### - Stand Alone Network Upgrades

Network Upgrades or tasks (e.g., telecommunications, environmental, or property work) that are not part of an Affected System that an Interconnection Customer may construct without affecting day-to-day operations of the CAISO Controlled Grid or Affected Systems during their construction. The Participating TO, the CAISO, and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Large Generator Interconnection Agreement. If the CAISO, the Participating TO, and the Interconnection Customer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the applicable CAISO and/or Participating TO must provide the Interconnection Customer a written technical explanation ~~within 15 days~~ of why it does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

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- Commented [SRS3]: Maybe specify when this determination will be made.

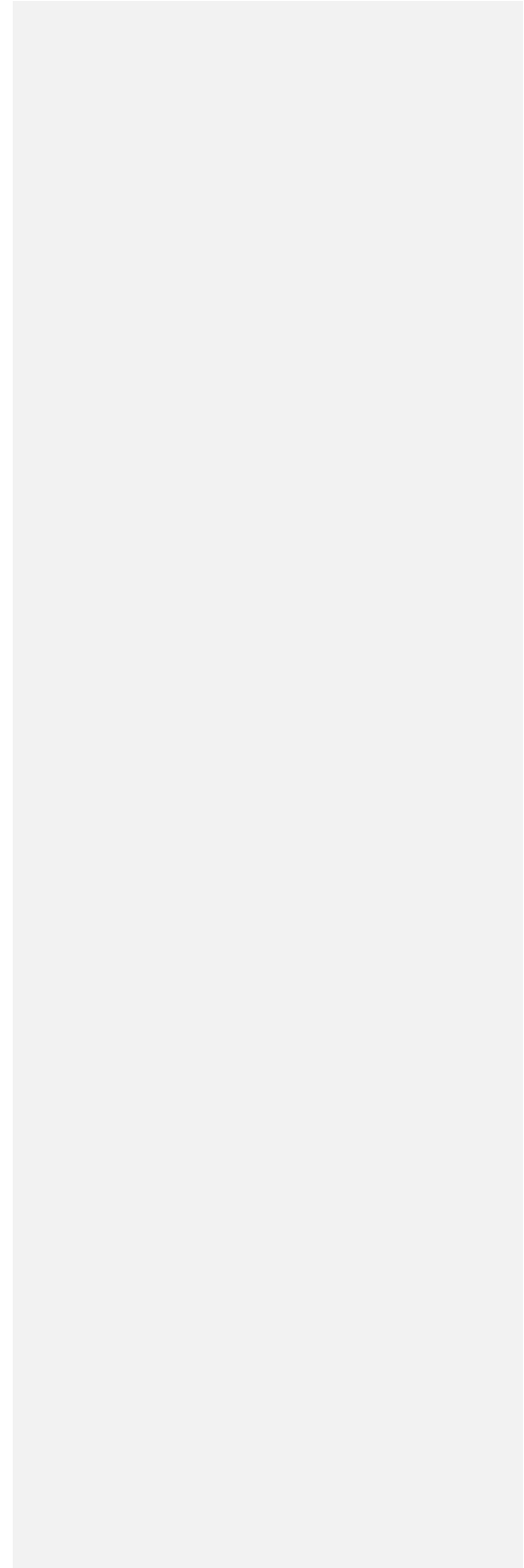
### - Surplus Interconnection Service

Any unneeded portion of Interconnection Service established in a Large Generator Interconnection Agreement, such that if Surplus Interconnection Service is utilized the total amount of Interconnection Service at the Point of Interconnection would remain the same Generating Facility Capacity above Interconnection Service Capacity. For example, if an Interconnection Request proposes 100 MW of Generating Facility Capacity but 95 MW of Interconnection Service Capacity, then (ignoring losses and auxiliary loads) the Surplus Interconnection Service would be 5 MW.

- Commented [SRS4]: This explanation is confusing. Please consider this revised definition and the suggested additional definitions above.
- Commented [SRS5]: An example here would help clarify the definition.

