

Business Practice Manual  
For  
Generator Interconnection and Deliverability  
Allocation Procedures  
(GIDAP) BPM

Version ~~2~~7.0

Last Revised: ~~December~~February ~~21~~21, 2021~~0~~

## Approval History

Approval Date: 08/28/2013

Effective Date: 08/28/2013

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BPM Owner's Title: Director, Grid Assets

## Revision History

Version	PRR#	Date	Description
<u>27</u>	<u>1309</u>	<u>2/1/2021</u>	<u>Clarification on point of interconnection changes, independent study process eligibility, interconnection financial security refunds, and allowable actions when projects are parked</u>
26	1290	12/21/2020	Clarifications in modifications between Phase I and Phase II, RNU reimbursement, and date in IR for requests in deliverability
25	1284	11/24/2020	Determining Refundable amount of IFS for withdrawn Energy Only projects in Section 8.10. Implement off-peak deliverability status
24	1273	10/2/2020	The last FERC 845 Implementation – Transfer of Surplus Interconnection Service, FERC Reporting, Interconnection Service Capacity
23	1259	8/26/2020	Implement the area and local off-peak network upgrades in the deliverability methodology enhancement approved by FERC in Sections 6.1.1.4-6.1.1.7
22	1249	2/20/2020	FERC 845 Implementation of additional changes at the Phase I Results Meeting, including the additional of Permissible Technology Advancements
21	1218	1/31/2020	Interconnection process enhancements: Affected PTO repayment clarifications, network upgrade & cost responsibility updates, and RNU reimbursement cap updates.

Version	PRR#	Date	Description
20	1206	12/23/2019	Clarifications in Section 5.2, project naming guidelines, and Section 6.2.6.3, Generator Downsizing, and Section 6.2.9.1, Affidavits for Allocation.
19.0	1186	10/24/2019	Interconnection process enhancements: Change in Deliverability Status, shared SANUs, study agreements, Interconnection request acceptance and validation
18.0	1157	8/5/2019	Interconnection process enhancements: Conditions for Partial Recovery of IFS, posting requirements for PTOs, impact of modifications of IFS, and project name publication
17.0	1152	5/30/2019	Adding Evaluation of Generator Capability white paper summary and link to CAISO website
16.0	1113	11/27/18	Revisions sections 4.5, 6.2.6, 6.2.9, and 6.6 to reflect tariff revisions to TP Deliverability allocation and retention resulting from 2018 Interconnection Process Enhancement initiative.
15.0	1084	10/24/18	Updating language for repayments of reliability network upgrades with congestion revenue rights
14.0	1050	5/24/2018	Added Section 6.2.5.5 Adding Energy Storage between Phase I and Phase II Studies
13.0	995	8/28/2017	Clarify Section 8.10.1 language pertaining to conditions for partial recovery of Interconnection Financial Security upon Withdrawal of Interconnection Request of Termination of GIA.
12.0	982	7/6/2017	Clarifying the Section 8.5.4 Separation of Third Posting and associated Section 8.11 Determining Refundable Portion of the Interconnection Financial Security for Network Upgrades.
11.0	966	3/30/2017	Clarifying requirements for selecting a project name
10.0	943	12/22/2016	Align language in Section 6.2.5.4 regarding the modification of the point of interconnection between Phase I and Phase II studies in the Generator Interconnection and Deliverability Allocation Procedures (GIDAP) and Generator Management BPMs.

Version	PRR#	Date	Description
9.0	927, 931		Interconnection process enhancements
8.0	911	7/28/16	2015 Interconnection process enhancements. Topics: 3,4,5,6,9,10, and 11
7.0	898, 900	6/2/16	Modified Affected System from IPE Updated Section 5 to include Interconnection Request electronic submission information, and correct study deposit amounts for Cluster, Independent Study Process, and Fast Track.
6.0	872, 874, 878	11/24/15	Added Reassessment language, Affidavit for Accelerated Phase II study, and criteria for multiple projects sharing a common site
5.0	768	9/29/2014	Added Section 6.2.6.3 (Generator Downsizing Process)
4.0	745	9/4/2014	Modified Affected System language
3.0	740	06/03/2014	Removed language added in Version 2, reverted to Version 1 language
2.0	705	04/07/2014	Replaced language resulting from the Affected System Stakeholder process
1.0	674	07/26/2013	1st Version Released

Although this GIDAP BPM is based on CAISO Tariff Appendix DD (GIDAP), it is written to provide the reader with a more detailed chronological sequence of events the Interconnection Customer needs to perform in order to interconnect to the Grid. The following Table of Contents summarizes that sequence.



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# **GIDAP BPM**

## **1. Introduction**

In this Introduction you will find the following information:

The purpose of California Independent System Operator Corporation (CAISO) Business Practice Manuals (BPMs);

What you can expect from this CAISO BPM; and

- Other CAISO BPMs or documents that provide related or additional information.

### **1.1. Purpose of CAISO Business Practice Manuals**

The Business Practice Manuals (BPMs) developed by CAISO are intended to contain implementation detail, consistent with and supported by the CAISO Tariff, including: instructions, rules, procedures, examples, and guidelines for the administration, operation, planning, and accounting requirements of CAISO and the markets. Business Practice Manuals are posted in the [California ISO BPM Library](#).

### **1.2. Purpose of this Business Practice Manual**

The GIDAP BPM covers procedures for cluster, independent, fast track, and 10kW or less inverter Interconnection Study processes for Large Generating Facilities (LGF) and Small Generating Facilities (SGF).

In this BPM you will find:

- A description of the application & study process for CAISO Tariff Appendix DD, which is referenced in this GIDAP BPM as the GIDAP; and
- General information on CAISO Tariff Appendix DD Generator Interconnection and Deliverability Allocation Procedures (GIDAP) processes.

The provisions of this BPM are intended to be consistent with the GIDAP. If the provisions of this BPM nevertheless conflict with the GIDAP, the CAISO is required to operate in accordance with the GIDAP. Any provision of the GIDAP that is summarized or repeated in this BPM is only to aid understanding. Even though every effort is made by the CAISO to update the information contained in this BPM and notify Market Participants and other parties of the changes, it is the responsibility of each Market Participant and other party to ensure that it is using the most recent version of this BPM and complies with all applicable provisions of the GIDAP.

## 1.3. References

The CAISO BPM for Definitions & Acronyms provides the definition of acronyms and words beginning with capitalized letters.

In addition, the following references relate to this GIDAP BPM:

Other CAISO BPMs; and

The CAISO FERC Electric Tariff.

The CAISO Website posts current versions of these documents.

Whenever this BPM refers to the GIDAP, a given agreement (such as a GIA or any other BPM or instrument), the intent is to refer to the GIDAP, that agreement, other BPM or instrument as it may have been modified, amended, supplemented or restated from the release date of this GIDAP BPM.

The captions and headings in this BPM intend solely to facilitate reference and not to have any bearing on the meaning of any of the terms and conditions of this BPM.

## 1.4. Definitions

### 1.4.1. Master Definitions Supplement

Unless the context otherwise requires, any word or expression defined in the Master Definitions Supplement, Appendix A to the CAISO Tariff, shall have the same meaning where used in this GIDAP BPM. Special Definitions not covered in Appendix A to the CAISO Tariff, yet apply to this GIDAP BPM are provided in Section 1.4.2 of this BPM.

### 1.4.2. Highlighted Definitions Applicable to this GIDAP BPM

The definitions of the following terms, which also appear in either CAISO Appendix A or the GIDAP (Appendix DD), are important to keep in mind in reviewing this GIDAP BPM:

#### Individual network upgrades

**Interconnection Reliability Network Upgrades (IRNU)** – 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.

**General Reliability Network Upgrades (GRNU)** – RNUs that are not IRNUs.

**Local Delivery Network Upgrades (LDNU)** – shall mean a transmission upgrade or addition identified by the CAISO in the GIDAP interconnection study process to relieve a Local Reliability Constraint.



**Local Off-Peak Network Upgrades (LOPNU)** – shall mean a transmission upgrade or addition the CAISO identifies in the generator interconnection study process to relieve a Local Off-Peak Constraint.

**Area Off-Peak Network Upgrade (AOPNU)** – shall mean a transmission upgrade or addition the CAISO identifies in the Transmission Planning Process to relieve an Area Off-Peak Constraint.

**Area Delivery Network Upgrade (ADNU)** – network upgrades to increase Transmission Plan Deliverability to relieve an Area Deliverability Constraint.

### **Network upgrade groups**

#### **Assigned Network Upgrade (ANU)**

Reliability Network Upgrades, Local Delivery Network Upgrades, and Local Off-Peak Network Upgrades currently assigned to the Interconnection Customer. Assigned Network Upgrades exclude (1) Conditionally Assigned Network Upgrades unless they become Assigned Network Upgrades, and (2) Precursor Network Upgrades.

#### **Conditionally Assigned Network Upgrade (CANU)**

Reliability Network Upgrades, Local Delivery Network Upgrades, and Local Off-Peak Network Upgrades currently assigned to an earlier Interconnection Customer, but which may be assigned to the Interconnection Customer.

**Precursor Network Upgrade (PNU)** - Network Upgrades required for an Interconnection Customer that consist of (1) Network Upgrades whose cost responsibility is assigned to an earlier Interconnection Customer that has executed its GIA; and (2) Network Upgrades in the approved CAISO Transmission Plan.

### **Cost responsibilities**

**Current Cost Responsibility (CCR)** - 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.

**Maximum Cost Responsibility (MCR)** - 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.

**Maximum Cost Exposure (MCE)** - 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.

"Affected System" shall mean an electric system other than the CAISO controlled grid that may be affected by the proposed interconnection. For the purposes of the CAISO's GIDAP process, this means any adjoining or electrically interconnected balancing authority area or transmission system that may be electrically close enough to a proposed generation project or cluster of projects such that the Interconnection Facilities, Network Upgrades, or the operation of the proposed generator could cause reliability or safety impacts on the neighboring system.



"Cluster Study Process" shall mean a process whereby a group of Interconnection Requests are studied together, instead of serially, for the purpose of conducting Phase I and II Studies.

"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 GIDAP Section 15.1 and GIDAP BPM Section 13.

"Dispute Resolution" shall mean the procedure set forth in GIDAP Section 15.5 and in GIDAP BPM Section 15 for resolution of a dispute between the Parties.

"Identified Affected System" shall mean an Affected System operator who either responded to the initial CAISO notification provided after the initial Interconnection Financial Security as described in Section 6.1.4.2 stating that it should be considered an Affected System or whose electric system has been identified by the CAISO as potentially impacted by a generator interconnection through the applicable study process.

"Option (A) Generating Facility" shall mean a Generating Facility for which the Interconnection Customer has selected Option (A) as the Deliverability option under GIDAP Section 7.2.

"Option (B) Generating Facility" shall mean a Generating Facility for which the Interconnection Customer has selected Option (B) as the Deliverability option under GIDAP Section 7.2.

"Party" or "Parties" shall mean the CAISO, Participating TO(s), Interconnection Customer or the applicable combination of the above.

"Potentially Affected System" shall mean an electric system in electric proximity to the CAISO's controlled grid that may be an Affected System.

"10 kW Inverter Process" shall mean the study process set forth in GIDAP Appendix 7, which applies only for an inverter-based Small Generating Facility no larger than 10 kW that meets the codes, standards, and certification requirements of Appendices 9 and 10 of the GIDAP, or that the Participating TO has reviewed the design of or tested and has satisfied itself that the proposed Small Generating Facility is safe to operate.

"TP Deliverability" shall mean the capability, measured in MW, of the CAISO Controlled Grid as modified by transmission upgrades and additions modeled or identified in the annual Transmission Plan to support the interconnection with Full Capacity Deliverability Status or Partial Capacity Deliverability Status of additional Generating Facilities in a specified geographic or electrical area of the CAISO Controlled Grid.

## 2. GIDAP Applicability and Comparability

This GIDAP BPM applies to Interconnection Requests that are processed under the GIDAP. The GIDAP was accepted by FERC on July 24, 2012, with an effective date of July 25, 2012. The CAISO processes both small generator Interconnection Requests (generation up to and

including 20 MW) and large generator Interconnection Requests (greater than 20 MW) under the GIDAP.

The ISO's Queue Cluster 5 and Interconnection Requests received on or after July 25, 2012, are being processed under the GIDAP.

**The Three Processing Tracks of the GIDAP** - Under the GIDAP, Interconnection Requests are processed under one of three study tracks: (i) the Queue Cluster Study Process track; (ii) the Independent Study Process track; and (iii) the Fast Track Process track, which includes the 10 kW Inverter Process track.

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

An Interconnection Request under the GIDAP is not a request for transmission service nor does it confer upon an Interconnection Customer any right to receive transmission service. In addition, it is important to understand that:

- (1) no Interconnection Customer obtains any "rights" to capacity by virtue of connecting to the CAISO Controlled Grid, even though it may "up-front finance" the cost to construct the needed network upgrades to interconnect the generating facility; and
- (2) "firm transmission service," a type of transmission service available in some parts of the eastern United States, does not exist with respect to the CAISO Controlled Grid.

There is sometimes confusion on the part of Interconnection Customers that, through the generator interconnection process, they have "purchased Network Upgrades" and have specific rights in them, or have specific rights to the transfer capacity that result from construction and installation of the upgrades because they may have up-front funded them. This is not the case. First, the interconnection process is designed to permit the generating facility to interconnect by:

- (1) in terms of reliability - identifying and constructing Network Upgrades needed to preserve the safe and reliable operation of the CAISO Controlled Grid (including General Reliability Network Upgrades); and
- (2) in terms of deliverability - enhance the transfer capacity of the CAISO Controlled Grid (through Delivery Network Upgrades) to deem the interconnecting generating facility "deliverable" in the sense that it has Full Capacity Delivery Status, a status which means that from an engineering standpoint, the output of the generating facility to the extent of

its Net Qualifying Capacity can be considered deliverable to the aggregate of load on the CAISO Controlled Grid, even under peak conditions.

Second, under the GIDAP the Interconnection Customer payments for certain Network Upgrades are repaid to the customer by the Participating TOs, from revenues that come from the CAISO Transmission Access Charge (TAC). Accordingly, while an Interconnection Customer generally up-front funds the construction of certain needed Network Upgrades, the customer does not ultimately absorb these costs - ratepayers who pay the TAC do.

In addition, discussion of generator interconnection sometimes crosses over into interrelated transactional concepts relating to power purchase transactions. For example, Resource Adequacy (RA) deliverability and Net Qualifying Capacity are not items which are the subject of an Interconnection Request or a Generator Interconnection Agreement (GIA). Parties sometimes mistakenly seek to put language regarding RA qualification into draft GIAs. In addition, there is sometimes confusion regarding what the Interconnection Service to the CAISO Controlled Grid does and does not provide to the Interconnection Customer.

- No “protection” against curtailment in real-time – Full Capacity Deliverability Status does not insulate a Generating Facility from curtailments that are necessary in real-time system operations.
- No determination of Resource Adequacy deliverability – interconnection under Full Capacity Deliverability Status is a necessary but not a sufficient condition for the facility to qualify as a Resource Adequacy resource and obtain a Net Qualifying Capacity (NQC) rating. The interconnection process only addresses physical and electrical interconnection; Resource Adequacy counting and qualification are external to the GIDAP.

**Timeframes for interconnection study** - The GIDAP contains time frames for the CAISO to accept and validate Interconnection Requests, conduct interconnection studies and negotiate GIAs. The CAISO and Participating TOs will use reasonable efforts to meet the time frames, and when the CAISO anticipates that it or the Participating TO cannot meet tariff time frames, it will inform the affected Interconnection Customers.

Proposed interconnection of a new Generating Facility to a Participating TO's Distribution System are processed, as applicable, pursuant to the applicable Participating TO's Wholesale Distribution Access Tariff (WDAT or WDT), CPUC Rule 21, or other Local Regulatory Authority requirements of the Participating TO.

## 3. On-Line Resources

### 3.1. The CAISO Queue (Public Internet Posting)

#### 3.1.1. Data Posting Requirement<sup>1</sup>

The CAISO posts on the CAISO Website a listing of all Interconnection Requests by project name and Queue Position (*i.e.*, queue number), pursuant to CAISO Tariff Section 3.6, and not by Interconnection Customer. The list will identify, for each Interconnection Request the following:

- a. The maximum summer and winter megawatt electrical output of the proposed Generating Facility;
- b. The location by county and state of the proposed Generating Facility;
- c. The station or transmission line(s), including voltage level, where the interconnection of the proposed Generating Facility will be made (Point of Interconnection);
- d. The most recent projected Commercial Operation Date of the proposed Generating Facility as given by the Interconnection Customer;
- e. The status of the Interconnection Request, including whether it is active or withdrawn;
- f. The availability of any studies related to the Interconnection Request;
- g. The date of the Interconnection Request;
- h. The type of Generating Facility to be constructed, including fuel type;
- i. Requested deliverability status of the proposed Generating Facility; and
- j. Project name.

The CAISO queue can be found on the CAISO Website by searching for the title “Interconnection Queue” and selecting the document with a title of “ISO Generator Interconnection Queue.”

<sup>1</sup> GIDAP Section 3.6.

The queue listing does not disclose the identity of an Interconnection Customer or interconnection component cost information – in general, this information is not public until the time that the Interconnection Customer signs a GIA, at which time it must be filed with or reported to FERC as a service agreement and thus becomes a public document.<sup>2</sup> Non-conforming GIAs, and those filed unexecuted with FERC, can be located on the CAISO Website by following this sequence of tabs (*Rules/Regulatory/Regulatory Filings and Orders/FERC – Filings [year]*).

The CAISO's practice is not to file a *conforming* GIA with FERC by way of formal transmittal letter and request for acceptance of the service agreement. Rather, the CAISO reports that it has entered into the GIA on the FERC Electric Quarterly Report (commonly known as the "EQR").<sup>3</sup> The EQR consists of data that the CAISO submits to FERC covering a particular quarter of the year. The CAISO includes as part of the EQR the CAISO service agreement number and the names of the parties to a GIA that the CAISO entered into during that quarter. For a conforming pro forma GIA, the effective date of the GIA is the last date of the last signature on the agreement and so that date will be listed as the effective date. Members of the public may see a copy of a conforming pro forma GIA referenced on the EQR by contacting the CAISO. The inquiring party should search the EQR and should provide the CAISO with the referenced service agreement number and the Interconnection Customer to assist the CAISO in identifying the GIA.

### 3.1.2. Assigning a Project Queue Number

A project is assigned a queue number once the interconnection application has been deemed complete and validated as described in Section 5 of this GIDAP BPM. After a project participating in the Independent Study Process, or a project participating in the Fast Track Process, or all projects participating in an annual Cluster Study have been assigned queue numbers, the project will be added and posted to the on-line CAISO queue.

### 3.1.3. On-line Queue Update Schedule

The on-line CAISO queue is updated at least once a month, unless there are no changes.

### 3.1.4. Interconnection Studies Quarterly Updates, retention, & reporting <sup>4</sup>

The CAISO will maintain on its website summary statistics related to processing Interconnection Studies pursuant to Interconnection Requests, updated quarterly. The

<sup>2</sup> GIDAP Section 3.6 states that "[e]xcept 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."

<sup>3</sup> The FERC EQRs are located at: <http://www.ferc.gov/docs-filing/eqr.asp>.

<sup>4</sup> GIDAP Section 3.6.1.

CAISO will maintain a link on OASIS to the CAISO website with the interconnection statistics. These statistics will include information about:

- Phase I Interconnection Studies
- Phase II Interconnection Studies
- Interconnection Requests Withdrawn

## 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.

## 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 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.

## 3.2. Resource Interconnection Management System (RIMS)

### 3.2.1. General Description of RIMS

The Resource Interconnection Management System, or RIMS, is a secure web-based database application used to track and manage data from active as well as withdrawn Interconnection Requests in the CAISO queue. This enables the CAISO and Participating TOs to accurately track the customer submitted data, project tasks, and milestones.

The database tracks information for each project name and Queue Position, including, MW, Point of Interconnection (POI), Participating TO and CAISO Engineers, PTO and CAISO Project Managers, project status, Commercial Operation Date (COD), contract information, Interconnection Customer Name and contact information.

Some of the information contained in RIMS is confidential information, in part, because the database information contains confidential information as to Interconnection Customers. For this reason, the application is accessed through secure website portals and Interconnection



Customers and Participating TOs have limited viewing access to only their projects and limited data entry access.

### 3.2.2. RIMS Access

For CAISO, Participating TO and Interconnection Customer access, an Application Access Request Form (AARF) needs to be filled out and submitted to the CAISO Help Desk. Listed below are the link for the form and the link to the overview document for the CAISO tools. The processing time can be one to two weeks. Please contact Linda Wright at [lwright@caiso.com](mailto:lwright@caiso.com) to activate the projects after the certificate needed to access RIMS is received.