**Appendix DD**

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



## 2.3 Interconnection Base Case Data

For each Interconnection Study Cycle, the CAISO, in coordination with applicable Participating TO(s), shall ~~publish~~ maintain updated Interconnection Base Case Data, including, as applicable, separate Interconnection Base Case Data for each Group Study to reflect system conditions particular to the Group Study, ~~to-on~~ a secured section of the CAISO Website. Interconnection Base Case Data will represent the network model and underlying assumptions used during the most recent Interconnection Study and represent system conditions in the near term planning horizon.

The CAISO will update and publish the Interconnection Base Case Data:

- (1) prior to the Phase I Interconnection Study with the Generation reflected in valid Interconnection Requests for the Interconnection Study Cycle, as well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case, along with any associated transmission upgrades or additions;
- (2) after the Phase I Interconnection Study with the Generation reflected in valid Interconnection Requests submitted in the Cluster Application Window for the Interconnection Study Cycle, and the identified preliminary transmission upgrades or additions, as well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case, along with any associated transmission upgrades or additions;
- (3) prior to the Phase II Interconnection Study, including all remaining Generation from the Phase I Interconnection Study for the Interconnection Study Cycle, as well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case, along with any associated transmission upgrades or additions; and
- (4) after the Phase II Interconnection Study, including all remaining Generation from the applicable Phase I Interconnection Study and the identified transmission upgrades and additions for the Interconnection Study Cycle, as well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case, along with any associated transmission upgrades or additions.

Interconnection Base Case Data shall include information subject to the confidentiality provisions in Section 15.1.

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

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## Section 3 Interconnection Requests

### 3.1 General

Pursuant to CAISO Tariff Section 25.1, an Interconnection Customer shall submit to the CAISO an Interconnection Request in the form of Appendix 1 to 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. In Interconnection Studies performed under this GIDAP, the CAISO will study these requests for Interconnection Service Capacity at the level requested of Interconnection Service requested for purposes of Interconnection Studies, identifying Network Upgrades, and associated costs.~~

Commented [SRS6]: See comments below

~~However, in the Interconnection Studies, the CAISO may study Interconnection Customer may be subject to other studies at the Generating Facility at the full Generating Facility Capacity, if necessary, to ensure the safety and reliability of the system, with the study costs borne by the Interconnection Customer. The Interconnection Study reports will separately identify if after the additional studies are complete, the CAISO determines that additional Network Upgrades are necessary, then the CAISO will (1) specify which any additional Network Upgrade costs are based on which studies; and (2) provide a detailed explanation of why the additional Network Upgrades are necessary triggered by use of the Generating Facility Capacity instead of the Interconnection Service Capacity.~~

~~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. The necessary control technologies and protection systems as well as any potential penalties for exceeding the level of Interconnection Service established in the executed GIA, or requested to be filed in an unexecuted, GIA, shall be established in Appendix C of that executed, or requested to be filed unexecuted, GIA.~~

Commented [SRS7]: This does not seem like much of a change to the current process, i.e., the CAISO already assumes max output at the POI to identify Network Upgrades but looks at installed capacity to identify, for example, the need for output-limitation and protection requirements.

The changes should clarify that some analyses in the Interconnection Studies will use the Generating Facility Capacity and others will use the Interconnection Service Capacity, but that there are not some completely separate, additional kinds of studies (unknown type, timing, etc.) that will or could use the former.

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.

Commented [SRS8]: Why have separate language for Small Generating Facilities? The language above seems to apply to all Generating Facilities, not just large ones.

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

~~The CAISO will allow an Interconnection Customer to utilize or transfer Surplus Interconnection Service at its existing Point of Interconnection. The original Interconnection Customer or one of its affiliates will have priority to utilize Surplus Interconnection Service. If the existing Interconnection Customer or one of its affiliates does not exercise its priority, then the Interconnection Customer will notify the CAISO that it has transferred its Surplus Interconnection~~

Commented [SRS9]: Surplus Interconnection Service seems to be behind the POI, not "at" the POI.

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.

**Commented [SRS10]:** This is a strange statement. Obviously, the IC will decide whether or not to transfer the SIS, but I don't see how the CAISO can dictate whether they give "priority" to their own affiliates or not (or even what "priority" means – e.g., if another entity agrees to pay).

The assignee of the Surplus Interconnection Capacity must execute a separate GIA. 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.

**Commented [SRS11]:** Since the facility was studied at the requested level and has not been downsized, it's not clear how the CAISO can keep the facility from using the full contracted Interconnection Service at the POI, i.e., why the IC would not be entitled to fully utilize the contracted Interconnection Service level.

Pursuant to Section 3.5 of this GIDAP, the assignee of the Surplus Interconnection Service will submit an Interconnection Request under the Independent Study Process. If the technology to be installed for the transferred Surplus Interconnection Service will utilize a different technology, the assignee must follow the rules applicable to technology changes contained in Section XXX, potentially including submission of an Interconnection Request under the Independent Study Process. In that circumstance, The CAISO and Participating TO will study and treat the use of the Surplus Interconnection Service and any capacity beyond the Interconnection Service 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 aggregate Interconnection Service of the original Interconnection Customer and the Surplus Interconnection Capacity of the assignee of capacity will be used to calculate reimbursement, and may not exceed the Interconnection Service of the original Interconnection Customer, as memorialized in its GIA.

**Commented [SRS12]:** Clarification and relocation of provisions below.

The transferred Surplus Interconnection Service must be scheduled and settled under a separate Resource ID. Transfer or utilization of Surplus Interconnection Service will not increase the Net Qualifying Capacity of the Generating Facility. Thus, that separate Resource ID will have Energy Only Deliverability Status unless:

**Commented [SRS13]:** There is no justification for requiring an additional IR and study for the assignee to use the transferred SIS. That capacity was already studied in the original Interconnection Studies, and the original IC would not have had to submit an additional IR to use it.

- Notwithstanding any other provision in this GIDAP, if the original Interconnection Customer notifies the CAISO that 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 will be transferred to the new Resource ID, as provided in [new BPM language for those transfers]. The transfer amount of Deliverability may not exceed the transfer Deliverability for which the transferred amount of Surplus Interconnection Service qualify under current CAISO rules.

**Commented [SRS14]:** By definition, this will require separate metering, so no need to say that below.

- The assignee seeks its own TP Deliverability allocation pursuant to Section 8.9 of this GIDAP, which it may do at any time.

**Commented [SRS15]:**

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 Generating Facility provides notice that it will cease operation permanently, the assignee of any transferred Surplus Interconnection Service may retain Interconnection Service by requesting its own Interconnection Agreement for Interconnection Service. However, unless the original Generating Facility seeks repowering under CAISO Tariff Section 25.1.2 with retention of deliverability, the Surplus Interconnection Service will be converted to Energy Only.

**Commented [SRS16]:** This possibility should be provided for.

If the original Interconnection Customer's Generating Facility ceases operation for three (3) years without having begun active construction of a repowered Generating Facility under Section 25.1.2

**Commented [SRS17]:** A more concise restatement of the language below. However, it's not clear why the SIS cannot retain Deliverability when the original facility closes.

~~of the CAISO tariff, 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, 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.~~

Commented [SRS18]: Moved elsewhere.

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### **3.6.1 Interconnection Studies Statistics**

~~On a quarterly basis, the CAISO will publish to the CAISO Website summary quarterly statistics related to processing Interconnection Studies pursuant to Interconnection Requests. These statistics will include:~~

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

~~(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 the 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 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 quarter.

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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 LDNU and RNU needed to address the impacts on the CAISO Controlled Grid of the Interconnection Requests,
- (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 maximum cost responsibility for LDNUs and RNUs assigned to 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, and
- (vii) provide a cost estimate of ADNUs for each Generating Facility in a Queue Cluster Group Study.

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, and an On-Peak Deliverability Assessment (and Off-Peak Deliverability Assessment which will be for informational purposes only) for the purpose of identifying LDNUs and estimating the cost of ADNUs, 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 and LDNUs to the CAISO Controlled Grid that are preliminarily identified as 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, 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 system safety or reliability or otherwise required to study of the full Generating Facility Capacity-due-to-safety-or-reliability concerns.