<http://www.caiso.com/Documents/UserApplicationAccessRequestForm.xls>

[http://www.caiso.com/Documents/Overview-ISOTools\\_AccessRequestForms.pdf](http://www.caiso.com/Documents/Overview-ISOTools_AccessRequestForms.pdf)

### 3.2.3. RIMS Updates

RIMS is updated daily by the Interconnection Resources team as well as by other CAISO departments with various information as it is received by the CAISO from the Participating TO or Interconnection Customers.

## 3.3. Base Case / Study Postings (Secure Website Posting)<sup>5</sup>

For each Interconnection Study Cycle, the CAISO, in coordination with the applicable Participating TO, shall maintain on its secured Website updated Interconnection Base Case Data to reflect system conditions particular to the study cycle. The Interconnection Base Case data shall include data for each group study and be inclusive of all Generation which is the subject of valid Interconnection Requests for the Independent Study process that entered the CAISO interconnection queue prior to the creation of the base case for each group study, along with any associated transmission upgrades or additions and shall be posted at the following intervals:

- Prior to the completion of the Phase I Interconnection Study; the base case will additionally include Generating Facilities from valid Interconnection Requests from the Cluster Application Windows for the Interconnection Study Cycle;
- After the Phase I Interconnection Study; the base case will additionally include Generating Facilities from valid Interconnection Requests from the Cluster Application Window for the Interconnection Study Cycle and identified preliminary transmission upgrades or additions;
- Prior to the completion of the Phase II Interconnection Study; include all remaining Generating Facilities from the Phase I Interconnection Study for the Interconnection Study Cycle and associated transmission upgrades for the interconnection plan of service; and

<sup>5</sup> GIDAP Sections 2.3 and 3.6.



- After the Phase II Interconnection Study; include all Generating Facilities from the applicable Phase I Interconnection Study and identified transmission upgrades and additions for the Interconnection Study Cycle.

Interconnection Base Case Data shall include information subject to the confidentiality provisions in GIDAP Section 15.1 and GIDAP BPM Section 13. The CAISO shall require parties that seek access to the Base Case Data to sign a CAISO confidentiality agreement and, where the party is not a member of the Western Electric Coordinating Council (WECC), or its successor, an appropriate form of agreement with WECC, or its successor, as necessary.

The base case data posted shall include the power flow base cases for Deliverability Assessment and reliability assessment, short circuit duty base cases, and contingency lists.

The CAISO posts information to its secured Website to protect confidential information. Confidential information includes information that is specified under GIDAP Section 15.1 as confidential information (primarily information provided by an Interconnection Customer which is proprietary to the Interconnection Customer) and also includes Critical Energy Infrastructure Information (CEII). In discussing CEII on its website, FERC defines CEII as follows:

CEII is specific engineering, vulnerability, or detailed design information about proposed or existing critical infrastructure (physical or virtual) that:

1. Relates details about the production, generation, transmission, or distribution of energy;
2. Could be useful to a person planning an attack on critical infrastructure;
3. Is exempt from mandatory disclosure under the Freedom of Information Act; and
4. Gives strategic information beyond the location of the critical infrastructure.<sup>6</sup>

The following information has been identified by FERC as comprising CEII information per FERC Form No. 715.

- Power Flow Base Cases;
- Transmitting Utility Maps and Diagrams;
- Transmission Planning Reliability Criteria;
- Transmission Planning Assessment Practices; and
- Evaluation of Transmission System Performance<sup>7</sup>

<sup>6</sup> See FERC's discussion of CEII at FERC's CEII webpage, accessible at <http://www.ferc.gov/legal/ceii-foia/ceii.asp>

<sup>7</sup> FERC regulations (18 C.F.R. § 141.300) require transmitting utilities to complete FERC Form No. 715 annually. FERC's web page on Form No 715 (accessible at <http://www.ferc.gov/docs-filing/forms/form-715/instructions.asp>) states:

The CAISO will post the following study data to the CAISO's secured Market Participant Portal:

- Deliverability assessment base cases with identified upgrades needed;
- Reliability assessment base cases with identified network upgrades needed;
- Short Circuit Duty base cases;
- Group study reports; and
- Contingency lists

If the CAISO makes any additional study reports available, it will do so in accordance with the disclosure requirements in GIDAP Section 15 and GIDAP BPM Section 13.

The CAISO will post to the CAISO Website any deviations from the study timelines under the GIDAP. 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. The CAISO attempts to post as soon as possible after the studies are completed.

For submission instructions to process Non-Disclosure Agreements, access the Interconnection Base Case, or access the Market Portal, please go to the CAISO Website and select the following sequence of tabs:

- Planning
- Transmission Planning
- Regional Transmission NDA
- Instructions to Access Secure Transmission Planning Website

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#### **§141.300 FERC Form No. 715, Annual Transmission Planning and Evaluation Report**

**Who must file:** Any transmitting utility, as defined in § 3(23) of the Federal Power Act, that operates integrated (that is, non-radial) transmission facilities at or above 100 kilovolts must complete FERC Form No. 715;

**When to file:** FERC Form No. 715 must be filed on or before each April 1st;

**What to file:** FERC Form No. 715 must be filed with the Office of the Secretary of the Federal Energy Regulatory Commission in accordance with the instructions on that form.

*The Commission considers the information collected by this report to be [Critical Energy Infrastructure Information \(CEII\)](#) and will treat it as such (emphasis added).*

See Instructions for filing Form 715 on FERC's webpage at [http://www.ferc.gov/docs-filing/forms/form-715/instructions.asp#Specific Instructions](http://www.ferc.gov/docs-filing/forms/form-715/instructions.asp#Specific%20Instructions)

## 4. Summary of Available Study Tracks and Application Deadlines

### 4.1. Cluster Study Process

Under the GIDAP, the interconnection study process for Interconnection Requests in a Queue Cluster consist of a Phase I Interconnection Study, a Phase II Interconnection Study, a TP Deliverability allocation study, and an annual reassessment.

#### 4.1.1. Notice of Open Application Window

The Cluster Application Window will open on April 1 and close on April 15 of each year.<sup>8</sup> The CAISO will issue a Market Notice approximately thirty (30) calendar days prior to the opening of the Cluster Application Window.

### 4.2. Independent Study Process (ISP)

The CAISO, in coordination with the applicable Participating TO(s), studies Interconnection Requests eligible for treatment under the Independent Study Process somewhat separately from other Interconnection Requests. To qualify under the ISP, the Interconnection Customer must provide, along with its Interconnection Request, an objective demonstration that inclusion in a Queue Cluster will not accommodate the desired Commercial Operation Date for the Generating Facility. As part of this demonstration, the Interconnection Customer must show that the desired Commercial Operation Date is physically and commercially achievable, by demonstrating specific criteria.

Alternatively, projects repowering or reconfiguring capacity of less than 5 MW may qualify for the ISP.

If the Project meets the Independent Study criteria, the Reliability Assessment is performed separately. Completion of the Upgrades identified in that study is sufficient for the Project to operate with Energy-Only Deliverability Status. If the Interconnection Customer seeks Full or Partial Capacity Deliverability Status, then the On-Peak Deliverability Assessment is performed in conjunction with the next cluster. If the Interconnection Customer requests Off-Peak Deliverability Status, then the Off-Peak Deliverability Assessment is performed in conjunction with the next cluster.

### 4.3. Fast Track Process

An Interconnection Customer may request interconnection of a proposed Generating Facility to the CAISO Controlled Grid under the Fast Track Process if the Generating Facility is no larger than 5 MW; (2) is requesting Energy-Only Deliverability Status; and (3) meets the codes, standards, and certification requirements of Appendices 9 and 10 of the GIDAP.

In some cases, the proposed Generating Facility may qualify for the Fast Track Process even if the facility has not passed the screens set out in Appendices 9 and 10, but the applicable

<sup>8</sup> GIDAP Section 3.3.1.

Participating TO and CAISO have reviewed the design for or tested the proposed Small Generating Facility and determined that it may interconnect consistent with Reliability Criteria and Good Utility Practice, despite not having passed the screens.

Alternatively, “Behind-the-Meter” capacity additions meeting the criteria in GIDAP Section 5 may also proceed under the Fast Track process.

#### 4.4. 10 kW Inverter Process

As stated above, the Fast Track Process track includes the 10 kW Inverter Process track. The 10 kW Inverter Process is available only for inverter-based Small Generating Facilities no larger than 10 kW that meet the codes, standards, and certification requirements of Appendices 9 and 10 of the GIDAP, or if the Participating TO has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

#### 4.5. Additional Deliverability Assessment Options

An eligible Generating Facility, including Energy Only projects, will have an opportunity to obtain deliverability following the TP Deliverability Allocation process described in GIDAP Section 8.9.2 and GIDAP BPM Section 6.2.9.

##### 4.5.1. Participating TO Tariff Option for Full Capacity Deliverability Status

To the extent that a Participating TO’s tariff provides the option for customers taking interconnection service under the Participating TO’s tariff to obtain Full Capacity Deliverability Status or Partial Capacity Deliverability Status, the CAISO will, in coordination with the applicable Participating TO, perform the necessary Deliverability Assessment to determine the Deliverability of customers electing such option. The CAISO shall execute any necessary agreements for reimbursement of study costs it incurs and to assure cost attribution for any Network Upgrades relating to any Deliverability status conferred to such customers under the Participating TO’s tariff.

##### 4.5.2. Deliverability from Non-Participating TOs

This process applies to Generating Facilities that interconnect to the transmission facilities of a Non-Participating TO located within the CAISO Balancing Authority Area that wish to obtain Full Capacity Deliverability Status or Partial Capacity Deliverability Status under the CAISO Tariff. Such Generating Facilities will be eligible to be studied by the CAISO for Full or Partial Capacity Deliverability Status pursuant to the provisions in GIDAP BPM Section 6.6.

### 5. Interconnection Requests

#### 5.1. Submission of Interconnection Requests

Electronic submission is the preferred method for Interconnection Customer to submit Interconnection Requests to the CAISO. Section 6.1 of the [RIMS5 User Guide](#) outlines this process. Following is a link to the presentation materials shown at the Webex training on electronic submission held March 31, 2016: [http://www.caiso.com/Documents/Presentation-ResourceInterconnectionManagementSystemTrainingMar31\\_2016.pdf](http://www.caiso.com/Documents/Presentation-ResourceInterconnectionManagementSystemTrainingMar31_2016.pdf).

All new Interconnection Requests submitted starting on April 1, regardless of submission method, must utilize the current [Interconnection Request Form](#) posted on the CAISO website, or in Appendix 1 to Appendix DD to the CAISO tariff.

The Interconnection Customer shall submit a separate Interconnection Request for each site (but 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 requiring two deposits.

### **Surplus Interconnection Service<sup>9</sup>**

In the event an Interconnection Customer is not studied for the transfer of Surplus Interconnection Service as a modification under Section 6.7.2 of the 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 GIDAP Section 4.2. The Independent Study Process for Surplus Interconnection Service will identify any additional Interconnection Facilities and/or Network Upgrades necessary.

## **5.2. Selecting a Project Name**

Dispatchers and operations personnel must be able to identify and easily communicate with each other regarding generators. Being forced to clarify “which Blythe?” or “is it GENX47H or GEN47XH?” could waste valuable time during a contingency event. As such, all project names provided in an Interconnection Request will be reviewed for compliance with the Project and Resource Naming Convention Guidelines provided below in section 5.2.1. These guidelines are intended to avoid naming issues early in the interconnection process. Projects may be required to change names at any time subject to CAISO discretion.

The Project and Resource Naming Convention Guidelines are utilized both by the CAISO for projects interconnecting to the CAISO controlled grid and by the PTOs for Wholesale Distribution Access Tariff (WDAT) projects interconnecting to the PTO distribution systems. Any project name in the Interconnection Request that does not meet the project naming convention guidelines will result in the Interconnection Customer being required to change the project name, including WDAT projects that are coming into the CAISO New Resource Implementation process prior to synchronization.

The CAISO will not accept duplicate names for projects. The RIMS application will not accept duplicate project names and will require a unique project name for the successful submittal of the Interconnection Request or project request. It is important to use the same project name in the Interconnection Request form as was entered when initially registering for a New Request Registration Code in the RIMS Public user interface. The Interconnection Customer may refer to the CAISO website for a list of previously utilized names that cannot be duplicated at the following: <http://www.caiso.com/Documents/ProhibitedProjectNames.xlsx>. If a name is initially accepted by RIMS, and upon further review is found to be unacceptable according to the guidelines below in Section 5.2.1, the Interconnection Customer will be required to provide a proposed alternative name, or a list of proposed names, prior to the project scoping meeting. The proposed alternative name(s) will be discussed at the scoping meeting. For those project requests that occur outside of the Interconnection Request process, the Interconnection Customer should work directly with their designated CAISO contact to determine an appropriate alternative name.

<sup>9</sup> GIDAP Section 3.4.

If the Interconnection Customer needs additional assistance with selecting a project name, they may send a name or list of possible project names to the CAISO to verify prior to submitting their Interconnection Request. However, project names are not reserved until the Interconnection Request is submitted in RIMS. As part of the Interconnection Request review and validation process, the CAISO will verify if each name complies with the Project and Resource Naming Convention Guidelines, has not already been utilized, or is not similar to a currently used name. The CAISO may provide the Interconnection Customer with a recommendation if the proposed name is unacceptable. Requests for review of a proposed project name may be sent to [IRinfo@caiso.com](mailto:IRinfo@caiso.com) with “Request for Name Review” in the subject line.

### 5.2.1. Project and Resource Naming Convention Guidelines:

Unacceptable Naming Configurations:	Examples of Unacceptable Names:	Examples Acceptable Names:
Maximum use of 30 (thirty) characters, including spaces		
No company types (i.e., LLC, Inc.)	Jefferson Corporation Solar; Jefferson Inc. Solar	Jefferson Solar
Repeated names with different unit numbers for a series of units is allowed, but only for a single entity at the same location (e.g. Blythe 1, Blythe 2, and so on).	No Blythe 1 and Blythe 2 owned by one entity at one location and Blythe 3 and Blythe 4 owned by a different entity or at another location.	If owned by a single entity Blythe 1, Blythe 2, Blythe 3, etc. is allowed.
No duplications of one or more words over four iterations, even at the same location and owned by the same entity.		Blythe Gas Unit, Blythe Solar, Blythe Wind, Blythe South are allowed. <ul style="list-style-type: none"> <li>Note: In this example “Blythe” in any new project name constituting a fifth similar name would not be allowed.</li> </ul>
No re-use of project names once in CAISO systems (once used by another project)	Any single name or similar pronounced name can only be used once. (e.g. Right cannot be used if Wright is already used)	Each name must be unique and distinguishable from each other when spoken by operators.
No use of the words “ <b>Project</b> ”, “ <b>Generating</b> ”, “ <b>Facility</b> ”, “ <b>*Phase</b> ”, “ <b>**Expansion</b> ”, “ <b>Farm</b> ”, “ <b>Station</b> ”	Canal Creek Power Plant Project	Canal Creek Power Plant
*No use of the word “ <b>Phase</b> ” (numbers only); however, when numbers are used for units it must be for the same project / owner	Canal Creek Power Plant Phase 1	Canal Creek Power Plant 1
**No use of the word “ <b>Expansion</b> ” unless used in an incoming Interconnection Request for the	Canal Creek Power Plant Expansion	Canal Creek Power Plant 2



purpose of increasing MW to an existing resource		
No acronyms unless identifying technology (i.e., PV)	FRV Windwood Solar	Windwood Solar
No special characters	Canal Creek Power Plant #1	Canal Creek Power Plant 1
No abbreviations similar to those used by CAISO (subject to CAISO discretion)	Canal Creek NQC California PTO Solar	
No conjoined words or words and numbers without spacing.	CanalCreekPowerPlant1 or Canal Creek Power Plant1	Canal Creek Power Plant 1
Names cannot begin with numbers	3 Solar	Solar 3
Numbers cannot be spelled out	Canyon Solar Three	Canyon Solar 3
No Roman numerals	Canal Creek Power Plant I; Canal Creek Power Plant II	Canal Creek Power Plant 1; Canal Creek Power Plant 2
The use of no more than two digits for any number, regardless of the reason for the number.	California Solar 100	California Solar 90
No megawatt values (MW)	Canal Creek Power Plant 20MW	Canal Creek Power Plant
No use of "Cluster number; C1"	Canal Creek Power Plant C3; Canal Creek Power Plant Cluster 3	Canal Creek Power Plant
No "license plate" configurations	HJK23RJ	Combinations of complete words and numbers of 2 digits or less.

### 5.3. Complete Interconnection Request Requirement<sup>10</sup>

An Interconnection Customer wishing to connect a new Generating Facility to the CAISO Controlled Grid, or to increase the capacity of an existing Generating Facility connected to the CAISO Controlled Grid, is required to submit to the CAISO a complete Interconnection Request, or for the 10 kW Inverter Process, the Interconnection Request is required to go to the applicable Participating TO.

A complete Interconnection Request submitted to the CAISO consists of the following:

- Interconnection Study Deposit;
- Completed application in the form of GIDAP Appendix 1; and
- Demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit.

<sup>10</sup> GIDAP Section 3.5.



Interconnection Request submitted during the Cluster Application Window for a cluster study (or at the time of submission for the Independent Study Process), must include each of the following items to be deemed a complete Interconnection Request submission:

- (i) An Interconnection Study Deposit of \$150,000.
- (ii) A completed application in the form of Appendix 1, including requested Deliverability status, requested study process (either Queue Cluster or Independent Study Process), preferred Point of Interconnection and voltage level, and all other required technical data, including all data requested in Attachment A to Appendix 1 in Excel format.
- (iii) Demonstration of Site Exclusivity or, for Interconnection Requests in a Queue Cluster, a posting of a Site Exclusivity Deposit of \$100,000 for a Small Generating Facility or \$250,000 for a Large Generating Facility. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Generating Facility or increase in capacity of the existing Generating Facility.
- (iv) A load flow model in GE PSLF format only.
- (v) A dynamic data file in GE PSLF format only.
- (vi) A reactive power capability document.
- (vii) A site drawing.
- (viii) A single-line diagram.
- (ix) A flat run plot and a bump test plot from the positive sequence transient stability simulation application.
- (x) A plot showing the requested MW at the Point of Interconnection from the GE PSLF load flow model.

Additionally, an executed Generator Interconnection Study Process Agreement (GISPA) for Queue Clusters, and the Secretary of State Certification for the Interconnection Customer and proof that the signatory is an authorized representative of the Interconnection Customer (see Section 5.3.1).

If any of the above items are not provided in the package submitted with the Interconnection Request by the close of the Cluster Application Window on April 15<sup>th</sup> (or the following Business Day if April 15<sup>th</sup> falls on a non-Business Day) for a cluster study, the Interconnection Request will

be deemed incomplete and will not be included in that year's Queue Cluster. Interconnection Requests under the Independent Study and Fast Track Processes must submit the same package of items above to be eligible for review. As noted below, it is highly encouraged that Interconnection Customers submit their entire Interconnection Request packages complete in all respects at least five (5) Business Days before the close of the Cluster Application Window and not wait until the last day.

### 5.3.1. Generator Interconnection Study Process Agreement<sup>11</sup>

The Generator Interconnection Study Process Agreement (GISPA) for Queue Clusters is now submitted with the IR package along with the Secretary of State Certification for the Interconnection Customer and proof that the signatory is an authorized representative of the Interconnection Customer. By marking the applicable checkbox, signing and dating the Interconnection Request the GISPA is executed.

☒ ***Your electronic signature below indicates your agreement with the following statement: By typing my name in the following line and clicking on the submission box below, the Interconnection Customer identified above certifies that the information contained in this Interconnection Request and Generator Interconnection Study Process Agreement for Queue Clusters is true and correct to the best of your knowledge.***

### 5.3.2. Reviewing Interconnection Requests for Completeness

Upon receipt of an Interconnection Request and Study Deposit, the CAISO will conduct an initial review of the package submitted to determine whether the Interconnection Request is complete. This review will verify that the Interconnection Request package includes all required information, that each subcomponent is filled out in its entirety (see examples in Section 5.3 of this BPM), and that the information provided is specific to the generating facility listed on the Interconnection Request. The CAISO will conduct the completeness review of the Interconnection Request package and notify Interconnection Customers whether their Interconnection Request package was deemed complete within five (5) Business Days from the date the Interconnection Request was submitted.

Interconnection Customers that submit Interconnection Requests more than five (5) Business Days before the close of the Cluster Application Window will receive an initial review and notification whether the Interconnection Request package is complete. If the submission is not complete, the Interconnection Customer will have until April 15 to cure its omission by providing the missing information. Interconnection Customers that submit interconnection requests during the last five (5) Business Days of the window may only discover after the window has closed that their request was incomplete and will be excluded from that year's cluster study.