**Commented [SRS19]:** This is a better statement than above, since it's clear here that there is only one set of Interconnection Studies that could assume Interconnection Service Capacity or Generating Facility Capacity, as appropriate.

## 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 applying 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; ~~and~~ (f) change in Deliverability Status to Energy Only Deliverability Status, Partial Capacity Deliverability Status, or a lower fraction of Partial Capacity Deliverability Status;
- (g) De minimis reductions in capacity pursuant to Section 7.5.13;
- (h) Permissible Technology Advancements consistent with Section 6.7.2.4.

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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 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 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 submit Permissible Technology Advancement requests. Permissible Technology Advancements may include, for example, removing equipment; aligning the COD 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 re-study or evaluation. The CAISO will update its Business Practice Manual on annual basis to list any additional Permissible Technology Advancement approved but not specifically enumerated here. The Interconnection Customer's written request to evaluate technological advancements must include the technical data required to assess the request and a non-refundable fee of \$2,500. Within thirty (30) calendar days of the Interconnection Customer's completed request, the CAISO, in consultation with the Participating TO, will notify the Interconnection Customer whether the request constitutes an approved Permissible Technological Request technological, or whether the Interconnection Customer must submit a modification request pursuant to Section 6.7.2.3.

**Commented [SRS20]:** So, how will this assessment process differ from the typical MMA request process? Also, why would an IC go this way – lower Study Deposit and 15 CDs less? Not much of a difference for most ICs.

## 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 RNUs 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; and
- (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) identify any potential control equipment for each Interconnection Request where the Interconnection Customer requested Interconnection Service Capacity is lower than the Generating Facility Capacity.

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The Phase II Interconnection Study report shall set forth the applicable cost estimates for RNUs, LDNUs, ADNUs and Participating TOs Interconnection Facilities that shall be the basis for Interconnection Financial Security Postings under Section 11.3. Where the cost estimations applicable to the total of RNUs and LDNUs are based upon the Phase I Interconnection Study (because the cost estimation for the subtotal of RNUs and LDNUs were lower and so establish maximum cost responsibility under Section 10.1), the Phase II Interconnection Study report shall recite this fact.

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## 15.5 Disputes

### 15.5.5 Non-binding Alternative Dispute Resolution

If a Party has submitted a Notice of Dispute pursuant to section 15.5.1, and the Parties are unable to resolve the claim or dispute through unassisted or assisted negotiations within the thirty (30) calendar days provided in that section, and the Parties cannot reach mutual agreement to pursue the section 15.5 arbitration process, a Party may request that the CAISO engage in non-binding Alternative Dispute Resolution pursuant to this section by providing written notice to the CAISO. Conversely, either Party may file a

request for non-binding Alternative Dispute Resolution pursuant to this section without first seeking mutual agreement to pursue the section 15.5 arbitration process. The process in section 15.5.5 shall serve as an alternative to, and not a replacement of, the section 15.5 arbitration process.

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Pursuant to this process, the CAISO must, within thirty (30) calendar days of receipt of the request for non-binding Alternative Dispute Resolution, appoint a neutral decision-maker that is an independent subcontractor that shall not have without any current or past substantial business or financial relationships with either Party. Unless otherwise agreed by the Parties, the decision-maker shall render a decision within sixty (60) calendar days of appointment and shall notify the Parties in writing of such decision and reasons therefore. This decision-maker shall be authorized only to interpret and apply the provisions of the GIDAP and GIA and shall have no power to modify or change any provision of the GIDAP and GIA in any manner.

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The result reached in this process is not binding, but, unless otherwise agreed, the Parties may cite the record and decision in the non-binding dispute resolution process in future dispute resolution processes, including in a section 15.5 arbitration, or in a Federal Power Act section 206 complaint. Each Party shall be responsible for its own costs incurred during the process and the cost of the decision-maker shall be divided equally among each Party to the dispute.