<sup>11</sup> GIDAP Section 6.1.1.

To the extent the CAISO and Participating TO cannot meet the five (5) business-day response timeline for Interconnection Requests submitted or corrected over five (5) Business Days before April 15, the Interconnection Customer will receive a day-for-day extension on its April 15 completion deadline. Interconnection Customers that submit or correct their Interconnection Requests within five (5) Business Days of April 15 may not receive a notification by April 15 and will receive no extension, and must have submitted a complete Interconnection Request by the April 15 window closing to proceed.

The review of Interconnection Requests for completeness is distinct from the technical validation, described in GIDAP Section 3.5.2 and Section 5.6 of this BPM, as the completeness review does not entail a technical review of the data and models provided. Interconnection Requests that have been deemed complete will continue on to the technical validation of data described in GIDAP Section 3.5.2 and Section 5.6 of this BPM.

#### 5.3.2.1. Examples of Incomplete Interconnection Requests

Examples where an Interconnection Request will be deemed incomplete and not accepted by the CAISO, without an opportunity to cure, include but are not limited to the following:

- The Interconnection Customer attempts to tender funds for the Interconnection Study Deposit or Site Exclusivity Deposit for CAISO receipt after the close of the Cluster Application Window;
- The Interconnection Customer tenders a financial instrument during the Cluster Application Window which is rejected for insufficient funds when the CAISO attempts to cash it, or the Interconnection Customer tenders deposit amounts that are less than the actual amounts due;
- The Interconnection Customer submits an incomplete application by omitting some portion of the required technical data;
- The Interconnection Customer submits Attachment A to Appendix 1 without providing responses to the items in the “Customer Confirmation” column in the Customer Confirmation and Validation Checklist in tab V of the Attachment A to Appendix 1 spreadsheet; and
- An Interconnection Customer submits documents that do not match the Generating Facility described on the Interconnection Request form.

## 5.4. Interconnection Study Deposit

### 5.4.1.1. Cluster and Independent Study Deposits

With the exceptions of the Fast Track Process and the 10kW Inverter Process, the required Interconnection Study Deposit is \$150,000, regardless of project size.

#### **5.4.1.2. Fast Track Study Deposit**

A non-refundable processing fee of \$500 is required by the CAISO for the Fast Track Process.

#### **5.4.1.3. 10 kW Inverter Study Deposit**

A non-refundable processing fee of \$100 is required by the appropriate Participating TO for the 10kW Inverter Process application.

#### **5.4.1.4. Use of Interconnection Study Deposit**

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

#### **5.4.1.5. Obligation for Study Costs**

The Interconnection Study Deposit is applied against actual study costs. The Interconnection Customer is obligated to pay actual costs exceeding the Interconnection Study Deposit.

Where an Interconnection Study is performed by means of a Group Study, the cost of the Group Study is charged pro rata (by the number of projects being studied as opposed to MW size, technology, or other criterion) to each Interconnection Request assigned to the Group Study. The cost of Interconnection Studies performed for an individual Interconnection Request, not part of a Group Study, is charged solely to the Interconnection Customer that submitted the Interconnection Request.

The actual costs of each reassessment, as set forth in GIDAP Section 7.4, will be divided and allocated equally amongst the following Interconnection Customers:

- (1) Interconnection Customers whose Generating Facilities are being studied in the applicable reassessment for purposes of utilizing the Generator Downsizing Process set forth in GIDAP Section 7.5;
- (2) Interconnection Customers whose Generating Facilities' Phase II Interconnection Studies were completed in the most recent Interconnection Study Cycle prior to the applicable reassessment;
- (3) Interconnection Customers whose Generating Facilities are parked pursuant to this GIDAP at the time of the applicable reassessment process; and

(4) Interconnection Customers with Interconnection Requests for Generating Facilities in Queue Clusters for whose Interconnection Studies the results of the applicable annual reassessment process will be used to establish the Base Case.

An Interconnection Customer will be allocated a single share of the actual costs of the reassessment per Generating Facility in these four categories, even if a Generating Facility falls within more than one of these categories.

#### **5.4.1.6. Study Invoicing and Refunds of any Study Deposit Balance**

In general, the Interconnection Customer will receive invoices from the CAISO that list study expenses incurred and corresponding amounts due. The amounts due are offset against the customer's study deposit. If the amounts owed exceed the amounts on deposit, the invoice directs the customer to pay the amount required over the deposit. The CAISO and Participating TOs have established a seventy-five (75) calendar day period for the Participating TO to provide invoices to the CAISO following:

- the completion of all scoping meetings for a cluster or ISP project
- the completion of all Phase I results meetings for a cluster or a System Impact and Facilities Study for an ISP project
- the completion of all Phase II results meetings for a cluster project
- the completion of the Fast Track process
- for an individual project upon withdrawal

The Participating TO and any third parties performing work on the CAISO's behalf shall invoice the CAISO for such work, and the CAISO shall issue invoices for Interconnection Studies that shall include a detailed and itemized accounting of the cost of each Interconnection Study. The CAISO draws from the Interconnection Study Deposit any undisputed costs by the Interconnection Customer within thirty (30) calendar days of issuance of an invoice. Whenever the actual cost of performing the Interconnection Studies exceeds the Interconnection Study Deposit, the Interconnection Customer pays the undisputed difference in accordance with the CAISO issued invoice within thirty (30) calendar days. The CAISO is not obligated to continue to have any studies conducted unless the Interconnection Customer has paid all undisputed amounts. If an Interconnection Study, or portions of a study normally performed by the Participating TO, are performed by an authorized third party vendor instead, study costs shall include the costs of those activities performed by the Participating TO to adequately review or validate that Interconnection Study or portions performed by the third party.

Following Interconnection Customer, CAISO, and Participating TO execution of the GIA (or, if an unexecuted GIA was filed with FERC, after FERC issues an order accepting the GIA), the CAISO will refund the unused balance of the Interconnection Study Deposit to the Interconnection Customer. The CAISO will also include any interest earned at the rate provided for in the interest-bearing account from the date of deposit (for any funds returned after withdrawal, the interest runs from the date of deposit to the date of withdrawal). The returned portion is the sum that exceeds the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.

Depending on the timing of a withdrawal, the CAISO may also retain an additional amount of money over and above the costs incurred as described in Section 5.5.1 of this GIDAP BPM.

### 5.4.2. Completed Application (Appendix 1 of Appendix DD)

With the exception of the 10 kW Inverter Process, the completed application must be in the form of GIDAP Appendix 1 pursuant to CAISO Tariff Section 25.1, including requested deliverability status, study process (e.g., Queue Cluster, Independent, Fast Track), preferred Point of Interconnection, voltage level, and all other required technical data as listed in GIDAP Section 3.5.1. The CAISO will forward a copy of the Appendix 1 Interconnection Request to the applicable Participating TO within five (5) Business Days of receipt. The completed application for the 10 kW Inverter Process will be in the form of the application specified in GIDAP Appendix 7 and is to be submitted to the appropriate Participating TO.

The Interconnection Customer must submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. A site may consist of land that is not necessarily contiguous. 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.

An Interconnection Customer may transfer its Interconnection Request to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change. This means that a transfer of the Interconnection Request cannot be separated from a transfer of the Generating Facility, *i.e.*, the Interconnection Request transfer must be in concert with the transfer of the Generating Facility to the transferee.

It is important to note that an Interconnection Customer cannot “sell or transfer its queue position” independently of the sale and transfer of the project for which the Interconnection Request has been submitted. The CAISO considers such transfers to be void and the Interconnection Request is subject to being deemed withdrawn. Transferees of an Interconnection Request should not expect to be able to substitute a different proposed Generating Facility for the proposed Generating Facility that was described in the Application Form accompanying the Interconnection Request.

Should the transferee Interconnection Customer desire to modify the proposed Generating Facility as compared to the description in the Application Form, the CAISO will consider this to be a request for Modification under GIDAP Section 6.7.2 and GIDAP BPM Section 7.



### 5.4.3. Site Exclusivity or Site Exclusivity Deposit

The Interconnection Customer must demonstrate Site Exclusivity as a required part of its Interconnection Request package, or, in lieu of such demonstration, tender a cash-equivalent Site Exclusivity deposit. This Site Exclusivity Deposit is made in addition to, and separately from the Interconnection Study Deposit. The Site Exclusivity Deposit amount is \$100,000 for a Small Generating Facility ( $\leq 20\text{MW}$ ) and \$250,000 for a Large Generating Facility ( $> 20\text{MW}$ ).

An Interconnection Customer that submits an Interconnection Request to take part in the Independent Study Process or the Fast Track Process Interconnection Requests must demonstrate Site Exclusivity and does not have the option to submit a Site Exclusivity Deposit.

#### 5.4.3.1. General (What is Site Exclusivity?)

Site Exclusivity is defined in CAISO Tariff Appendix A as documentation reasonably demonstrating:

- For private land;
  - Ownership of, a leasehold interest in, or a right to develop property upon which the Generating Facility will be located consisting of a minimum of 50% of the acreage reasonably necessary to accommodate the Generating Facility; or
  - An option to purchase or acquire a leasehold interest in property upon which the Generating Facility will be located consisting of a minimum of 50% of the acreage reasonably necessary to accommodate the Generating Facility.
- For public land, including that controlled or managed by any federal, state or local agency, a final, non-appealable permit, license, or other right to use the property for the purpose of generating electric power and in acreage reasonably necessary to accommodate the Generating Facility, with exclusive right to use public land under the management of the federal Bureau of Land Management (BLM) shall be in a form specified by the BLM; and
- For the Fast Track Process, the required demonstration of Site Exclusivity is somewhat more liberal than the required showing in the definition above. For example, a party placing a small unit on a site may only need to show that it has a license to site the facility (which is revocable at the time). This situation may be acceptable where, for example, no upgrades were needed to site the unit, and the unit could be easily removed and relocated. For the Fast Track Process, such demonstration may include documentation reasonably demonstrating a right to



locate the Generating Facility on real estate or real property improvements owned, leased, or otherwise legally held by another. For example, depending on the circumstances, the CAISO might find a “license” to locate the generating facility on another’s property to be sufficient demonstration of Site Exclusivity under the Fast Track Process, even though a license is generally revocable by the licensor upon notice to the licensee. This is because, it is a common commercial practice for parties to enter into license agreements to site small personal property improvements, such as a small generating unit, a kiosk, or other rather easily removable items on the licensee’s property, even when they intend a long term relationship.

In contrast, if the Interconnection Customer offered a mere license for an Interconnection Request under the Cluster Study Process track or the Independent Study Process track, the CAISO would likely not accept the license as demonstration of Site Exclusivity because a license revocable at will, would not necessarily demonstrate a legal right to use the property “through the Commercial Operation Date” of the Generating Facility, and it is not common commercial practice to use a license instead of a lease or other long term instrument to use the land for a substantial facility. While the Generating Facility interconnected under the Fast Track Study Process, which holds only a license to locate on the site, may also run the risk that it will lose its site control, the risk is not so great as to signal non-viability of the project as would be the case for, say, a Large Generating Facility. Indeed, the “plug and play” aspect of a Small Generating Facility under the Fast Track Study Process may be such that the Interconnection Customer could remove the unit for relocation at a different site if the licensor revoked the license.

The Site Exclusivity Deposit serves as a placeholder to demonstrate project viability in the interim period until the Interconnection Customer acquires Site Exclusivity to site and operate the Generating Facility on the land. Accordingly, it is refundable upon the Interconnection Customer’s demonstration of Site Exclusivity (or returned upon withdrawal of an Interconnection Request).<sup>12</sup> Site Exclusivity Deposits will be deposited into an interest-bearing account. Any interest earned will be included in the Site Exclusivity deposit refund if and when valid Site Exclusivity documents are presented to and accepted by the CAISO.

The time period for which the Interconnection Customer must demonstrate Site Exclusivity is, at a minimum, through the Commercial Operation Date of the Generating

<sup>12</sup> GIDAP Section 3.5.1.3 [*Use of Site Exclusivity Deposit*] “The Site Exclusivity Deposit shall be refundable to the Interconnection Customer at any time upon demonstration of Site Exclusivity or the Interconnection Request is withdrawn . . . or deemed withdrawn.”

Facility.<sup>13</sup> The CAISO has at times received documents wherein the Interconnection Customer has demonstrated a legal right to use the property for construction and operation of the Generating Facility, though not for the period through the Commercial Operation Date, but under documents permitting the Interconnection Customer to renew (such as a lease term renewal or option to extend an option to purchase or lease).

In such cases the CAISO has informed the Interconnection Customer that it has *presently* established Site Exclusivity, and that the Interconnection Customer must periodically update the information to show the CAISO that the Interconnection Customer has continued to *maintain* Site Exclusivity under the tendered documents. For example, it is acceptable to have an option period which may be extended. In such a case, the Interconnection Customer will need to show, as the current option period is reaching an end, that the Interconnection Customer has secured an extension of the option.

When the Interconnection Customer presents an option as a means to demonstrate Site Exclusivity as part of the application package, the Interconnection Customer does not have to secure the option through the Commercial Operation Date of the Generating Facility at the onset of the Interconnection Request. However, if the option period were to end before the Interconnection Customer purchased the property, then the Interconnection Customer would lose the Site Exclusivity demonstration, unless the Interconnection Customer showed that some replacement agreement or present legal right to the property has been put in place as a substitute.

For example, the Interconnection Customer may need to demonstrate – when the time comes – that it has renewed the lease pursuant to the lease extension period or paid an additional option fee to hold open the option to purchase or lease the property. Accordingly, the CAISO has also informed such Interconnection Customers that, if they “fall out of contract,” they will have been considered to have lost their Site Exclusivity demonstration and then be required to provide a Site Exclusivity Deposit or provide new documentation showing a legal right to place the Generating Facility on the site.

#### 5.4.3.2. Projects Sited on BLM-Administered Federal Land

ISO Tariff Appendix A includes the following definition for “Site Exclusivity” for public land:

Documentation reasonably demonstrating:

- (2) For public land, including that controlled or managed by any federal, state, or local agency, a final, non-appealable permit, license, or other right to use the property for the purpose of generating electric power and in acreage reasonably necessary to accommodate the Generating Facility, which exclusive right to use public land under the management of the

<sup>13</sup> GIDAP Section 3.5.1(iii).

federal Bureau of Land Management shall be in a form specified by the Bureau of Land Management.

The GIDAP requires that the Interconnection Customer demonstrate proof of Site Exclusivity through the Generating Facility's proposed Commercial Operation Date or post a Site Exclusivity Deposit in lieu of Site Exclusivity.

Interconnection Customers may satisfy the Site Exclusivity requirement with respect to federal-owned land administered by the Bureau of Land Management (BLM) by meeting all three of Criteria A, B, and C, which are each discussed below with CAISO comments on the criteria.

- Criterion A: The Interconnection Customer has secured a temporary use permit (issued by the BLM) or has demonstrated that it is conducting testing/data gathering activities without need for such BLM permit by demonstrating that:
  - Subpart 1: The Interconnection Customer has obtained and perfected (*i.e.*, by recording in Official Records of the appropriate county) a right-of-way (ROW) or lease that authorizes the Interconnection Customer/BLM Applicant to place power generation testing facilities on the property; or

**CAISO Comment:** *The BLM has explained that, wind energy developers may avail themselves of two types of ROW Grants for testing and monitoring.*

Type I ROW (ROW Grant for Site Specific Wind Energy Testing and Monitoring Facilities) provides authorization for placement of individual anemometers and/or meteorological towers, and that the grant pertains to a land area which is minimally necessary for construction and operation of the temporary facility. The ROW grant is permitted for a period of three years in length, subject to certain renewal rights if, by the end of the three years, the grantee has filed a Type III ROW application, (Type III ROW Grant for Commercial Wind Energy Development Facilities, which is an application for a long term-right of way to site the facility.) and has prepared a the Plan of Development (POD).

Type II ROW (ROW Grant for a Wind Energy Site Testing and Monitoring Project Area). This ROW grant authorizes placement of anemometers and/or meteorological towers over a land that includes the proposed project area. The ROW grant precludes applications from other wind energy developers during the term. This ROW grant also provides for a three-year term, with the opportunity to extend at the end of the three years, if the grantee has filed a Type III ROW application and prepared a POD.

*BLM extends to solar developers the option to submit an application for a lease for testing activity. Such leases have a term of three years.*

*In general, the CAISO would require the Interconnection Customer to maintain the permit through the period of time in which the customer receives a permanent permit, unless the Interconnection Customer demonstrates to the satisfaction of the CAISO that the temporary use permit is not needed.*

Or, alternatively

- Subpart 2: The Interconnection Customer has provided adequate demonstration that it is conducting (or has already conducted) the preliminary data gathering activities, without the need for a temporary permit.

**CAISO Comment:** *For example, the Interconnection Customer may demonstrate that it did not seek a temporary permit because the permit is not legally or practically required to acquire test data. The following are (non-exclusive) examples of why a permit might not be needed: (1) because the Interconnection Customer can enter the site and conduct testing without the permit; (2) because the customer can install the testing data on a nearby property that is not BLM land; or (3) because the test data is being obtained by other means than on-site testing, such as by use of National Renewable Energy Laboratory (NREL) isolation maps, which a solar customer may use in preliminary investigations and which the customer has found to be sufficient.*

*Note, that in these examples, the customer is either engaged in ongoing activities that show active preliminary data gathering, or the customer is explaining that it already has gathered all of the preliminary data that it needs. In contrast, a statement by the customer that it has not yet gathered preliminary data or engaged in current activities, but will have to do this at some future time signals that the customer has not satisfied Criterion A, that its land acquisition efforts for the public land are too preliminary, and that it is appropriate for the customer to provide the \$250,000 Site Exclusivity Deposit.*

- Criterion B: The Interconnection Customer is undertaking significant additional activity to prosecute the long-term permit to site the Generating Facility, as demonstrated by a showing of all of the following:
  - Interconnection Customer has applied for a long-term BLM ROW or lease for authorization to construct, operate, and maintain a commercial power generation facility on the project site;

- The Interconnection Customer has submitted and the BLM has reviewed the Interconnection Customer's Plan of Development based on the latest applicable guidelines, the BLM has accepted the Interconnection Customer's application and the BLM has assigned a case number to the application; and
- The Interconnection Customer has entered into a pro forma Cost Recovery Agreement with the BLM (*i.e.*, an agreement whereby permit applicant agrees to fund the cost of an environmental review process), and, additionally, the Interconnection Customer has advanced to the BLM the cost recovery funds that the Interconnection Customer is required to pay under the Cost Recovery Agreement.

**CAISO Comment:** *In the alternative to making a showing to the CAISO as to each of these components of Criterion B, the Interconnection Customer can satisfy Criterion B by providing the CAISO with a copy of the Notice of Intent to Prepare an Environmental Impact Statement (NOI) issued by the BLM for the customer's application. The NOI is published in the Federal Register and begins the formal scoping process and serves as the official legal notice that the BLM, or when the BLM is the lead agency, the BLM and its cooperators, are commencing an Environmental Impact Statement (EIS).*

- Criterion C: The Interconnection Customer demonstrates that the BLM has issued no other pending BLM long-term Rights-of-Way/lease applications that are incompatible with or mutually exclusive of the applicant's long-term use of the project site. If the BLM has done so, and such pending BLM application(s) exist, then the Interconnection Customer must demonstrate that it was the first-in-time BLM applicant to have reached the milestones that satisfy the criteria listed above in this section.

**CAISO Comment:** *Criterion C is intended to avoid the situation where two competing Interconnection Customers are attempting to demonstrate Site Exclusivity to the CAISO for the same site, and these customers have inconsistent (*i.e.*, mutually exclusive) plans to use the BLM land which is the footprint for their generation facilities. The CAISO's intention here is not to resolve the inconsistency but rather to direct any second-in-line Interconnection Customer that it must provide the CAISO with a Site Exclusivity Deposit.*

*The potential for duplicate (mutually exclusive) applications could arise if the BLM were processing inconsistent or mutually exclusive applications/permits for two different technology developers (*i.e.*, wind and solar, solar and geothermal) or two developers of the same technology (*i.e.*, wind and wind; solar and solar).*

*The BLM has informed the CAISO that, in certain situations (for example, for the California Desert area), the BLM has received applications for ROWs from multiple developers, for different technology prime mover facilities (for example, a wind energy developer and a solar energy developer) for the same land. In those cases, both of the BLM applicants have submitted the requisite documents or performed the requisite actions described in Criteria A and B(a) and (b). Logically, the BLM would not undertake significant permitting activities if these two permits were inconsistent. The CAISO seeks to determine this explicitly.*

*In situations such as these, where the competing projects cannot both be sited on the same area of land, the Interconnection Customer who demonstrates that it is the first-in-time applicant to have satisfied Criteria A and B would be considered to have established Site Exclusivity. Other Interconnection Customers would be required to submit the Site Exclusivity Deposit.*

*To satisfy Criterion C, the Interconnection Customer will be required to warrant and represent to the CAISO that the customer has made inquiry to the BLM, and that the BLM has informed the customer that either no other applicant has made application for the same land area which is the subject of the customer's long-term ROW/lease application, or that there are other project applicants, but the BLM has informed the customer that those applications/project uses are not inconsistent with the customer's BLM application.*

#### **5.4.3.3. Criteria for Multiple Projects Sharing a Common Site**

Projects that share a common site must provide a layout showing how the projects will utilize the project site. The thresholds for Generating Facilities outlined in item 5.3.1.1 for parcels on private lands, or item 5.3.1.2 for projects sited on BLM land, must be met for each project.