...

**Appendix 1 Interconnection Request  
INTERCONNECTION REQUEST**

Provide one copy of this completed form pursuant to Section 7 of this Appendix 1 below.

1. The undersigned Interconnection Customer submits this request to interconnect its Generating Facility with the CAISO Controlled Grid pursuant to the CAISO Tariff (check one):  
 Fast Track Process.  
 Independent Study Process.  
 Queue Cluster process.  
 Annual Deliverability Assessment pursuant to Section 9.
2. This Interconnection Request is for (check one):  
 A proposed new Generating Facility.  
 An increase in the generating capacity or a Material Modification to an existing Generating Facility.
3. Requested Deliverability Status is for (check one):  
 Full Capacity (For Independent Study Process and Queue Cluster Process only)  
(Note – Deliverability analysis for Independent Study Process is conducted with the next annual Cluster Study)  
 Partial Deliverability for \_\_\_ MW of electrical output (For Independent Study Process and Queue Cluster Process only)  
 Energy Only
4. The Interconnection Customer provides the following information:
  - a. Address or location, including the county, of the proposed new Generating Facility site or, in the case of an existing Generating Facility, the name and specific location, including the county, of the existing Generating Facility;  
  
Project Name: \_\_\_\_\_  
  
Project Location:  
Street Address: \_\_\_\_\_  
City, State: \_\_\_\_\_  
County: \_\_\_\_\_  
Zip Code: \_\_\_\_\_  
GPS Coordinates: \_\_\_\_\_
  - b. Maximum net megawatt electrical output (as defined by section 2.c of Attachment A to this appendix) of the proposed new Generating Facility or the amount of net megawatt increase in the generating capacity of an existing Generating Facility;  
  
Maximum net megawatt electrical output (MW): \_\_\_\_\_ or  
Net Megawatt increase (MW): \_\_\_\_\_
  - c. Type of project (i.e., gas turbine, hydro, wind, etc.) and general description of the equipment configuration (if more than one type is chosen include nameplate MW for each);  

<u>Technology</u>	<u>Nameplate</u>
<input type="checkbox"/> Cogeneration	<input type="checkbox"/> (MW)

- \_\_\_ Reciprocating Engine                    \_\_\_ (MW)
- \_\_\_ Biomass                                    \_\_\_ (MW)
- \_\_\_ Steam Turbine                           \_\_\_ (MW)
- \_\_\_ Gas Turbine                             \_\_\_ (MW)
- \_\_\_ Wind                                        \_\_\_ (MW)
- \_\_\_ Hydro                                       \_\_\_ (MW)
- \_\_\_ Photovoltaic                            \_\_\_ (MW)
- \_\_\_ Combined Cycle                        \_\_\_ (MW)

\_\_\_ Other (please describe):

General description of the equipment configuration (e.g. number, size, type, etc):

- d. Proposed In-Service Date (first date transmission is needed to the facility), Trial Operation date and Commercial Operation Date by month, day, and year and term of service (dates must be sequential); \_\_\_\_\_

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

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

Proposed Term of Service (years): \_\_\_\_\_

- e. Name, address, telephone number, and e-mail address of the Interconnection Customer's contact person (primary person who will be contacted);

Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Company Name: \_\_\_\_\_  
 Street Address: \_\_\_\_\_  
 City, State: \_\_\_\_\_  
 Zip Code: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_  
 Fax Number: \_\_\_\_\_  
 Email Address: \_\_\_\_\_

- f. Approximate location of the proposed Point of Interconnection (i.e., specify transmission facility interconnection point name, voltage level, and the location of interconnection);

\_\_\_\_\_

- g. Interconnection Customer data (set forth in Attachment A)

**The Interconnection Customer shall provide to the CAISO the technical data called for in Attachment A to this Interconnection Request. One (1) copy is required.**

- h. Requested capacity (in MW) of Interconnection Service Capacity (if lower than the Generating Facility Capacity; may not exceed Generating Facility Capacity);