#### **5.4.3.4. Use of Site Exclusivity Deposit<sup>14</sup>**

If the Interconnection Customer provides a Site Exclusivity Deposit in lieu of demonstrating proof of Site Exclusivity the CAISO holds the deposit in an interest-bearing account at a bank or financial institution designated by the CAISO until such time that the Interconnection Customer has demonstrated Site Exclusivity. Once the Interconnection Customer provides a satisfactory demonstration of proof of Site Exclusivity the ISO will return the Site Exclusivity Deposit to the Interconnection Customer with interest earned at the rate provided for in the interest bearing account. The latest point when an Interconnection Customer can utilize a deposit instead of Site Exclusivity is the milestone date for property acquisition stated in the Interconnection Customer's GIA. If the

<sup>14</sup> GIDAP Section 3.5.1.3.



Interconnection Customer does not acquire the site in sufficient acreage to locate the Generating Facility at that time, the Interconnection Customer will be in breach of its GIA and, if the breach is not cured, the GIA will be terminated resulting in the Interconnection Request being deemed withdrawn.

## 5.5. Proposed Commercial Operation Date<sup>15</sup>

The proposed Commercial Operation Date of the new Generating Facility or increase in capacity of the existing Generating Facility shall not exceed seven years from the date the Interconnection Request is received by the CAISO, unless the Interconnection Customer demonstrates, and the applicable Participating TO(s) and the CAISO agree, such agreement not to be unreasonably withheld, that engineering, permitting and construction of the new Generating Facility or increase in capacity of the existing Generating Facility, or the Upgrades needed to accommodate the Generating Facility or capacity increase will take longer than the seven-year period. The CAISO's current practice is to incorporate the time frame for completion of the transmission build-out when determining the Commercial Operation Date.

## 5.6. Interconnection Request Validation<sup>16</sup>

After the CAISO deems an Interconnection Request complete, the CAISO and Participating TO engineers will perform a second, in-depth review to ensure that all data provided in the Interconnection Request are "valid." On the latter of April 15, or when the CAISO notifies the Interconnection Customer that its request is complete, the CAISO and Participating TO will have ten (10) Business Days to determine whether the Interconnection Request contains deficiencies that would preclude its inclusion in the CAISO's Phase I Interconnection Studies. Deficiencies would include, for example, modeling errors, inaccurate or inconsistent data, and unusable files.

If an Interconnection Request has deficiencies, the CAISO will notify the Interconnection Customer and detail the deficiencies identified. When the Interconnection Customer provides the corrected information, the CAISO will re-review it within five (5) Business Days and notify the Interconnection Customer whether its Interconnection Request is valid or still contains deficiencies. If the Interconnection Request continues to be invalid, the CAISO will include in its notification the reasons for such failure. This process may repeat until June 30. If an Interconnection Request is not deemed valid by June 30, the Interconnection Request will be deemed invalid and will not be included in that year's interconnection study.

### 5.6.1. Day-for-Day Extensions to the June 30<sup>th</sup> Deadline

If the CAISO and PTO cannot meet the initial ten (10) Business Day validation deadline or a subsequent five (5) Business Day deadline for re-submissions, the Interconnection Customer

<sup>15</sup> GIDAP Section 3.5.1.4.

<sup>16</sup> GIDAP Section 3.5.2.

will receive a day-for-day extension on the June 30 deadline for validation. However, these day-for-day extensions will only apply to CAISO/PTO responses to Interconnection Customer deficiency cures that are submitted on or before May 31<sup>st</sup>. For instance, if an Interconnection Customer does not respond to the initial deficiency notice until after May 31, it will receive no extension beyond the June 30 deadline for validation.

## 5.7. Evaluation of Generator Reactive Capability

FERC issued an Order 827 on June 16, 2016 that requires all newly interconnecting non-synchronous generators, including wind generators, to provide dynamic reactive power within the range of 0.95 leading to 0.95 lagging at the high-side of the generator substation unless the transmission provider has established a different power factor range that applies to all non-synchronous generators in the transmission provider's control area on a comparable basis. These new non-synchronous generators are required to maintain a composite power delivery at continuous rated power output.

Non-synchronous generators may meet the dynamic reactive power requirement by utilizing a combination of the inherent dynamic reactive power capability of the inverter, dynamic reactive power devices (e.g., Static VAR Compensators), and static reactive power devices (e.g., capacitors) to make up for losses.

FERC accepted the CAISO compliance filing to implement this requirement. The requirement is applicable to:

- An existing asynchronous generating facility making upgrades to its generating units after September 21, 2016
- Asynchronous generating facilities submitting a written request to continue a re-study under Section 6.4 of Appendix U of the CAISO tariff on or after September 21, 2016
- An interconnection customer posts the Interconnection Financial Security for an asynchronous generating facility pursuant to Appendix DD of the CAISO tariff section 11.2.2 on or after September 21, 2016
- An interconnection customer that submits an interconnection request for an asynchronous generating facility under the Fast Track process on or after September 21, 2016

For synchronous generators the requirements did not change and the Generating Unit is required to maintain a composite power delivery at continuous rated power output at the terminals of the Electric Generating Unit at a power factor within the range of 0.95 leading to 0.90 lagging. Such requirement can be verified from the generator capability curve directly.

A white paper was published on February 25, 2019<sup>17</sup> focusing on the methodology to evaluate reactive capability of asynchronous generators and establishes a common approach for the CAISO and all Participating TOs to evaluate the reactive capability of newly interconnecting generators in the interconnection studies. The actual operational capability shall be verified when the generator achieves commercial operation and not addressed here.

The guidelines presented in the February 25, 2019 white paper are to ensure that all PTOs use a consistent approach when evaluating the reactive capabilities of new generation. PTOs may deviate from these procedures as long as the following general principles are followed:

1. If a generator can meet the power factor requirement under normal conditions but is deficient under extreme conditions, the IC can mitigate the deficiency by using an automated control scheme to derate the real power output of the generator in order to meet the reactive power requirement.
2. Generators that are capable of providing more reactive support than required are modeled in the studies providing only the required amount.

For details on the methodology that is applied to evaluate a generator's reactive capability in the generation interconnection studies, the white paper is available on the CAISO website.<sup>18</sup>

## 5.8. Transferability of Interconnection Request<sup>19</sup>

An Interconnection Customer may transfer its Interconnection Request to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change.

## 5.9. Withdrawals<sup>20</sup>

The Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to the CAISO, and the CAISO will notify the applicable Participating TO(s) and Affected System Operators, if any, within three (3) Business Days of receipt of such a notice. In addition, after confirmation by the CAISO of a valid Interconnection Request under GIDAP Section 3.5.2 and GIDAP BPM Section 5.3, if the Interconnection Customer fails to adhere to all requirements of the GIDAP, except as provided in GIDAP Section 15.5 or GIDAP BPM Section 15, the CAISO shall deem the Interconnection Request to be withdrawn.

<sup>17</sup> <http://www.caiso.com/Documents/EvaluateGeneratorReactiveCapability-WhitePaper.pdf>

<sup>18</sup> <http://www.caiso.com/Documents/EvaluateGeneratorReactiveCapability-WhitePaper.pdf>

<sup>19</sup> GIDAP Section 3.9.

<sup>20</sup> GIDAP Section 3.8.

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

Withdrawal results in the removal of the Interconnection Request from the Interconnection Study Cycle. If an Interconnection Customer disputes the withdrawal and removal from the Interconnection Study Cycle and has elected to pursue Dispute Resolution, the Interconnection Customer's Interconnection Request will not be considered in any ongoing Interconnection Study during the Dispute Resolution process. During the time that the dispute process is going on the request is essentially removed (*i.e.*, not considered). If the resolution is in favor of the Interconnection Customer, then the Interconnection Customer will again be considered (*i.e.*, re-inserted) in the study cycle.

In the event of such withdrawal, the CAISO, subject to the provisions of GIDAP Sections 3.5.1.1 and 15.1 and GIDAP BPM Sections 5.5.1 and 13, shall provide, at the Interconnection Customer's request, all information that the CAISO developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

### 5.9.1. Effect on Study Deposit due to Withdrawal<sup>21</sup>

Except for proposed Generating Facilities processed under the Fast Track Process set forth in GIDAP Section 5 and GIDAP BPM Section 6.4, the Interconnection Study Deposit is refundable as explained below. Note that, if the Interconnection Customer withdraws at any time later than thirty one (31) calendar days after the Scoping Meeting, then the GIDAP provides that the CAISO retains a portion of the study deposit over and above actual costs incurred in processing the Interconnection Request. This provision is intended to incent the Interconnection Customer to withdraw timely should it discover facts, for example in a Scoping Meeting, that signal to the Interconnection Customer that it should withdraw from the queue and wait for another Interconnection Study Cycle. If the Interconnection Customer waits to withdraw until the Phase I Interconnection Study Cycle has begun, then the withdrawal causes disruption to the study work to the detriment of other Interconnection Customers.

- (a) For withdrawal up to thirty (30) calendar days following the Scoping Meeting: Only actual costs are deducted from the Study Deposit. Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under GIDAP Section 3.8 and GIDAP BPM Section 5.5 on or before thirty (30) calendar days following the Scoping Meeting, the CAISO shall refund to the

<sup>21</sup> GIDAP Section 3.5.1.1.

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

(b) For withdrawal during the period between the 31<sup>st</sup> day after the Scoping Meeting, and 30 calendar days following the Phase I or System Impact Study Results Meeting: Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under GIDAP Section 3.8 and GIDAP BPM Section 5.5 more than thirty (30) calendar days after the Scoping Meeting, but on or before thirty (30) calendar days following the Results Meeting (or the latest date permitted under the GIDAP for a Results Meeting if an Interconnection Customer elects not to have a Results Meeting) for the Phase I Interconnection Study or the System Impact Study for Generating Facilities processed under the Independent Study Process, the CAISO shall refund to the Interconnection Customer the difference between:

- (i) the Interconnection Customer's Interconnection Study Deposit and
- (ii) the greater of the costs the CAISO and Participating TOs have incurred on the Interconnection Customer's behalf or one-half of the original Interconnection Study Deposit up to a maximum of \$100,000, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal.

(c) For withdrawal after the 30<sup>th</sup> day following the Phase I or System Impact Study Results Meeting: Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under GIDAP Section 3.8 or GIDAP BPM Section 5.5 at any time more than thirty (30) calendar days after the Results Meeting (or the latest date permitted under the GIDAP for a Results Meeting if an Interconnection Customer elects not to have a Results Meeting) for the Phase I Interconnection Study, or the Interconnection System Impact Study for proposed Generating Facilities processed under the Independent Study Process, the Interconnection Study Deposit shall be non-refundable.

If the Interconnection Customer does not withdraw, or is not deemed withdrawn, and proceeds to sign a GIA, then there is no forfeiture of an unused study deposit balance:

Following Interconnection Customer, CAISO, and Participating TO execution of the GIA (or, if an unexecuted GIA was filed with FERC, on after FERC issues an order accepting the GIA), the CAISO refunds the unused balance of the Interconnection Study Deposit to the Interconnection Customer. The CAISO will also include any interest earned at the rate provided for in the interest-bearing account from the date of deposit (for any funds returned after withdrawal, the interest runs from the date of deposit to the date of withdrawal). The returned portion is the sum that exceeds the costs the CAISO, Participating TOs, and third

parties have incurred on the Interconnection Customer's behalf. As indicated above, depending on the timing of a withdrawal, the CAISO may also retain an additional amount of money over and above the costs incurred.

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

Application of "forfeited funds": All non-refundable portions of the Interconnection Study Deposit that exceed the costs the CAISO, Participating TOs, or third parties have incurred on the Interconnection Customer's behalf are distributed in the same manner as the CAISO distributes collected penalties (under CAISO Tariff Section 37.9.4).

## 6. Study Tracks and Details

### 6.1. General (Applies across all Study Tracks)

#### 6.1.1. Detailed description of Network Upgrades

##### 6.1.1.1. Reliability Network Upgrades (RNUs)<sup>22</sup>

Reliability Network Upgrades are the transmission facilities at or beyond the Point of Interconnection identified in the Interconnection Studies as necessary to interconnect one or more Generating Facilities safely and reliably to the CAISO Controlled Grid, which would not have been necessary but for the interconnection of one or more Generating Facilities, including Network Upgrades necessary to remedy short circuit or stability problems, or thermal overloads.

Reliability Network Upgrades include Interconnection Reliability Network Upgrades and General Reliability Network Upgrades.

Interconnection Reliability Network Upgrades (IRNU) are 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.

<sup>22</sup> CAISO Tariff Appendix A, definition of Reliability Network Upgrades, General Reliability Network Upgrades, and Interconnection Reliability Network Upgrades.



Reliability Network Upgrades that are not Interconnection Reliability Network Upgrades are General Reliability Network Upgrades (GRNUs).

Reliability Network Upgrades shall only be deemed necessary for system operating limits, occurring under any system condition, which 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 WECC path's approved rating.

#### **6.1.1.2. Local Delivery Network Upgrades (LDNU)<sup>23</sup>**

Local Delivery Network Upgrades mean transmission upgrades or additions identified by the CAISO in the GIDAP interconnection study process to relieve a Local Deliverability Constraint.

A Local Deliverability Constraint is a transmission system operating limit modeled in the GIDAP study process that would be exceeded if the CAISO were to assign Full Capacity or Partial Capacity Deliverability Status to one or more additional Generating Facilities interconnecting to the CAISO controlled grid in a specific local area and that is not an Area Deliverability Constraint.

#### **6.1.1.3. Area Delivery Network Upgrades (ADNU)<sup>24</sup>**

Area Delivery Network Upgrades mean transmission upgrades or additions identified by the CAISO to relieve an Area Deliverability Constraint.

An Area Deliverability Constraint means a transmission system operating limit that would constrain the deliverability of a substantial number of generators if the CAISO were to assign Full Capacity or Partial Capacity Deliverability Status to additional Generating Facilities in one or more specified geographic or electrical areas of the CAISO Controlled Grid in a total amount that is greater than the TP Deliverability for those areas. The definition also states that an Area Deliverability Constraint may be a transmission system operating limit that constrains a quantity of generation in a local area of the grid that is larger than the generation amount identified in the applicable Transmission Planning Process portfolio for the entire portfolio area, or a transmission system operating limit that constrains all or most of the same generation already constrained by a previously identified area deliverability constraint.

#### **6.1.1.4. ADNU vs. LDNU**

Determination of ADNU vs. LDNU is based on the deliverability constraint the upgrade will relieve. First of all, a deliverability constraint is defined by the following:

<sup>23</sup> CAISO Tariff Appendix A, definition of Local Delivery Network Upgrade.

<sup>24</sup> CAISO Tariff Appendix A, definitions of Area Delivery Network Upgrade and Area Deliverability Constraint.

- Facilities that have operating limits exceeded
- Contingency condition
- Contributing generators - group of generators that has distribution factor or flow impact greater than 5%

A deliverability constraint is either local or area depending on the following factors:

- Number of the contributing generators<sup>25</sup>
- Total MW of the contributing generators
- Potential mitigation cost
- Renewable Base Portfolio MW

The following Area Deliverability Constraints have been identified in previous studies as constraining substantial number of generators<sup>26</sup> or a quantity of generation in a local area larger than the generation amount identified in the applicable Transmission Planning Process portfolio for the entire portfolio area:

- SCE South of Vincent transfer limit (north-to-south)
- Midway to Vincent or Whirlwind 500kV line flow limits (north-to-south or south-to-north)
- SCE South of Kramer transfer limit
- SCE Lugo 500/230kV transformer bank capacity
- Victorville – Lugo (Path 61) path flow limit
- SCE Eldorado area 500kV line flow limits
- SCE Lugo to Pisgah 230kV line flow limits
- SCE Valley to Serrano 500kV line flow limits
- SCE Valley to Devers 500kV line flow limits
- SCE Devers to Red Bluff to Colorado River 500kV line flow limits
- SCE Eldorado 500/230kV bank capacity
- SDG&E ECO-Miguel 500kV line flow limit
- SDG&E Miguel 500/230kV transformer bank capacity
- PG&E Midway – Gates – Los Banos 500kV line flow limits
- PG&E Los Banos – Telsa 500kV line flow limit
- PG&E Los Banos – Tracy 500kV line flow limit
- PG&E Gates 500/230kV transformer bank capacity

The general guideline is that a constraint is an Area Deliverability Constraint if one of the four criteria below is met:

- ADC-C1: A transmission system operating limit that constrains all or most of the same generation already constrained by a previously identified Area Deliverability Constraint listed above.
- ADC-C2: Both of the following are met:

<sup>25</sup> The generating units include both the existing resources and the new generation projects. Each existing resource with distinct resource ID assigned for participating in the CAISO market is counted as one generating unit and each new generation project with distinct generation interconnection queue position as one generating unit. For aggregated resources, the participating units (i.e. the parent resources) are counted.

<sup>26</sup> As defined by ADC-C2 below

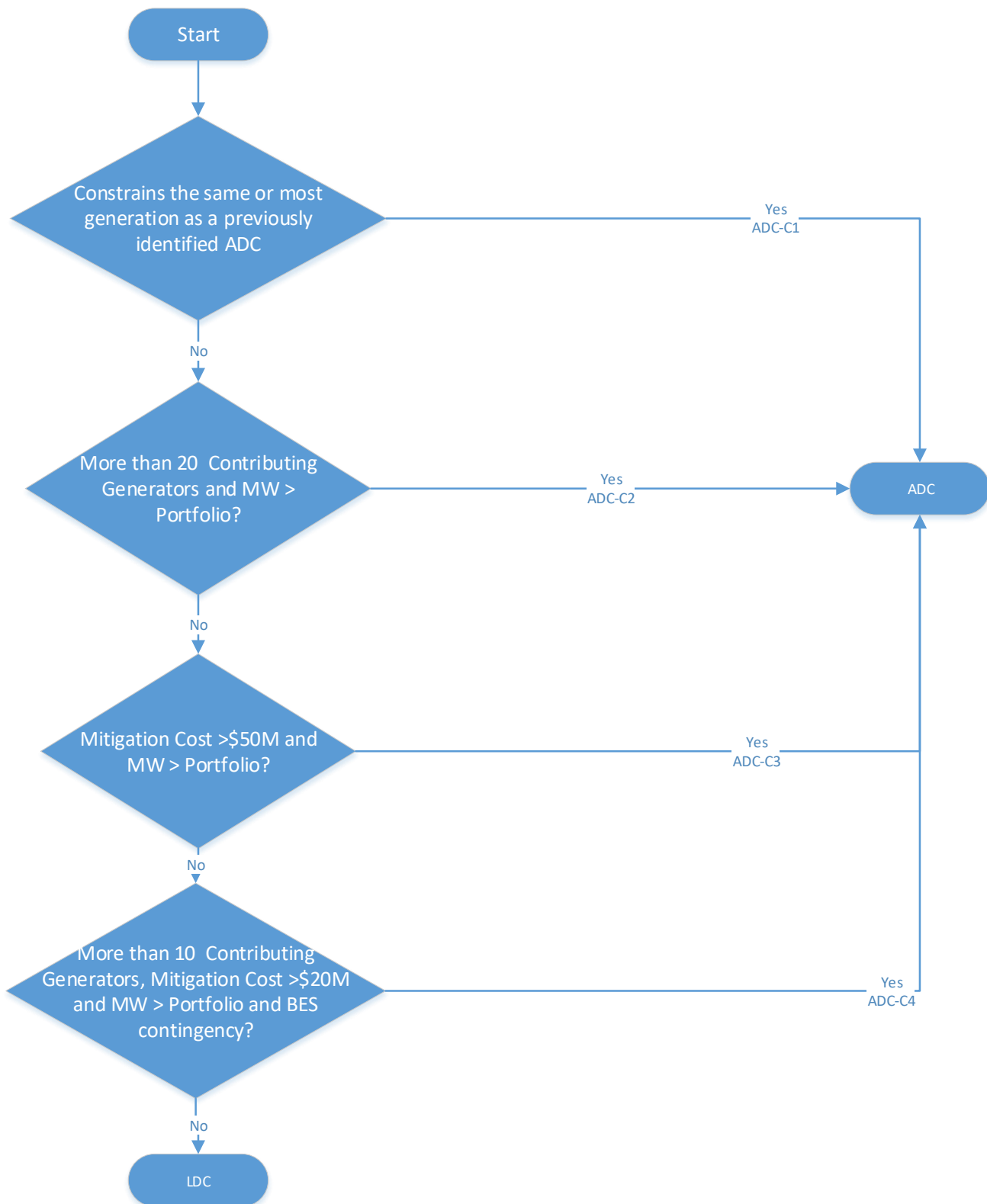
1. There are more than 20 generating units<sup>25</sup> contributing to the constraint, and the total MW amount of the new generators among the contributing buses in the renewable base portfolio.
  2. The total MW amount of the new generation contributing to the constraint exceeds the MW amount of the renewable base portfolio mapped within the 5% circle as defined in on-peak deliverability assessment methodology<sup>27</sup>.
- ADC-C3: Both of the following are met:
    1. The total MW amount of the new generation exceeds the MW amount of the current renewable base portfolio mapped within the 5% circle as defined in on-peak deliverability assessment methodology<sup>27</sup>;
    2. The mitigation would cost more than \$50M<sup>28</sup>.
  - ADC-C4: All of the following are met:
    - There are more than 10 generating units<sup>25</sup> contributing to the constraint.
    - The total MW amount of the new generation exceeds the MW amount of the renewable base portfolio mapped within the 5% circle as defined in on-peak deliverability assessment methodology<sup>27</sup>;
    - The constraint is caused by a contingency on the Bulk Electric System;
    - The mitigation would cost more than \$20M<sup>28</sup>.

The constraint is tested against the four criteria in the sequence shown above. If the criteria is met, the constraint is an area constraint and the test stops, as illustrated in the flow chart below.

The constraint is a Local Deliverability Constraint if it is not an Area Deliverability Constraint.

<sup>27</sup> <http://www.caiso.com/Documents/On-PeakDeliverabilityAssessmentMethodology.pdf>

<sup>28</sup> The mitigation cost includes escalation by the estimated construction duration; the cost estimate is from previous interconnection studies or based on per-unit cost guideline.



#### 6.1.1.5. Area Off-Peak Network Upgrades (AOPNUs)<sup>29</sup>

A transmission upgrade or addition the CAISO identifies in the Transmission Planning Process to relieve an Area Off-Peak Constraint.

An Area Off-Peak Constraint is a transmission system operating limit that would cause excessive curtailment to a substantial number of Generating Facilities during Off-Peak Load conditions, as described in Section 6.3.2.2 of Appendix DD and the CAISO Off-Peak Deliverability Assessment posted on the CAISO Website.

#### 6.1.1.6. Local Off-Peak Network Upgrades (LOPNUs)<sup>30</sup>

A transmission upgrade or addition the CAISO identifies in the generator interconnection study process to relieve a Local Off-Peak Constraint.

A Local Off-Peak Constraint is a transmission system operating limit modeled in the generator interconnection study process that would be exceeded or lead to excessive curtailment, as described in the Off-Peak Deliverability Assessment methodology, if the CAISO were to assign Off-Peak Deliverability Status to one or more Generating Facilities interconnecting to the CAISO Controlled Grid in a specific local area, and is not an Area Off-Peak Constraint.

#### 6.1.1.7. AOPNU vs. LOPNU

Determination of AOPNU vs. LOPNU is based on the off-peak constraint the upgrade will relieve. First of all, an off-peak constraint is defined by the following:

- Facilities that have operating limits exceeded
- Contingency condition
- Contributing generators - group of generators that has distribution factor greater than 5%

An off-peak constraint is either local or area depending on the following factors:

- Number of the contributing generators<sup>31</sup>
- Total MW of the contributing generators
- Potential congested energy
- Potential mitigation cost
- Renewable Base Portfolio MW

The general guideline is that a constraint is an Area Off-Peak Constraint if one of the four criteria below is met:

- AOPC-C1: The same transmission constraint has already been identified as an Area Deliverability Constraint in the on-peak deliverability assessment.

<sup>29</sup> CAISO Tariff Appendix A, definitions of Area Off-Peak Network Upgrade and Area Off-Peak Constraint.

<sup>30</sup> CAISO Tariff Appendix A, definitions of Local Off-Peak Network Upgrade and Local Off-Peak Constraint.

<sup>31</sup> The generating units include both the existing resources and the new generation projects. Each existing resource with a distinct resource ID assigned for participating in the CAISO market is counted as one generating unit and each new generation project with a distinct generation interconnection queue position is counted as one generating unit. For aggregated resources, the participating units (i.e. the parent resources) are counted as one generating unit.

- AOPC-C2: Both of the following are met:
  - There are more than 20<sup>31</sup> Location Constrained Resource Interconnection Generators (LCRIGs) contributing to the constraint. Based on the off-peak deliverability methodology, contributing LCRIGs must have the fuel source or source of energy substantially occur during off-peak conditions, such as wind and solar.
  - The total MW amount of the new generation contributing to the constraint exceeds the MW amount of the renewable base portfolio mapped within the 5% circle as defined in off-peak deliverability assessment methodology<sup>32</sup>.
- AOPC-C3: Both of the following are met:
  - The total MW amount of the new generation exceeds the MW amount of the renewable base portfolio mapped within the 5% circle as defined in off-peak deliverability assessment methodology<sup>32</sup>;
  - The mitigation would cost more than \$50M<sup>28</sup>.
- AOPC-C4: The cost of the mitigation exceeds estimated avoided curtailment cost.  
 The avoided curtailment cost is estimated from the incremental off-peak deliverability in the off-peak deliverability assessment. It is compared to the mitigation cost as described below.

Step 1. Determine the reduced output MW (MW1) from the contributing generators in order to mitigate the constraint.

Step 2. Determine deliverable output MW (MW2) with the transmission upgrade – MW2.

Step 3. The difference between MW1 and MW2 is the incremental deliverable MW in the studied snapshot.

Step 4. Estimate the annual energy produced by the contributing generators between output levels MW1 and MW2 when the system load is above 50% of the peak load.

The incremental deliverable MW varies under different system conditions and the resources may not be needed due to oversupply conditions under lighter load conditions. Historical data indicate that transmission related renewable curtailment typically occurs when the CAISO load is above 50% of the peak load.

Step 5. Estimate the potential curtailed energy due to the constraint by applying a discount factor to the annual energy in Step 4.

The incremental deliverable MW varies under different system conditions and tends to be smaller at higher load levels. This is estimated by the discount factor. The factor depends on the electrical connectivity of the gen-pocket and the load composition inside the pocket.

<sup>32</sup> <http://www.caiso.com/Documents/Off-PeakDeliverabilityAssessmentMethodology.pdf>



- Apply a factor of 0.75 for a pocket without any load and radially connected to the rest of the system.
- Apply a factor of 0.5 or lower for a pocket in a high load study area (i.e. the peak load in the study area exceeds the capacity of the LCRIGs).
- Apply a factor between 0.5 and 0.75 for a pocket in a low load study area (i.e. the peak load in the study area is less than the capacity of the LCRIGs).

Step 6. Estimate the potential avoided curtailment cost by multiplying the potential curtailed energy and the energy cost. The energy cost is based on the public information provided by the CPUC or other California regulatory entity.

- For example, the solar PV energy cost was estimated to be \$30/MWh in the CPUC 2019-2020 Integrated Resource Planning Inputs and Assumptions.<sup>33</sup>

Step 7. Estimate the Net Present Value of the potential avoided curtailment cost assuming 40 years of transmission line lifetime and a 7% discount rate (real).

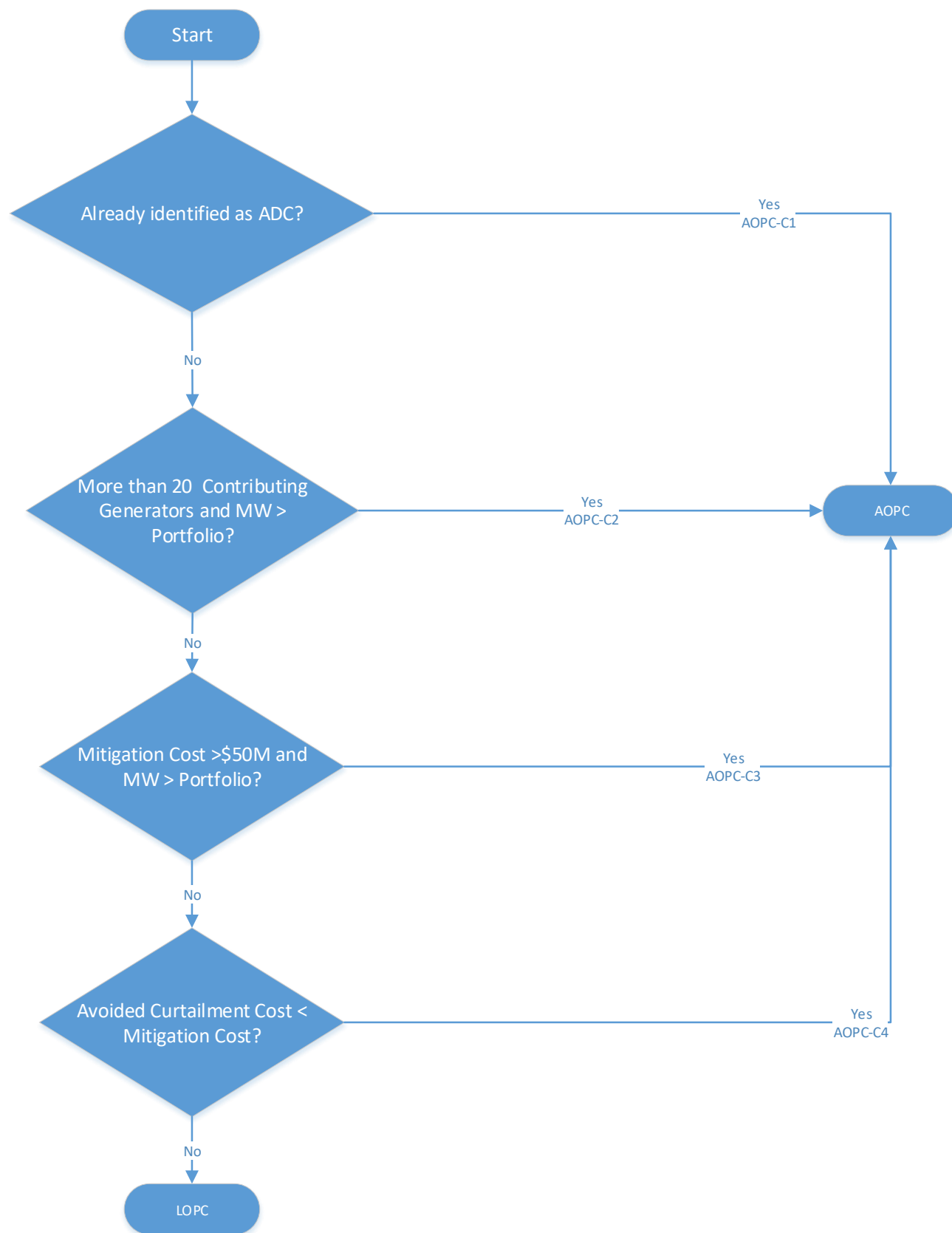
Step 8. Estimate the Net Present Value of the revenue requirement of the transmission upgrade from the capital cost of the mitigation<sup>28</sup>.

Step 9. If the revenue requirement of the mitigation in Step 8 is greater than the potential avoided curtailment cost in Step 7, the constraint is an Area Off-Peak Deliverability Assessment.

The constraint is tested against the four criteria in the sequence shown above. If the criteria is met, the constraint is an area constraint and the test stops, as illustrated in the flow chart below.

The constraint is a Local Off-Peak Constraint if it is not an Area Off-Peak Constraint.

<sup>33</sup><ftp://ftp.cpuc.ca.gov/energy/modeling/Inputs%20%20Assumptions%202019-2020%20CPUC%20IRP%202020-02-27.pdf>



### 6.1.2. Detailed Description of Interconnection Facilities

The Participating TO's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities (collectively referred to as Interconnection Facilities) includes all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the CAISO Controlled Grid. Interconnection Facilities are sole-use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

Regardless of whether a Generating Facility is an Option (A) Generating Facility, an Option (B) Generating Facility, or has Energy-Only Deliverability Status, the customer will be responsible without reimbursement for the costs of the Participating TO's Interconnection Facilities and all other facilities costs besides the costs of Network Upgrades discussed above.

### 6.1.3. Use of Per-Unit Costs to Estimate Network Upgrade Costs<sup>34</sup>

Under the direction of the CAISO, each Participating TO develops and provides to the CAISO per-unit Costs for facilities generally required to interconnect Generation to their respective systems, which are updated on an annual basis.

These per-unit costs will reflect the anticipated cost of procuring and installing such facilities during the current Interconnection Study Cycle, and may vary among Participating TOs and within a Participating TO Service Territory based on geographic and other cost input differences, and should include an annual adjustment for the following ten (10) years to account for the anticipated timing of procurement to accommodate a potential range of Commercial Operation Dates of Interconnection Requests in the Interconnection Study Cycle. The per-unit costs are used to develop the cost of Network Upgrades and Participating TO's Interconnection Facilities. Deviations from a Participating TO's benchmark per-unit costs will be permitted if a reasonable explanation for the deviation is provided in the study report and there is no undue discrimination.

Per-unit costs do not take into account site specific installation challenges, however, the per-unit cost guides utilize cost factor multipliers that increase the cost estimates for factors such as more difficult terrain, high population densities, economies of scale for varying line lengths, and for areas prone to more severe weather conditions.

Prior to adoption and publication of final per-unit costs for use in an Interconnection Study Cycle, the CAISO will post to the CAISO Website draft per-unit costs, including non-confidential information regarding the bases therefore, hold a stakeholder meeting to address the draft per-unit costs, and permit stakeholders to provide comments on the draft per-unit

<sup>34</sup> GIDAP Section 6.4.

costs. A schedule for the release and review of per-unit costs is set forth in GIDAP Appendix 5.

For access to the draft per-unit costs published by the CAISO, please go to the CAISO Website and select the following sequence of tabs:

1. Planning
2. Generator Interconnection
3. Generator interconnection application process

#### 6.1.4. Coordination with Affected Systems<sup>35</sup>

##### 6.1.4.1. Electric System Listing

The CAISO will maintain a listing of Potentially Affected Systems for each study area and will make this information publicly available on its website. The listing will contain contact information for Potentially Affected Systems and the CAISO will use this for notification purposes and for other purposes described in this BPM.

##### 6.1.4.2. Affected System Notification and Declaration

The CAISO will provide notice to Potentially Affected Systems at the beginning of the cluster or independent study process of each Interconnection Request that may impact their systems within a sufficient time period so that each Potentially Affected System operator has the opportunity to participate in Scoping Meetings and study Result Meetings to obtain a better understanding of each project. This notification will include timeline information from the CAISO's interconnection process, including possible study coordination dates during the CAISO's interconnection study process that would facilitate timely resolution of any Identified Affected System issues.

The CAISO will invite Potentially Affected System operators for each study area to all of the Scoping Meeting for that area. The Scoping Meeting for each Interconnection Request will take place within sixty (60) calendar days from the close of the Interconnection Request window. At the Scoping Meeting, participants will discuss the project details and schedule for both the applicable study and the project including the timing of Base Case and study results postings. If, following notice from the CAISO, a Potentially Affected System operator believes it will be impacted by the proposed interconnection, the CAISO will expect such operator to make every effort to conduct its interconnection studies in parallel with the CAISO's GIDAP process to facilitate a timely determination of upgrades that may be needed on the Identified Affected System to resolve any impact of the interconnection and avoid any delays in the project's timelines.

<sup>35</sup> GIDAP Sections 3.7.

The CAISO will share its study plans and Base Cases with Potentially Affected System operators as described further below. Potentially Affected System operators must enter into non-disclosure agreements with the CAISO to access Base Case and study plan data, and to participate in Scoping/Results Meetings. The CAISO will work with the Participating TOs and Potentially Affected System operators to facilitate the exchange of network models and other information needed for the Potentially Affected System operators to assess impacts on their systems and determine if they are an Affected System. The CAISO includes WDAT projects in its studies and within CAISO group reports and Base Cases.

The CAISO will invite all Potentially Affected System for each study area to all of the Phase I Study Results Meetings for that area. The Phase I Study Results Meetings for each Interconnection Request will take place within thirty (30) calendar days of providing the Phase I Study report to the Interconnection Customer. Interconnection Customers electing to move forward in the study process must post their initial Interconnection Financial Security within ninety (90) calendar days after issuance of their Phase I Interconnection Study Report, consistent with the CAISO Tariff. The CAISO will notify the applicable Potentially Affected System operators which project(s) have made their initial Interconnection Financial Security, and which projects did not and withdrew from the study process.

The CAISO will request that Potentially Affected System operators, within sixty (60) calendar days after receiving notice of which projects have posted their initial Interconnection Financial Security, advise the CAISO in writing that either: 1) the CAISO should consider the electric system to be an Identified Affected System (whether or not a system impact study has been conducted); or 2) the electric system is not an Affected System. If the Potentially Affected System operator does not make an affirmative representation within sixty (60) calendar days of the initial Interconnection Financial Security notification, the CAISO will assume that the electric system is not an Affected System. Affected Systems wishing to become Identified Affected Systems shall notify the CAISO. For each Interconnection Request, the CAISO shall establish a list of the Identified Affected Systems and shall provide the list and any revisions to the Interconnection Customer as soon as practicable.

Projects greater than or equal to 200 MW must comply with WECC Progress Report Policies and Procedures, regardless of whether any Potentially Affected System operators have identified themselves as Affected Systems. That WECC process is described at:

[http://www.wecc.biz/library/Documentation Categorization Files/Guidelines/Project Coordination and Path Rating Processes.pdf](http://www.wecc.biz/library/Documentation/Categorization%20Files/Guidelines/Project%20Coordination%20and%20Path%20Rating%20Processes.pdf). The CAISO, together with the PTOs, will facilitate and assist generator project sponsor efforts to comply with this reporting process

and to assess impacts on potentially affected WECC paths if concerns are identified by operators of other systems.<sup>36</sup>

The CAISO will notify Identified Affected System operators when individual and group Phase II Study results are available, and will invite them to attend each Phase II Study Results Meetings for each project they have identified that may impact their electric systems. The CAISO will list the Identified Affected Systems in the Phase II Interconnection Study Reports.

Once the GIA is executed, the list of Identified Affected Systems may be modified over time if (i) the CAISO failed to identify the Affected System initially; (ii) the interconnection Customer modifies its project such that an electric system becomes a Potentially Affected System; or (iii) the Interconnection Customer converts from a Wholesale Distribution Access Tariff to the CAISO Tariff and the same Affected Systems were not notified previously or the conversion was due to a system change. In these instances, the CAISO will coordinate with the Interconnection Customer and the Potentially Affected System to develop an expedited timeline to determine whether the Affected System is an Identified Affected System. Notification of such changes will be in accordance with the process identified in the GIA. The GIA will also direct the Interconnection Customer to affirmatively contact the Identified Affected System operators to address system impacts, if any. The CAISO will provide Interconnection Customer contact information to Identified Affected System operators and the CAISO will provide Identified Affected System operator contact information for the Interconnection Customer. Identified Affected System operators will be notified when study plans and Base Cases are posted on the CAISO secure website using the market participant portal. As discussed further below, the CAISO's Queue Management group is available to assist Interconnection Customers through the Affected System process.

If an electric system operator advises the CAISO that it is an Identified Affected System after the sixty (60) day notification period, the CAISO will not delay the synchronization or Commercial Operation of the generating facility for mitigation required by the Affected System unless the Affected System identifies, and the CAISO confirms, a legitimate reliability issue. The Affected System must provide the CAISO with a system analysis demonstrating the impact of the generator interconnection. Where a legitimate reliability issue is present, the CAISO will work with the Affected System and the Interconnection Customer to establish temporary mitigations, if possible, for the identified reliability issue.

#### **6.1.4.3. Study Process and Affected System Contact Documentation**

<sup>36</sup> If an Identified Affected System has concerns that the Accepted Rating of its WECC Path may be impacted, the scope of this Path impact path study must be included in the study agreements between the Identified Affected System and generation project sponsors potentially causing the impacts.