\_\_\_\_\_

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- 5. Applicable deposit amount made payable to California ISO. Send check to CAISO (see section 7 below for details) along with the:
  - a. Interconnection Request for processing.
  - b. Attachment A (Interconnection Request Generating Facility Data).
- 6. Evidence of Site Exclusivity as specified in the GIDAP and name(s), address(es) and contact information of site owner(s) (check one):

\_\_\_\_\_ Is attached to this Interconnection Request  
\_\_\_\_\_ Deposit in lieu of Site Exclusivity attached, Site Exclusivity will be provided at a later date in accordance with this GIDAP

7. This Interconnection Request shall be submitted to the CAISO representative indicated below:

California ISO  
Attn: Grid Assets  
P.O. Box 639014  
Folsom, CA 95763-9014

Overnight address:  
California ISO  
Attn: Grid Assets  
250 Outcropping Way  
Folsom, CA 95630

8. Representative of the Interconnection Customer to contact:

[To be completed by the Interconnection Customer]

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Company Name: \_\_\_\_\_  
Street Address: \_\_\_\_\_  
City, State: \_\_\_\_\_  
Zip Code: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Fax Number: \_\_\_\_\_  
Email Address: \_\_\_\_\_

9. This Interconnection Request is submitted by:

Legal name of the Interconnection Customer: \_\_\_\_\_

By (signature): \_\_\_\_\_

Name (type or print): \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



LARGE GENERATOR INTERCONNECTION AGREEMENT

[INTERCONNECTION CUSTOMER]

[PARTICIPATING TO]

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

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

Commented [SRS21]: To distinguish use of the term "injection" from energy injection into the storage.

**Stand Alone Network Upgrades** shall mean Network Upgrades, that are not part of an Affected System that the Interconnection Customer may construct without affecting day-to-day operations of the CAISO Controlled Grid or Affected Systems during their construction. The Participating TO, the CAISO, and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to this LGIA. If the CAISO, the Participating TO, and the Interconnection Customer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the applicable CAISO and/or Participating TO must provide the Interconnection Customer a written technical explanation outlining why it does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

Commented [SRS22]: As noted above, it would be helpful to state when this determination would be made.

**Surplus Interconnection Service**

Generating Facility Capacity above Interconnection Service Capacity. For example, if an Interconnection Request proposes 100 MW of Generating Facility Capacity but 95 MW of Interconnection Service Capacity, the Surplus Interconnection Service would be 5 MW. Any unneeded portion of Interconnection Service established herein, such that if Surplus Interconnection Service is utilized the total amount of Interconnection Service at the Point of Interconnection would remain the same.

Commented [SRS23]: Consistent with comments provided above.

...

ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION

Interconnection Facilities, Network Upgrades, and Distribution Upgrades shall be studied, designed, and constructed pursuant to Good Utility Practice. Such studies, design and construction shall be based on the assumed accuracy and completeness of all technical information received by the Participating TO and the CAISO from the Interconnection Customer associated with interconnecting the Large Generating Facility.

**5.1 Options.** Unless otherwise mutually agreed among the Parties, the Interconnection Customer shall select the In-Service Date, Initial Synchronization Date, and Commercial Operation Date; and either the Standard Option, Alternate Option, or, if eligible, Merchant Option, set forth below for completion of the Participating TO's Interconnection Facilities and Network Upgrades as set forth in Appendix A; Interconnection Facilities, Network Upgrades, and Distribution Upgrades, and such dates and selected option shall be set forth in Appendix B, Milestones. At the same time, the Interconnection Customer shall indicate whether it elects to exercise the Option to Build set forth in Article 5.1.3 below. If the dates designated by Interconnection Customer are not acceptable to the CAISO and Participating TO, they shall so notify the Interconnection Customer within thirty (30) calendar days. Upon receipt of the notification that the Interconnection Customer's designated dates are not acceptable to the CAISO and Participating TO, the Interconnection Customer shall notify the CAISO and Participating TO within thirty

(30) calendar days whether it elects to exercise the Option to Build if it has not already elected to exercise the Option to Build.