No later than six months prior to its generating unit's Initial Synchronization Date, an Interconnection Customer must provide documentation to the CAISO confirming that Identified Affected System operators have been contacted, that any system reliability impacts have been addressed (or that there are no system impacts), or that the Interconnection Customer has taken all reasonable steps to address potential reliability system impacts with the Identified Affected System operator but has been unsuccessful. The Identified Affected System list will be used in the CAISO's queue management process to check that the Interconnection Customer has contacted and worked with all Identified Affected System operators. The Interconnection Customer should be coordinating with the CAISO through its quarterly/monthly report via the following web address: [QueueManagement@caiso.com](mailto:QueueManagement@caiso.com) and raising any concerns so that they can be resolved, to avoid any delay in synchronization of the Generating Facility.

If the Interconnection Customer has been unsuccessful in resolving Identified Affected System issues at the time of the above demonstration, the documentation must provide sufficient details about all contacts and other attempts to work with the Identified Affected System and address system impacts. The CAISO will not allow generation projects to be energized on the CAISO controlled grid until Identified Affected System issues are resolved. If impacts cannot be mitigated within the CAISO controlled grid, the CAISO will advise the Interconnection Customer and the Identified Affected System operator that the interconnection cannot proceed. If an Interconnection Customer makes a unilateral decision that an affected system agreement is not necessary and does not reasonably attempt to address the issue with the Identified Affected System operator, the CAISO will advise the Interconnection Customer that the interconnection will not be allowed to move forward with synchronization and commercial operation unless the issue is resolved. However, if the Interconnection Customer's reasonable coordination efforts with the Identified Affected System operator do not result in the Identified Affected System operator moving forward on a timely basis, and the CAISO determines that possible impacts on the Identified Affected System can be mitigated within the CAISO Controlled Grid, the CAISO will advise the Identified Affected System operator and the Interconnection Customer that the interconnection can proceed without affirmative agreement by the Identified Affected System. If the Interconnection Customer and Identified Affected System disagree about the methodology used to determine the need for mitigation, upon request, the CAISO will confer with the parties in an attempt to resolve the differences.

If it becomes necessary for the CAISO and/or the relevant Participating TO to take actions related to infrastructure improvements within the CAISO controlled grid to mitigate possible impacts on an Identified Affected System as a result of the Identified Affected System operator not moving forward with the resolution of any such impacts on a timely and/or reasonable basis despite efforts by the Interconnection Customer, then the Interconnection Customer will be responsible for paying any costs attributable to the Interconnection Customer or the Participating TO, consistent with the CAISO Tariff.

To the extent that possible impacts on the Identified Affected System can be mitigated within the CAISO Controlled Grid without the need for infrastructure improvement, the CAISO will work with the Identified Affected System in advance of the Interconnection Customer's project being energized to develop operating procedures or take other necessary mitigation actions. Consistent with the CAISO Transmission Planning Process and operating procedures, the CAISO will continue to monitor the effectiveness of non-infrastructure solutions after the project is energized and coordinate with Affected Systems.

If requested by the Interconnection Customer or the Identified Affected System operator, the CAISO may review the reasonableness of the studies conducted and study results issued by the Identified Affected System operator. If the CAISO has concerns, the CAISO may review whether the Identified Affected System has used the information on the CAISO system that the CAISO provided to the Identified Affected System, and may make suggestions to the identified Affected System.

If requested by the Interconnection Customer or the Identified Affected System operator, the CAISO will review Affected System agreements, tendered to Interconnection Customers and made available to the CAISO, to determine whether they contain terms and conditions that could be problematic for the CAISO.

The CAISO will review other issues on a case-by-case basis, either upon the request of the Interconnection Customer or the Identified Affected System operator, or where the CAISO deems it appropriate including any reliability issues raised by Affected System operators identified outside the timeframes defined above.

### 6.1.5. CAISO Controlled Grid as an Affected System

#### 6.1.5.1. Notifying the CAISO and Affected Participating TO(s); Study Process

Once an Interconnection Customer has entered the neighboring system operator's interconnection process and if it appears that there could be reliability impacts on the CAISO Controlled Grid, the CAISO and affected Participating TO(s) should be notified by the neighboring system operator so that study data can be exchanged and studies coordinated.

In addition, Interconnection Customers in the neighboring system, once apprised of possible impacts on the CAISO or the interconnecting Participating TO, should take reasonable steps to contact the CAISO and affected Participating TO(s) and enter into a study agreement with the Participating TO to identify reliability system impacts. During the study process, the CAISO and Participating TO will seek to work with the neighboring system and coordinate study schedules with the neighboring systems, if practicable, to which the generation project seeks to interconnect to evaluate cost effective and efficient mitigation solutions for reliability impacts on the CAISO Controlled Grid. The CAISO will review and concur with impact studies prepared by the Participating TO. If requested by

the generation project owner or the neighboring system operator, the CAISO will review impact studies prepared by the neighboring system operator.

#### **6.1.5.2. Reimbursement for Reliability Mitigation Solutions on CAISO Controlled Grid**

Funding and reimbursement for Reliability Network Upgrades on the CAISO controlled grid will be in accordance with the applicable provisions of the CAISO Tariff regarding generator interconnection. The CAISO will use the applicable tariff reimbursement scheme for Reliability Network Upgrades to Participating TO systems in effect on the date on which the Interconnection Customer entered into a study agreement with the affected Participating TO.

#### **6.1.5.3. Facilities Construction Agreement**

If reliability system impacts and mitigation solutions are identified in the Participating TO study process, the Interconnection Customer must enter into the CAISO's facilities construction agreement, which is a three-party agreement involving the Interconnection Customer, the CAISO and the affected Participating TO. The CAISO will notify the neighboring system operator that a facilities construction agreement will be executed to address system impacts on the CAISO Controlled Grid and will share the agreement with the neighboring system operator, upon request, once it has been developed and executed.

Prior to synchronization, the neighboring system operator should verify that the CAISO and potentially impacted Participating TO(s) have been contacted and that steps have been taken to address any reliability system impacts.

## **6.2. Queue Cluster Study Process<sup>37</sup>**

The Queue Cluster Study Process track is the default process for processing Interconnection Requests (see GIDAP BPM Attachments 1 and 2). Unless it is demonstrated that an Interconnection Request qualifies for the Independent Study Process track (GIDAP Section 4), the Fast Track Process track (GIDAP Section 5), or the 10 kW Inverter Process (GIDAP Appendix 7), the Interconnection Request will be studied under the Queue Cluster Study Process track (GIDAP Sections 6 and 7).

For Interconnection Requests in a Queue Cluster, the Interconnection Studies consist of a Phase I Interconnection Study, a Phase II Interconnection Study, a TP Deliverability allocation and reassessment study, and an update to the Phase II Interconnection Study report to reflect the results of TP Deliverability allocation and reassessment for the Queue Cluster.

<sup>37</sup> GIDAP Sections 2.4.3 and 6.

### 6.2.1. [Not Used]

### 6.2.2. Scoping Meeting<sup>38</sup>

The CAISO shall establish a date agreeable to the Interconnection Customer and the applicable Participating TO(s) for the Scoping Meeting. All Scoping Meetings shall occur no later than June 30, unless otherwise mutually agreed upon by the Parties.

The CAISO shall endeavor to bring any Affected System into the communications regarding the Interconnection Studies. The CAISO shall evaluate whether the Interconnection Request is at or near the boundary of an affected Participating TO(s) service territory or of any other Affected System(s) so as to potentially affect such third parties, and, in such case, the CAISO shall invite the affected Participating TO(s), and/or Affected System Operator(s) in accordance with GIDAP Section 3.7 and GIDAP BPM Section 6.1.4, to the Scoping Meeting by informing such third parties of the time and place of the scheduled Scoping Meeting as soon as practicable.

The Scoping Meeting is a primary feedback mechanism available to the Interconnection Customer to provide general preliminary information regarding the Interconnection Request.

The purpose of the Scoping Meeting is to discuss items such as reasonable Commercial Operation Dates and alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection and eliminate alternatives given resources and available information.

Should the proposed Point of Interconnection be determined to be infeasible, the Interconnection Customer may explore alternative Points of Interconnection. The Interconnection Request requires the Interconnection Customer provide the address or location, including the county, of the proposed new Generating Facility site and the Interconnection Customer may explore alternative Points of Interconnection near the site proposed in the Interconnection Request, for example, within the same county, one transmission line, or one switchyard from the original. The applicable Participating TO(s) and the CAISO will bring to the meeting, as reasonably necessary to accomplish its purpose, the following: (a) such already available technical data, including, but not limited to, (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues, (b) general information regarding the number, location, and capacity of other Interconnection Requests in the Interconnection Study Cycle that may potentially form a Group Study with the Interconnection Customers Interconnection Request, and (c) the PTO Interconnection Handbook.

The Interconnection Customer is required to bring to the Scoping Meeting, in addition to the technical data in Attachment A to the GIDAP Appendix 1, any system studies previously

<sup>38</sup> GIDAP Section 6.1.2.

performed. Likewise, the applicable Participating TO(s), the CAISO and the Interconnection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting.

On the basis of the meeting, the Interconnection Customer shall designate its Point of Interconnection. The Interconnection Customer is required to confirm the Interconnection Request's Point of Interconnection within five (5) Business Days of the Scoping Meeting. The duration of the meeting shall be sufficient to accomplish its purpose.

The CAISO prepares draft minutes of the meeting, and provides the Interconnection Customer and the other attendees with an opportunity to confirm their accuracy before they are finalized. The minutes include, at a minimum, discussions among the applicable Participating TO(s) and the CAISO of the expected results and a good-faith estimate of the costs for the Phase I Interconnection Study. If, at the Scoping Meeting, the Interconnection Customer disagreed with the CAISO and/or Participating TO on some subject matter covered in the meeting, the CAISO will attempt to capture the disagreement in the minutes, and the Interconnection Customer will have the opportunity, when it reviews the draft minutes, to add to the discussion in the draft version minutes as a part of its opportunity to confirm the accuracy of the meeting minutes.

### 6.2.3. Grouping Interconnection Requests<sup>39</sup>

At the CAISO's option, and in coordination with the applicable Participating TO(s), Interconnection Requests received during the Cluster Application Windows may be either studied individually or in a Group Study for the purpose of conducting one or more of the analyses forming the Interconnection Studies. For each Interconnection Study within an Interconnection Study Cycle, the CAISO may develop one or more Group Studies. A Group Study will include, at the CAISO's sole judgment after coordination with the applicable Participating TO(s), Interconnection Requests that electrically affect one another with respect to the analysis being performed without regard to the nature of the underlying Interconnection Service.

Short circuit upgrades and looped substations generally comprise the majority of General Reliability Network Upgrade costs. Short circuit duty contribution is used to create groups for short circuit duty mitigation. Generating Facilities connecting to new substations are included in the group for allocation of the cost of the new substation. Generating Facilities are grouped together for Special Protection System analysis and mitigation based on its expected flow contribution to the identified constraint. Generating Facilities are grouped together for reactive support analysis based on geographic and electrical proximity. The CAISO may also, in its sole judgment after coordination with the applicable Participating TO(s), conduct an Interconnection Study for an Interconnection Request separately to the extent warranted by Good Utility Practice based upon the electrical remoteness of the

<sup>39</sup> GIDAP Section 6.1.3.

proposed Generating Facility from other Generating Facilities with Interconnection Requests in the Cluster Application Window for a particular year.

The fact that the CAISO included an Interconnection Request in a Group Study will not relieve the CAISO or Participating TO(s) from meeting the timelines for conducting the Phase I Interconnection Study provided in the GIDAP. Group Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable regional transmission expansion plan in light of the transmission system's capabilities at the time of each study.

In general, the business practice of the CAISO has been to identify study areas for purposes of creating Queue Cluster groups based upon the topography and electrical configuration of the CAISO Controlled Grid, such that Generating Facilities in the Queue Cluster that materially affect each other electrically are placed within a particular study area. The exact grouping is determined during the study.

## 6.2.4. Phase I Interconnection Studies

### 6.2.4.1. Scope and Purpose of Phase I Interconnection Studies<sup>40</sup>

The scope and purpose of the Phase I Interconnection Study is to:

- (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 the required Interconnection Facilities for each Interconnection Request;
- (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, MCR, and Maximum Cost Exposure 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

<sup>40</sup> GIDAP Section 6.2.



- (vii) provide a good faith 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 control requirement for each Interconnection Request where the Interconnection Customer requested Interconnection Service Capacity is lower than the Generating Facility Capacity. Additional requirements such as testing of control equipment if the net facility output exceeds the Interconnection Service Capacity can be found in the Section 14 of the Generator Management BPM.

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 for the purpose of identifying LDNUs and LOPNUs 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 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, 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.

#### 6.2.4.2. Roles and Responsibilities of Participating TO and CAISO

The GIDAP sets forth a pro forma contract between the CAISO and the applicable Participating TOs that clarifies the roles and responsibilities of the CAISO and Participating TOs with regard to Generator Interconnection Procedures and Interconnection Study Agreements.<sup>41</sup> This agreement is commonly referred to as the “Roles and Responsibilities Agreement.” The CAISO will assign responsibility for performance of portions of the Interconnection Studies to the relevant Participating TOs, under the direction and oversight of, and approval by, the CAISO, as set forth in the agreement. The agreement serves as a general overview of the roles and responsibilities as between the CAISO and Participating TOs, but does not include the process steps, involvement or obligations of the Interconnection Customer, or all procedures that are necessary to comply with all provisions of a GIA, the GIDAP, and Generator Interconnection Study Process Agreement for Queue Clusters.

#### 6.2.4.3. Deliverability Assessment<sup>42</sup>

For both the Phase I Interconnection Study and the Phase II Interconnection Study, the CAISO, in coordination with the applicable Participating TOs will conduct On-Peak Deliverability Assessments and Off-Peak Deliverability Assessments for Interconnection Customers selecting Full Capacity Deliverability Status or Partial Capacity Deliverability Status.

#### The On-Peak Deliverability Assessment

The On-Peak Deliverability Assessment shall determine the Interconnection Customer’s Generating Facility’s ability to deliver its energy to the CAISO Controlled Grid under peak load conditions, and identify preliminary Delivery Network Upgrades required to provide the Generating Facility with Full Capacity or Partial Capacity Deliverability Status. The methodology for the On-Peak Deliverability Assessment is published on the CAISO Website at <http://www.caiso.com/Documents/On-PeakDeliverabilityAssessmentMethodology.pdf>. The On-Peak Deliverability Assessment does not convey any right to deliver electricity to any specific customer or Delivery Point.

The On-Peak Deliverability Assessment will consist of two rounds, the first of which will identify any transmission constraints that limit the Deliverability of the Generating Facilities in the group study and will identify LDNUs to relieve the local constraints, and second of which will determine ADNUs to relieve the area constraints.

<sup>41</sup> GIDAP Appendix 4, at Attachment A.

<sup>42</sup> GIDAP Sections 6.3.2.1 and 6.3.2.2.

The first round of the Deliverability Assessment models all the generation projects requesting Full Capacity or Partial Capacity Deliverability Status in accordance with the On-Peak Deliverability Assessment Methodology. The transmission system operating limits identified during the assessment are divided into two categories: Local Deliverability Constraints and Area Deliverability Constraints.

Local Deliverability Constraints tend to have the following attributes:

- Generators whose deliverability is constrained by Local Deliverability Constraints (i.e., generators inside the 5% DFAX circle) are all located on a few buses electrically close to each other. Relieving these constraints does not trigger high-cost upgrades.

Area Deliverability Constraints tend to have the following attributes:

- Generators whose deliverability is constrained by Area Deliverability Constraints (i.e., generators inside the 5% DFAX circle) are spread over at least one and possibly more grid study areas or resource areas identified in a resource portfolio used in the Transmission Planning Process.
- In the first round of the Phase I Deliverability Assessment, relieving Area Deliverability Constraints may trigger high cost upgrades, driven by excessively large MW amounts of new generation electrically located behind the Area Deliverability Constraint.
- In some potential situations, the CAISO may classify a constraint as an Area Deliverability Constraint if it constrains the deliverability of generators electrically close to each other and is triggered by an exceptionally large volume of generation. This could occur, for example, when there is an exceptionally large volume of interconnection requests in a relatively smaller local sub-area within one of the resource development areas identified in the Transmission Planning Process portfolios and relieving the constraint requires expensive upgrades. This potential situation was raised as a concern by some stakeholders, and the CAISO determined that in such cases, if they occur, the appropriate remedy would be to reclassify the constraint as an area deliverability constraint based on the recognition that it would serve a substantial volume of generation projects within the study area.

In summary, the categorization of ADNU versus LDNU is based on the deliverability constraint that triggers the need of the DNU. With the exception of Special Protection System- mitigating deliverability constraints, ADNUs are transmission upgrades or additions to relieve Area Deliverability Constraints and LDNUs are to relieve Local Deliverability Constraints.

In the second round of the Deliverability Assessment, facilities necessary to provide the incremental deliverability between the level of TP Deliverability and an additional

amount are identified. In a Phase I Study, the additional amount represents a subset of the generator interconnection projects whose requested deliverability is supported by additional ADNU. In a Phase II Study, the additional amount represents the generator interconnection projects selecting Option (B).

### **Off-Peak Deliverability Assessment**

The CAISO, in coordination with the applicable Participating TO(s), shall perform an Off-Peak Deliverability Assessment to identify transmission upgrades in addition to those Delivery Network Upgrades identified in the On-Peak Deliverability Assessment, if any, for a Group Study or individual Interconnection Study that includes one or more Location Constrained Resource Interconnection Generators (LCRIG), where the fuel source or source of energy for the LCRIG substantially occurs during off-peak conditions. Interconnection Customers that are not LCRIGs whose fuel source or course of energy substantially occurs off-peak will not trigger Off-Peak Network Upgrades. LCRIGs whose fuel source or source of energy substantially occurs off-peak could trigger Local Off-Peak Network Upgrades if the Interconnection Customer selects Off-Peak Deliverability Status. LCRIGs could select Off-Peak Deliverability Status or Off-Peak Energy Only regardless of their On-Peak Deliverability Status.

The CAISO will perform the Off-Peak Deliverability Assessment to identify Off-Peak Network Upgrades required for Generating Facilities selecting Off-Peak Deliverability Status. The methodology for the Off-Peak Deliverability Assessment is published on the CAISO Website at <http://www.caiso.com/Documents/Off-PeakDeliverabilityAssessmentMethodology.pdf>. The transmission upgrades identified in the Off-Peak Deliverability Assessment shall comprise those needed for the expected output of each proposed new LCRIG or the amount of megawatt increase in the generating capacity of each existing LCRIG as listed by the Interconnection Customer in its Interconnection Request, whether studied individually or as a Group Study, to be deliverable to the aggregate of Load on the CAISO Controlled Grid under the Generation dispatch conditions studied without excessive curtailment. The estimated costs of Local Off-Peak Network Upgrades identified in the Off-Peak Deliverability Assessment will be assigned or conditionally assigned to LCRIG 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. Area Off-Peak Network Upgrades are for information only.

The Off-Peak Deliverability Assessment does not convey any right to deliver electricity to any specific customer or Delivery Point, nor guarantee any level of deliverability, or transmission capacity, or avoided curtailment.

#### 6.2.4.4. Phase I Interconnection Study Procedures<sup>43</sup>

The CAISO coordinates the Phase I Interconnection Study with applicable Participating TO(s) pursuant to GIDAP Section 3.2 and with any Affected System Operator whose system is affected by the Interconnection Request pursuant to GIDAP Section 3.7 or GIDAP BPM Section 6.1.4.

Existing studies shall be used to the extent practicable when conducting the Phase I Interconnection Study. The CAISO will coordinate Base Case development with the applicable Participating TOs to ensure the Base Cases are accurately developed. The CAISO shall use Reasonable Efforts to complete and issue to Interconnection Customers the Phase I Interconnection Study report within two hundred (200) calendar days after the commencement of the Phase I Interconnection Study for Queue Cluster 5 and within one hundred seventy (170) calendar days after the annual commencement of the Phase I Interconnection Study beginning with Queue Cluster 6; however, each individual study or Group Studies may be completed prior to this maximum time where practicable based on factors, including, but not limited to, the number of Interconnection Requests in the Cluster Application Window, study complexity, and reasonable availability of subcontractors as provided under GIDAP Section 15.2.

Note also that not all reports will come out on the same day and that some studies may be completed sooner than others. The CAISO will share applicable study results with the applicable Participating TO(s) for review and comment and will incorporate comments into the study report. The CAISO will issue a final Phase I Interconnection Study report to the Interconnection Customer. At the time of completion of the Phase I Interconnection Study, the CAISO may, at the Interconnection Customer's request, determine whether the Interconnection Request qualifies for an Accelerated Phase II Study effort under GIDAP Section 8.6 and GIDAP BPM Section 6.2.7.5.