**5.1.1 Standard Option.** The Participating TO shall design, procure, and construct the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades, using Reasonable Efforts to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the dates set forth in Appendix B, Milestones. The Participating TO shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event the Participating TO reasonably expects that it will not be able to complete the Participating TO's Interconnection Facilities, Network Upgrades, and Distribution Upgrades by the specified dates, the Participating TO shall promptly provide written notice to the Interconnection Customer and the CAISO and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

**5.1.2 Alternate Option.** If the dates designated by the Interconnection Customer are acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities by the designated dates.

If the Participating TO subsequently fails to complete the Participating TO's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Initial Synchronization Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B, Milestones; the Participating TO shall pay the Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by the Interconnection Customer shall be extended day for day for each day that the CAISO refuses to grant clearances to install equipment.

**5.1.3 Option to Build.** ~~If the dates designated by the Interconnection Customer are not acceptable to the Participating TO, the Participating TO shall so notify the Interconnection Customer within thirty (30) Calendar Days, and unless the Parties agree otherwise, the~~ Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades. ~~If the Interconnection Customer elects to exercise its option to assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, it shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO.~~ The Participating TO, CAISO, and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A to this LGIA. Except for Stand Alone Network Upgrades, the Interconnection Customer shall have no right to construct Network Upgrades under this option.

**5.1.4 Negotiated Option.** ~~If the Interconnection Customer elects not to exercise its option under Article 5.1.3, Option to Build, the Interconnection Customer shall so notify the Participating TO within thirty (30) Calendar Days of receipt of the Participating TO's notification that the designated dates are not acceptable to the Participating TO, and~~ If the dates designated by the Interconnection Customer are not acceptable to the CAISO and the Participating TO, the Parties shall in good faith attempt to negotiate terms and conditions ~~including revision of the specified dates and liquidated damages, the provision of incentives,~~ or the procurement and construction of ~~a portion of the Participating TO's Interconnection~~

~~Facilities and Stand Alone Network Upgrades by the Interconnection Customer all facilities other than the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades if the Interconnection Customer elects to exercise the Option to Build under Article 5.1.3.) pursuant to which the Participating TO is responsible for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades. If the Parties are unable to reach agreement on such terms and conditions, then, pursuant to Article 5.1.1 (Standard Option), the Participating TO shall assume responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Network Upgrades all facilities other than the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades if the Interconnection Customer elects to exercise the Option to Build pursuant to Article 5.1.1, Standard Option.~~

**5.2 General Conditions Applicable to Option to Build.** If the Interconnection Customer assumes responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, or assumes responsibility for any stand-alone task, such as telecommunications, environmental, or real-estate related work:

...

~~(13) If the Interconnection Customer exercises the Option to Build pursuant to Article 5.1.3, the Interconnection Customer shall pay the Participating TO the agreed upon amount of [ \$ PLACEHOLDER ] for Participating TO to execute the responsibilities enumerated to it under Article 5.2. The Participating TO will invoice the Interconnection Customer for this total amount to be divided on a monthly basis pursuant to Article 12.~~

Commented [SRS24]: Need an explanation for this addition, including how it relates at all to Order 845.

## Article 19. Assignment

**19.1 Assignment.** This LGIA may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this LGIA without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this LGIA; and provided further that the Interconnection Customer shall have the right to assign this LGIA, without the consent of the CAISO or Participating TO, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that the Interconnection Customer will promptly notify the CAISO and Participating TO of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the CAISO and Participating TO of the date and particulars of any such exercise of assignment right(s), including providing the CAISO and Participating TO with proof that it meets the requirements of Articles 11.5 and 18.3. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this LGIA shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

~~The Interconnection Customer may assign Surplus Interconnection Service pursuant to Section 3.4 of the GIDAP. The assignee must execute a separate GIA with the CAISO and Participating TO. The CAISO, Participating TO, and original Interconnection Customer will work in good faith to amend the original GIA to reflect the transfer of Surplus Interconnection Service before the execution of the assignee's GIA.~~

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