At any time the CAISO determines that it will not meet the required time frame for completing the Phase I Interconnection Study due to the large number of Interconnection Requests, study complexity, or unavailability of subcontractors on a reasonable basis to perform the study in the required time frame, the CAISO shall notify the Interconnection Customers as to the schedule status of the Phase I Interconnection Study and provide an estimated completion date with an explanation of the reasons why additional time is required.

Upon request, the CAISO shall provide the Interconnection Customer all supporting documentation, work papers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Phase I

<sup>43</sup> GIDAP Section 6.6.

Interconnection Study, subject to confidentiality arrangements consistent with GIDAP Section 15.1 and GIDAP BPM Section 13.

(i) **Identification of and Cost Allocation for Reliability Network Upgrades (RNUs)<sup>44</sup>**

**Interconnection Reliability Network Upgrades (IRNUs)**

The CAISO, in coordination with the applicable Participating TO(s), will determine the facilities required at the Point of Interconnection to physically achieve the requested interconnection. Pursuant to GIDAP Section 8.3, Interconnection Customers assigned IRNUs in their Phase I Interconnection Study will be allocated the full cost of their IRNUs in their MCR. The Maximum Cost Exposure will include the full costs of conditionally assigned IRNUs. The Current Cost Responsibility will include their allocated share of assigned IRNU costs, which is pro-rata on the basis of the number of Interconnection Requests assigned the same IRNU in the current Queue Cluster.

**General Reliability Network Upgrades (GRNUs)**

The CAISO, in coordination with the applicable Participating TO(s), will perform short circuit and stability analyses for each Interconnection Request either individually or as part of a Group Study to preliminarily identify the RNUs needed to interconnect the Generating Facilities to the CAISO Controlled Grid. The CAISO, in coordination with the applicable Participating TO(s), shall also perform power flow analyses, under a variety of system conditions, for each Interconnection Request either individually or as part of a Group Study to identify Reliability Criteria violations, including applicable thermal overloads, that must be mitigated by GRNUs.

The cost of all RNUs identified in the Phase I Interconnection Study shall be estimated in accordance with GIDAP Section 6.4 and GIDAP BPM Section 6.1.3. The estimated costs of short circuit related GRNUs identified through a Group Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the short circuit duty contribution of each Generating Facility. The estimated costs of all other GRNUs identified through a Group Study shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the maximum megawatt electrical output of each proposed new Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request. The estimated costs of RNUs identified as a result of an Interconnection Request studied separately shall be assigned solely to that Interconnection Request.

(ii) **Identification of and Cost Allocation for Delivery Network Upgrades**

**Local Delivery Network Upgrades (LDNUs)<sup>45</sup>**

<sup>44</sup> GIDAP Section 6.3.1.

<sup>45</sup> GIDAP Section 6.3.2.1.1.



The On-Peak Deliverability Assessment will be used to establish the cost allocation for LDNUs for each Interconnection Customer selecting Full Capacity or Partial Capacity Deliverability Status. Deliverability of a new Generating Facility will be assessed on the same basis as all existing resources interconnected to the CAISO Controlled Grid.

The cost of LDNUs identified in the On-Peak Deliverability Assessment as part of a Phase I Interconnection Study shall be estimated in accordance with GIDAP Section 6.4 and GIDAP BPM Section 6.1.3. The estimated costs of Delivery Network Upgrades identified in the On-Peak Deliverability Assessment shall be assigned to all Interconnection Requests selecting Full Capacity or Partial Capacity Deliverability Status based on the flow impact of each such Generating Facility on the Delivery Network Upgrades as determined by the Generation distribution factor methodology set forth in the On-Peak Deliverability Assessment methodology.

#### **Area Delivery Network Upgrades (ADNUs)<sup>46</sup>**

The On-Peak Deliverability Assessment will be used in the Phase I Interconnection Studies to identify those facilities necessary to provide the incremental Deliverability between the level of TP Deliverability and such additional amount of Deliverability as is necessary for the MW capacity amount of generation targeted in the Phase I Interconnection Studies. Based on such facility cost estimates, the CAISO will calculate a rate for ADNU costs equal to the facility cost estimate divided by the additional amount of Deliverability targeted in the study. The Phase I Interconnection Studies shall provide a cost estimate for each Interconnection Customer which equals the rate multiplied by the requested deliverable MW capacity of the Generating Facility in the Interconnection Request.

#### **(iii) Identification of and Cost Allocation for Local Off-Peak Network Upgrades**

The estimated costs of Local Off-Peak Network Upgrades identified in the Off-Peak Deliverability Assessment will be assigned or conditionally assigned to LCRIG 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.

#### **(iv) Identification of and Cost Allocation for Participating TO's Interconnection Facilities**

<sup>46</sup> GIDAP Section 6.3.2.1.2.

As part of the Phase I studies, the Participating TO will identify the required Participating TO's Interconnection Facilities associated with each Interconnection Request. The cost for these identified Interconnection Facilities will be estimated in accordance with GIDAP Section 6.4 and GIDAP BPM Section 6.1.3 and included in the Phase I Interconnection Study report.

#### **6.2.4.5. Phase I Cost Responsibility<sup>47</sup>**

Under the GIDAP Cluster Study Process track, the MCR assigned to the Interconnection Customer for Network Upgrades is the lower sum of allocated Assigned Network Upgrades of the cost estimates determined through the Phase I Interconnection Studies or the cost estimates determined through the Phase II Interconnection Studies.

Notwithstanding the Interconnection Customer's MCR and Maximum Cost Exposure, until such time as the Phase II Interconnection Study report is issued to the Interconnection Customer, the allocated costs for Assigned Network Upgrades for each Interconnection Customer for the ANUs in the Phase I Interconnection Study report shall establish the value for:

- (i) each Interconnection Customer's Current Cost Responsibility, MCR, and Maximum Cost Exposure; and
- (ii) the initial posting of Interconnection Financial Security required from each Interconnection Customer under GIDAP Section 11.2 and GIDAP BPM Section 8.3 for such Network Upgrades.

The Interconnection Customer's MCR for ANUs shall be subject to further adjustment based on the results of the annual reassessment process, as set forth in GIDAP BPM Section 6.2.6.2.

Interconnection Customers selecting Option (A) do not post Interconnection Financial Security for ADNUs. The cost estimate provided in the Phase I Interconnection Studies establishes the basis for the initial Interconnection Financial Security Posting under GIDAP Section 11.2 for Interconnection Customers selecting Option (B). The Phase II Interconnection Studies shall refresh the cost estimate for ADNUs and shall provide the basis for second and third Interconnection Financial Postings as specified in GIDAP Section 11.

The ADNU cost estimates provided in the Interconnection Study report are estimates only and do not provide a maximum value for cost responsibility to an Interconnection Customer for ADNUs. However, subsequent to the Interconnection Customer's receipt of

<sup>47</sup> GIDAP Sections 7.3 and 10.1.

its Phase II Interconnection Study report, an Interconnection Customer having selected Option (B) may have its ADNUs adjusted in the reassessment process undertaken under GIDAP Section 7.4. Accordingly, for such Interconnection Customers, the most recent annual reassessment undertaken under GIDAP Section 7.4 shall provide the most recent cost estimates for the Interconnection Customer's ADNUs.

In contrast to the cost estimation for ANUs, which establishes the Interconnection Customer's MCR, GIDAP cost estimation for Interconnection Facilities yields estimates with no cost responsibility cap. Accordingly, the costs for the Participating TO's Interconnection Facilities estimated in the Phase I and Phase II Interconnection Studies are estimates only that establish the basis for Interconnection Financial Security posting amounts. Interconnection Customers' cost responsibility for Interconnection Facilities extends to the actual costs for such facilities.

The Phase I Interconnection Study report shall set forth the applicable cost estimates for Network Upgrades and Participating TO's Interconnection Facilities that shall be the basis for the initial Interconnection Financial Security posting under GIDAP Section 11.2 and GIDAP BPM Section 8.3.

#### **6.2.4.6. Contents of Phase I Interconnection Study Report**

Below is a general list of report information that may be included as part of the Phase I Interconnection Study reports. The list may not be a comprehensive list of all the possible types of data as each project can have unique circumstances. The content of information in Phase I Interconnection Study reports will vary from project to project.

- Generator interconnection data
- Study scopes and assumptions
- On-Peak Deliverability Assessment
- Off-Peak Deliverability Assessment
- Power flow analysis
- Reactive power deficiency analysis
- Transient stability evaluation
- Short circuit duty analysis
- Preliminary protection requirement
- Interconnection plan of service requirements
- Network upgrade requirements

- Identify Potentially Affected Systems
- Substation and transmission work scope and estimate
- Upgrades scopes, cost estimates and construction schedule estimates

### 6.2.5. Phase I Interconnection Study Results Meetings<sup>48</sup>

Within thirty (30) calendar days of issuing the Phase I Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall hold a Results Meeting to discuss the results of the Phase I Interconnection Study, including allocated cost responsibilities, modifications, change in Commercial Operation Date (COD), and other possible changes addressed in GIP BPM Section 7.

#### 6.2.5.1. Interconnection Customer Comments on Phase I Interconnection Study Report<sup>49</sup>

Should the Interconnection Customer provide written comments on the final Phase I Interconnection Study report within ten (10) Business Days of receipt of the report, but in no event less than three (3) Business Days before the Results Meeting conducted to discuss the report, whichever is sooner, the CAISO will address the written comments in the Phase I Interconnection Study Results Meeting. Should the Interconnection Customer provide comments at any later time (up to the time of the Results Meeting), then such comments shall be considered informal inquiries to which the CAISO will provide informal, informational responses at the Results Meeting, to the extent possible.

The Interconnection Customer may submit, in writing, additional comments on the final Phase I Interconnection Study report up to three (3) Business Days following the Results Meeting. Based on any discussion at the Results Meeting and any comments received, the CAISO (in consultation with the applicable Participating TO(s)) will determine, in accordance with GIDAP Section 6.8 and GIDAP BPM Section 8.6, whether it is necessary to follow the final Phase I Interconnection Study report with a revised study report or an addendum. The CAISO will issue any such revised report or addendum to the Interconnection Customer no later than fifteen (15) Business Days following the Results Meeting.

#### 6.2.5.2. Meeting Minutes<sup>50</sup>

<sup>48</sup> GIDAP Section 6.7.

<sup>49</sup> GIDAP Section 6.7.

<sup>50</sup> GIDAP Section 6.7.

The CAISO will prepare the minutes from the meetings and will provide the Interconnection Customer and the other attendees an opportunity to confirm the accuracy of the minutes. If the Interconnection Customer disagrees with the CAISO and/or Participating TO on some subject matter covered in the meeting, the CAISO will attempt to capture the disagreement in the draft minutes, and the Interconnection Customer will have the opportunity to add to the discussion in the minutes as a part of its opportunity to confirm the accuracy of the draft minutes before finalization.

#### **6.2.5.3. Commercial Operation Date Validation<sup>51</sup>**

At the Phase I Results Meeting, the Interconnection Customer shall provide a schedule outlining key milestones including environmental survey start date, expected environmental permitting submittal date, expected procurement date of project equipment, back-feed date for project construction, and expected project construction date. This will assist the parties in determining if Commercial Operation Dates are reasonable. If major Interconnection Customer's Interconnection Facilities for the Generating Facility have been identified in the Phase I Interconnection Study, such as telecommunications equipment to support a possible Special Protection System (SPS), distribution feeders to support back feed, new substation, and/or expanded substation work, permitting and material procurement lead times may result in the need to alter the proposed Commercial Operation Date. The Parties may agree to a new Commercial Operation Date.

In addition, where an Interconnection Customer intends to establish Commercial Operation separately for different Electric Generating Units or project phases at its Generating Facility, it may only do so in accordance with an implementation plan agreed to in advance by the CAISO and Participating TO, which agreement shall not be unreasonably withheld. Where the parties cannot agree, the Commercial Operation Date determined reasonable by the CAISO, in coordination with the applicable Participating TO(s), will be used for the Phase II Interconnection Study where the changed Commercial Operation Date is needed to accommodate the anticipated completion, assuming Reasonable Efforts by the applicable Participating TO(s), of necessary Reliability Network Upgrades and/or Participating TO's Interconnection Facilities, pending the outcome of any relief sought by the Interconnection Customer through the dispute procedures under GIDAP Section 15.5 and GIDAP BPM Section 15. The Interconnection Customer must notify the CAISO within five (5) Business Days following the Results Meeting that it is initiating dispute procedures.

#### **6.2.5.4. Modifications Prior to Phase II Studies<sup>52</sup>**

<sup>51</sup> GIDAP Section 6.7.1.

<sup>52</sup> GIDAP Section 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 GIDAP BPM Section 6.2.5.4 shall include specifically: (a) a decrease in the electrical output (MW) of the proposed project; (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 GIDAP BPM Section 5.2 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 the GIDAP BPM Section 7.1; (f) change in Deliverability Status from Full Capacity Deliverability Status to Energy Only Deliverability Status or Partial Capacity Deliverability Status, or from Partial Capacity Deliverability Status to a lower fraction of Partial Capacity Deliverability Status; (g) change from Off-Peak Deliverability Status to Off-Peak Energy Only.

The addition of inverters will be allowed if the Phase I study shows that there is a shortage of active and/or reactive capability to meet the requested net MW and the reactive capability requirement at the Point of Interconnection. Any other addition of inverters will require a Material Modification Assessment unless the addition is to support modifications allowed in Section 6.2.5.4 and 6.2.5.5. Under no circumstances can the addition of inverters be used to increase the capacity at the POI.

Section 6.7.2.2 of the Appendix DD allows an Interconnection Customer to modify its Point of Interconnection within ten (10) calendar days of the Phase I Study Results Meeting without a Material Modification Assessment. Section 6.7.2.2 also states that such changes shall be pursuant to Section 6.7.2.1 of Appendix DD, which states that these changes "may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request" and must be "acceptable to the Participating TO(s) [and] the CAISO . . . , such acceptance not to be unreasonably withheld." As such, if an Interconnection Customer proposes a timely Point of Interconnection modification request and the CAISO and Participating TO(s) are able to determine that the modification either improves or does not adversely impact the costs and benefits (including reliability) of the interconnection, and the proposed change is able to be accommodated, then the request will be approved.



For any modifications other than these, see GIDAP BPM Section 7 (Modifications).

The Interconnection Customer shall remain eligible for the Phase II Interconnection Study if the modifications are in accordance with this GIDAP BPM Section 6.2.5.4.

#### **6.2.5.5. Adding Energy Storage between Phase I and Phase II Studies**

Pursuant to Section 6.7.2.2 of Appendix DD, the ISO has developed the following guidelines for dealing with projects that want to add inverter-based storage between the Phase I and Phase II studies as part of the Appendix B submittal, or following the acceptance of an IC's Appendix B.

1. An IC can convert a portion of an inverter-based project, such as solar and wind, to an inverter-based energy storage technology as part of their Appendix B submittal. The following are guidelines/restrictions set forth to establish limitations of such conversion:
2. Conversion can only be a MW-for-MW exchange from the original technology to energy storage.
3. It is possible for the Short Circuit Duty (SCD) of the energy storage inverter to be greater than the original inverter. While the ISO expects such a change to be *de minimis*, it will examine the issue in the Phase II studies with the new SCD values and revised cost responsibilities, if any. If an IC wants to add inverter-based storage to its project after the ISO has approved the Appendix B, an updated Appendix B and an updated Interconnection Request should be re-submitted to the ISO. The ISO will determine whether the change will substantially impact costs to the grid. Otherwise, the IC must submit its request for inverter storage under the material modification process. If there is not sufficient time to complete the assessment before the Phase II studies begin, the MMA will be delayed until after the Phase II study for the project has been completed. In such cases, the project will be studied in Phase II based on the approved Appendix B and its associated Interconnection Request.
4. Without an MMA, the total Generating Facility gross capacity may not increase, even if a tripping scheme to limit the output is proposed.
5. If an IC desires to increase the total Generating Facility gross capacity, utilizing a tripping scheme to limit the output, then the IC must request the change through the MMA process to allow for an assessment of the impacts.
6. If an MMA is requested between Phase I and Phase II studies and there is not sufficient time to complete the assessment before the Phase II studies begin, the MMA will be delayed until after the Phase II study for the project has been completed. In such case, the project will be studied in Phase II based on the approved Appendix B.
7. The level of deliverability studied in Phase I cannot be increased.
8. If the IC wants to maintain FCDS for a project, it may have to downsize the project to the amount of FCDS studied in Phase I.

## 6.2.6. Activities in Preparation for Phase II Studies<sup>53</sup>

### 6.2.6.1. Phase II Data Form

Within ten (10) Business Days following the Phase I Interconnection Study Results Meeting, the Interconnection Customer shall submit to the CAISO the completed form of Appendix B to the “*Generator Interconnection Study Process Agreement for Queue Clusters*”– set forth in GIDAP Appendix 3 (GIDAP Appendix B). The title of GIDAP Appendix B is “*Data Form to Be Provided by the Interconnection Customer Prior to Commencement of the Phase II Interconnection Study*,” In this form, the Interconnection Customer provides critical information regarding the customer’s proposed Generating Facility for the purpose of scoping the Phase II Interconnection Study Work.

#### (i) **Confirm On-Peak Deliverability Status and Provide Other Data<sup>54</sup>**

GIDAP Appendix B requires the Interconnection Customer to make certain important choices and/or affirmations about the nature of its proposed Generating Facility, so that the facility can be appropriately incorporated into the Phase II Interconnection Study effort. One of the most important things that the Interconnection Customer must do is make its election to either:

- a) confirm the desired Deliverability Status that the Interconnection Customer had previously designated in the completed form of Appendix A to the Generator Interconnection Study Process Agreement (Assumptions Used in Conducting the Phase I Interconnection Study); or
- b) change the desired Deliverability Status in one of the following ways:
  - (i) from Full Capacity Deliverability Status to Energy-Only Deliverability Status;
  - (ii) from Full Capacity Deliverability Status to Partial Capacity Deliverability Status with a specified fraction of Full Capacity Deliverability Status;
  - (iii) from Partial Capacity Deliverability Status to Energy-Only Deliverability Status; or
  - (iv) reduce Partial Capacity Deliverability Status to a lower fraction of Full Capacity Deliverability Status.

<sup>53</sup> GIDAP Section 7.

<sup>54</sup> GIDAP Section 7.1.

Importantly, there is no opportunity for the Interconnection Customer to “upgrade” its delivery status from Energy-Only Deliverability Status to Full or Partial Capacity Deliverability Status.

Another significant point that the Interconnection Customer must bear in mind in deciding either to confirm a Full or Partial Capacity Deliverability Status or to “downgrade” (for example, from Full to Partial Capacity or to Energy-Only Deliverability Status) is that, once the choice is made, there is no later, further opportunity for the Interconnection Customer to “upgrade” the deliverability status of the Generating Facility, say from Partial Capacity or Energy-Only Deliverability Status to Full Capacity Delivery Status. The purpose of an Interconnection Request and Interconnection Study is to interconnect the facility to the CAISO Controlled Grid. A new facility (or increase increment of an increased facility) is only interconnected to the grid once, and so the Interconnection Request mechanism is not available thereafter to change delivery status.

Once the Interconnection Customer has chosen Energy Only or Partial Capacity Deliverability Status at the onset of the Phase II Interconnection Study, the only opportunity left for the Interconnection Customer to request FCDS for the Energy Only portion of the project is when the Generating Facility meets the criteria for Energy Only projects to obtain TP Deliverability as defined under GIDAP Section 8.9.2.

(ii) **Confirm MW Capacity**

GIDAP Appendix B requires the Interconnection Customer to confirm the requested MW capacity of the generator, including the Interconnection Service Capacity.

(iii) **Confirm Off-Peak Deliverability Status**

GIDAP Appendix B requires the LCRIG Interconnection Customer to confirm the requested Off-Peak Deliverability Status. The Interconnection Customer may change from Off-Peak Deliverability Status to Off-Peak Energy Only. There is no opportunity for the Interconnection Customer to “upgrade” from Off-Peak Energy Only to Off-Peak Deliverability Status.

(iv) **Confirm Need for Ratepayer-Funded/Self Fund Deliverability (Option A or B)<sup>55</sup>**

This GIDAP BPM Section 6.2.6.1(iii) applies to Interconnection Requests for which the Generating Facility Deliverability Status is either Full Capacity or Partial Capacity.

Within GIDAP Appendix B, the Interconnection Customer must select one of two options with respect to Deliverability for the Generating Facility:

<sup>55</sup> GIDAP Section 7.2.

**Option (A)**, which means that the Generating Facility requests TP Deliverability only. If the facility does not receive an allocation of TP Deliverability it will either withdraw or convert to EO to be able to continue to Commercial Operation. If the Interconnection Customer selects Option (A), then the Interconnection Customer shall be required to make an initial posting of Interconnection Financial Security under GIDAP Section 11.2 and GIDAP BPM Section 8.3 for the Current Cost Responsibility assigned to it in the Phase I Interconnection Study for Interconnection Facilities, RNUs and LDNUs; or,

**Option (B)**, which means that the Interconnection Customer requests Full Capacity Deliverability Status or Partial Capacity Deliverability Status and will assume cost responsibility for all Delivery Network Upgrades (both ADNUs and LDNUs, to the extent applicable) without cash repayment under GIDAP Section 14.3.2 and GIDAP BPM Section 12 to the extent that sufficient TP Deliverability is not allocated to the Generating Facility to provide its requested Deliverability Status. If the Interconnection Customer selects Option (B), then the Interconnection Customer shall be required to make an initial posting of Interconnection Financial Security under GIDAP Section 11.2 and GIDAP BPM Section 8.3 for the Current Cost Responsibility assigned to it in the Phase I Interconnection Study for Interconnection Facilities, RNUs, LDNUs and ADNUs. To qualify to receive any allocation of TP Deliverability, Interconnection Customers selecting Option (B) must still meet the criteria identified in GIDAP Section 8.9.2.

#### 6.2.6.2. Reassessment of Study Assumptions for the Phase II Studies<sup>56</sup>

The CAISO, in coordination with the Participating TOs, will perform a reassessment of the Network Upgrades needed for Interconnection Requests queued before the current cluster prior to the beginning of the GIDAP Phase II Interconnection Studies for the current cluster. The reassessment will evaluate the impacts on those Network Upgrades identified in previous interconnection studies and assumed in the Phase I Interconnection Study of:

- (a) Interconnection Request withdrawals occurring after the completion of the Phase II Interconnection Studies for the immediately preceding Queue Cluster;
- (b) Generator Downsizing Requests submitted in the most recent Generator Downsizing Request Window that meet the requirements set forth in GIDAP Section 7.5, and Generating Facilities that are to have their Interconnection Service Capacity reduced pursuant to GIDAP Sections 8.9.4, 8.9.5, and 8.9.6

<sup>56</sup> GIDAP Section 7.4.

- (c) the performance of earlier queued Interconnection Customers with executed GIAs with respect to required milestones and other obligations,
- (d) the amount of TP Deliverability available for allocation;
- (e) the results of the TP Deliverability allocation from the prior Interconnection Study cycle; and,
- (f) transmission additions and upgrades approved in the most recent Transmission Planning Process cycle.

The scope of the reassessment generally includes On-Peak Deliverability Assessment, Off-Peak Deliverability Assessment, off-peak power flow study, stability analysis and short circuit duty analysis, as necessary. The reassessment will determine if a previously required Network Upgrade is still needed and could be modified or eliminated. This information will be used to develop the base case for the Phase II Interconnection Study.

The results of the reassessment may also indicate that a particular Network Upgrade is no longer required prior to the interconnection of an Interconnection Customer's facility, or for an Interconnection Customer's facility to achieve its requested deliverability status, based on its position in the queue. In such instances the financial responsibility to fund the Network Upgrade as assigned in its governing interconnection study report remains unchanged.

Where, as a consequence of the reassessment, the CAISO determines that the Network Upgrade requirement for an Interconnection Request has changed from its most recent governing interconnection study report, the CAISO will issue a reassessment report to the Interconnection Customer. The GIA for the Interconnection Request will be modified or amended accordingly. Such changes to plans of service in Queue Clusters earlier than the current Interconnection Study Cycle will also serve as the basis for potential adjustments to the MCR for Network Upgrades for Interconnection Customers in such earlier Queue Clusters, as follows:

- (a) An Interconnection Customer shall be eligible for an adjustment to its MCR for Network Upgrades if a reassessment undertaken pursuant to this Section 7.4 reduces its estimated cost responsibility for Network Upgrades by at least twenty (20) percent and \$1 million, as compared to its current MCR for Network Upgrades based on its Interconnection Studies or a previous reassessment.

The MCR for an Interconnection Customer who meets this eligibility criterion will be the lesser of (a) its current MCR and (b) 100 percent of the costs of all remaining Network Upgrades included in the Interconnection Customer's plan of service.

- (b) If an Interconnection Customer's MCR for Network Upgrades is adjusted downward pursuant to (a) above, and a subsequent reassessment identifies a change on the CAISO's system that occurs after the completion of the Interconnection Customer's Interconnection Studies and requires additional or expanded Network Upgrades, resulting in an increase in the Interconnection Customer's estimated cost responsibility for Network Upgrades above the MCR as adjusted based on the results of a prior reassessment, then the Interconnection Customer's MCR for Network Upgrades will be the estimated cost responsibility determined in the subsequent reassessment, so long as this amount does not exceed the MCR originally established by the Interconnection Customer's Interconnection Studies. In such cases, where the estimated Current Cost Responsibility determined in the subsequent reassessment exceeds the MCR as adjusted based on the results of a prior reassessment, the Interconnection Customer's MCR for Network Upgrades shall be the MCR established by its Interconnection Studies. The Interconnection Customer's MCR may never exceed the MCR determined by the lower of the Phase 1 and Phase 2 Interconnection Studies.

The reassessment is performed in conjunction with TP Deliverability allocation as described in GIDAP BPM Section 6.2.9.4.

Example 1:

*Project ABC*

Phase 1 Network Upgrades MCR: \$20,000,000

Phase 2 Network Upgrades MCR: \$10,000,000

**Original Network Upgrades MCR: \$10,000,000**

Reassessment #1: \$8,000,000 Network Upgrades estimated cost allocation; all Network Upgrades are 100% assigned to *Project ABC*.

Pursuant to (a) above, the Network Upgrades the cost responsibility is lower than the original MCR by at least 20 percent and \$1 million.

Updated Network Upgrades MCR: \$8,000,000

Reassessment #2: \$11,000,000 Network Upgrades estimated cost allocation due to unexpected system resource retirement resulting in new Network Upgrade requirement

Pursuant to (b) above, the Network Upgrades MCR is the original Network Upgrades MCR established by the Phase 2 Interconnection Study.

Network Upgrades MCR: \$10,000,000

Example 2:

*Project XYZ*



Phase 1 Network Upgrades MCR: \$50,000,000

Phase 2 Network Upgrades MCR: \$30,000,000

**Original Network Upgrades MCR: \$30,000,000**

Reassessment #1: \$40,000,000 Network Upgrades estimated cost allocation

Pursuant to (b) above, the Network Upgrades MCR is the original Network Upgrades MCR established by the Phase 2 Interconnection Study.

Network Upgrades MCR: \$30,000,000

Phase 2 Revised Report #1 Network Upgrades MCR: \$20,000,000

Network Upgrades MCR is established as the lower of the Phase 1 and Phase 2 Interconnection Study.

**Original Network Upgrades MCR is adjusted: \$20,000,000**

Reassessment #2: \$19,000,000 Network Upgrades estimated cost allocation

Pursuant to (a) above, the Network Upgrades estimated cost responsibility has *not been* reduced by at least 20 percent and \$1 million of the MCR.

Network Upgrades MCR: \$20,000,000

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 adjust 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 MCR, as applicable.

The posted Interconnection Financial Security required of the Interconnection Customer for Network Upgrades shall be adjusted to correspond to any increase in the Interconnection Customer's estimated Current Cost Responsibility any time after but no later than sixty (60) calendar days after issuance of a reassessment report. The CAISO will notify an Interconnection Customer that receives a downward adjustment to its Current Cost Responsibility pursuant to this Section, and the Interconnection Customer may choose to adjust its posted Interconnection Financial Security within sixty (60) calendar days of the issuance of the reassessment report.

Additionally, the ISO will notify an Interconnection Customer of any change to its MCR pursuant to this Section.

### 6.2.6.3. Generator Downsizing Process<sup>57</sup>

An Interconnection Customer seeking to downsize the Interconnection Service Capacity of its Generating Facility may submit a complete Generator Downsizing Request during the annual Generator Downsizing Request Window of October 15 to November 15. Such requests that meet the downsizing eligibility requirements will be studied as part of the next annual reassessment process. A Generating Facility that meets the requirements described below may participate in the Generator Downsizing Process more than once.

#### Qualified Generating Facilities

Regardless of whether a Generating Facility is from a previous study process, it will qualify for the Generator Downsizing Process if it meets the following criteria:

#### (i) Commercial Operation Status<sup>58</sup>

The Generating Facility must be in one of the following two categories:

- (a) Currently in the CAISO queue and has not yet achieved the last Commercial Operation Date in its Generator Interconnection Agreement.
- (b) Has achieved the last Commercial Operation Date in its Generator Interconnection Agreement with a total megawatt capacity amount that is lower than the amount specified in its Generator Interconnection Agreement by no more than the greater of the de minimis threshold set forth in Section 6.2.6.3 (iii)(c).

The implications of this provision are summarized in the following table:

<b>If the project Interconnection Service Capacity specified in the GIA is:</b>	<b>Then the reduced capacity criterion is:</b>
Greater than 200 MW	5 percent (above 200, 5% > 10 MW)
Between 40 MW and 200 MW	10 MW (between 40 and 200, 5% ≤ 10 MW)
Less than 40 MW	25 percent (<40, 10 MW is more than 25%)

The table below shows examples that further illustrate these criteria:

<sup>57</sup> GIDAP Section 7.5.

<sup>58</sup> GIDAP Section 7.5.3.1.

Total MW Capacity in GIA	Actual MW Capacity	Downsizing Request Required	Reason
100	95	No	Shortfall MW not greater than 5% or 10 MW of GIA MW capacity
100	90	No	Actual MW within 10 MW of GIA MW capacity
200	185	Yes	Shortfall MW greater than 5% or 10 MW of GIA MW capacity
40	30	No	Shortfall MW reduction not more than 25% of GIA MW capacity
20	10	Yes	Actual MW reduction more than 25% of GIA MW capacity

(ii) Good Standing Requirements<sup>59</sup>

The Interconnection Customer must meet the following requirements:

- (a) Interconnection Customer must be in compliance with all applicable requirements of the CAISO Tariff under which the Interconnection Request is being processed, including timely submittal of all Interconnection Financial Security postings that have come due.
- (b) Interconnection Request cannot be withdrawn or deemed withdrawn by the CAISO. A Generating Facility that is deemed withdrawn with a cure period that has not expired by the close of the applicable Generator Downsizing Request Window may apply, but cure must be made prior to the expiration of the cure period. Failure to cure during the cure period will result in the withdrawal of the Generating Downsizing Request from the annual Generator Downsizing Process.
- (c) Interconnection Customer must be in compliance with the terms of its Generator Interconnection Agreement, including Interconnection Customer milestones. An Interconnection Customer that has received a notice of breach may apply if the cure period has not expired by the close of the applicable Generator Downsizing Request Window. Failure to cure during the cure period will result in the withdrawal of the Generating Downsizing Request from the annual Generator Downsizing Process.
- However, a Generating Facility failing to meet the Commercial Operation status criterion under category (i)(b) is eligible to participate in the annual Generator Downsizing Process.

(iii) Other Opportunities to Reduce Generating Facility Size<sup>60</sup>

<sup>59</sup> GIDAP Section 7.5.3.2.

<sup>60</sup> GIDAP Sections 7.5.1 and 7.5.2.

Apart from the Generator Downsizing Process, Interconnection Customers may also reduce the Interconnection Service Capacity Generating Facilities in the following circumstances:

- (a) Generating Facilities that have not yet entered into the Phase II study process can have their Interconnection Service Capacity reduced pursuant to GIDAP Section 6.7.2.
- (b) Generating Facilities with partial termination clauses in their Generator Interconnection Agreements.
- (c) Commercially operational Generating Facilities within the de minimis threshold of no more than the greater of five percent (5%) of their Interconnection Service Capacity or 10 MW but not more than 25% of the Interconnection Service Capacity.
- (d) Generating Facilities whose Interconnection Service Capacity is reduced pursuant to GIDAP Sections 8.9.4, 8.9.5, and 8.9.6. (BPM Sections 6.2.9.6, 6.2.9.7, and 6.2.9.8).
- (e) Modifications made pursuant to GIDAP 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.

Any other proposed modifications must be submitted separately pursuant to GIDAP Section 6.7.2. CAISO evaluation of such proposed modifications to Generating Facilities that are also participating in the annual Generator Downsizing Process will be deferred until the completion of the Generator Downsizing Process.

(iv) Initiating the Generator Downsizing Request<sup>61</sup>

During the Generator Downsizing Request Window (October 15 through November 15 of each year) a qualifying Interconnection Customer must submit a Generator Downsizing Request package consisting of the following:

- Completed Generator Downsizing Request form – Link: Link to be added at a later date.
- Generator Downsizing Deposit of \$60,000 (Fed wire or check)

Failure to submit either of these two items will void the Generator Downsizing Request. Submitting the Generator Downsizing Request with some errors or omissions will not void the Generator Downsizing Request provided the Interconnection Customer cures the deficiency pursuant to Section 6.2.6.3(v) below. If the Generator Downsizing Request does not include both items, the CAISO will

<sup>61</sup> GIDAP Section 7.5.5.1.

return the Generator Downsizing Request package to the Interconnection Customer as incomplete and not evaluate the package. The Interconnection Customer may re-submit a complete package if the Generator Downsizing Request Window is still open.

(v) Validating the Generator Downsizing Request<sup>62</sup>

After the CAISO receives a Generating Downsizing Request, the CAISO will forward a copy of the Generator Downsizing Request package to the applicable Participating TO and begin processing and validating the request. The CAISO will notify the Interconnection Customer within ten (10) Business Days after the close of the Generator Downsizing Request Window whether its Generator Downsizing Request is deemed complete, valid, and ready to be studied or if there are data deficiencies.

The CAISO will provide the Interconnection Customer with a Downsizing Generator Payment Obligation Agreement executed by the CAISO within ten (10) Business Days of the Generator Downsizing Request being deemed complete, valid, and ready to be studied. The Interconnection Customer must execute and return to the CAISO the Downsizing Generator Payment Obligation Agreement within ten (10) Business Days thereafter.

If there are data deficiencies, the Interconnection Customer will have an opportunity to provide additional information to address the data deficiencies. The CAISO must receive all such additional information within twenty (20) Business Days of the close of the Generator Downsizing Request Window or ten (10) Business Days after the CAISO first provides notice that the Generator Downsizing Request is not valid, whichever is later. The CAISO will review and notify the Interconnection Customer within five (5) Business Days of receipt of any additional information if the Generating Downsizing Request is now valid. If the Interconnection Customer does not submit the required information or fails to meet the requirements within the allotted timeframe, the Generator Downsizing Request will be deemed withdrawn and the Generator Downsizing Deposit will be refunded to the Interconnection Customer less costs incurred during the validation process.

After a Generator Downsizing Request has been deemed valid, the reduced MW value of the project will be updated in RIMS and reflected in the CAISO Generator Interconnection Queue.

(vi) Withdrawal of Generator Downsizing Request<sup>63</sup>

A Generator Downsizing Request may only be withdrawn by the Interconnection Customer during the applicable Generator Downsizing Request Window. The Generator Downsizing Deposit, less costs incurred during the validation process, will be refunded to those withdrawing during this timeframe.

(vii) Interconnection Financial Security Impacts on a Withdrawn Downsized project

<sup>62</sup> GIDAP Section 7.5.5.2.

<sup>63</sup> GIDAP Section 7.5.6.

A downsized project that chooses to withdraw from the interconnection queue will have any Interconnection Financial Security partial recovery amount based on the pre-downsized MW size. After the close of the downsizing window, any partial recovery of the Interconnection Financial Security for Network Upgrades under Sections 8.11.1 and 8.11.2 of this BPM will be calculated based on the Generating Facility's most recent Interconnection Service Capacity prior to its downsizing request.

(viii) Use of Generator Downsizing Deposits<sup>64</sup>

The Generator Downsizing Deposits will be deposited into an interest-bearing account and used to pay prudent costs incurred by the CAISO, the applicable Participating TO(s), and/or third parties at the direction of the CAISO and the applicable Participating TO(s) to perform and administer the Generator Downsizing Process. These costs include, but are not limited to, the costs of studying the Generator Downsizing Request in the reassessment process performed pursuant to GIDAP Section 3.5.1.2 (where the Generator Downsizing Requests are studied), and costs associated with amending the Generator Interconnection Agreement of the Downsizing Generator to incorporate changes resulting from the Generator Downsizing Process.

Reassessment study costs are divided and allocated equally among downsizing Generating Facilities, Generating Facilities in the most recently completed Phase II study cycle, parked Generating Facilities, and the Interconnection Requests for which the reassessment is used to establish the Base Case for the Phase I and Phase II studies.

(ix) Obligations of Downsizing Generators for Actual Costs<sup>65</sup>

A Downsizing Generator will be responsible for its share of all actual costs incurred in connection with studying its Generator Downsizing Request in the next reassessment process conducted pursuant to GIDAP Section 7.4. A Downsizing Generator will also be responsible to pay for the actual costs associated with amending its Generator Interconnection Agreement to reflect any changes resulting from the Generator Downsizing Process.

(x) Invoicing and Payment of Downsizing Costs<sup>66</sup>

The applicable Participating TO(s) will submit an invoice to the CAISO for completed work in support of the Generator Downsizing Process within seventy five (75) calendar days. Within thirty (30) calendar days thereafter, the Interconnection Customer will receive invoices from the CAISO that list study expenses incurred and corresponding amounts due, including the costs invoiced by the Participating TO(s) and/or third parties, as applicable. The amounts due will be offset against the Interconnection Customer's Generator Downsizing Deposit. If the amounts due

<sup>64</sup> GIDAP Sections 3.5.1.2 and 7.5.7.

<sup>65</sup> GIDAP Sections 7.5.8 and 7.5.9.

<sup>66</sup> GIDAP Section 7.5.10.



exceed the amount on deposit, the invoice will direct the Interconnection Customer to pay the amount required in excess of the deposit within thirty (30) calendar days. If the amounts due are less than the amount on deposit, the unused balance plus applicable interest from the interest-bearing account where funds are deposited will be refunded to the Interconnection Customer.

Any refunds will be processed in accordance with the CAISO's established business practice whereby interconnection deposit refunds are processed in batches and payments are disbursed monthly. If the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate a refund or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer, the thirty (30) calendar day period for the refund will be suspended until such issue(s) are cured.

(xi) Cost Allocation for Network Upgrades<sup>67</sup>

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

(xii) Reflecting Network Upgrades and Interconnection Facilities Changes to Generator Interconnection Agreements<sup>68</sup>

If the Generator Interconnection Agreement negotiation process has not begun or is in progress once the reassessment process conducted pursuant to GIDAP Section 7.4 is completed, the Generator Downsizing Request will be reflected in the final Generator Interconnection Agreement.

Each Downsizing Generator that has (1) a Generator Downsizing Request approved pursuant to the GIDAP and (2) an executed Generator Interconnection Agreement will be provided with a draft amendment reflecting the Generator Downsizing Request of the Downsizing Generator as soon as possible following the completion of the reassessment process conducted pursuant to GIDAP Section 7.4. The reassessment report is considered an amendment to the Generator Interconnection Agreement until the formal amendment process is completed.

<sup>67</sup> GIDAP Section 7.5.11.

<sup>68</sup> GIDAP Section 7.5.12.

(xiii) Interaction with Executed Generator Interconnection Agreements<sup>69</sup>

For Downsizing Generators with executed Generator Interconnection Agreements derived from either Appendix CC or Appendix EE to the CAISO Tariff, GIDAP Section 7.5.13 will apply in lieu of Article 5.19.4 of such Generator Interconnection Agreements, and any Generating Facility capacity reductions permitted under Article 5.19.4 will be performed in accordance with and be subject to GIDAP Section 7.5.13.

## 6.2.7. Phase II Studies

### 6.2.7.1. Scope & Purpose of Phase II Studies<sup>70</sup>

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 to physically and reliably interconnect 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, MCR, and Maximum Cost Exposure, as applicable;

<sup>69</sup> GIDAP Section 7.5.13.3.

<sup>70</sup> GIDAP Section 8.1.1.

- (viii) provide updated Precursor Network Upgrades needed prior to its in service date and to achieve the Deliverability Status for the Generating Facilities; and
- (xi) identify any potential control equipment for each Interconnection Request where the Interconnection Customer requested Interconnection Service Capacity is lower than the Generating Facility Capacity. Additional requirements such as testing of control equipment if the net facility output exceeds the Interconnection Service Capacity can be found in the Section 14 of the Generator Management BPM.
- (xii) identify LOPNUs needed for Generating Facilities selecting Off-Peak Deliverability Status, and provide final cost estimates; and
- (xiii) 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 the second and third Interconnection Financial Security Postings under Section 11.3. Where the MCR is based upon the Phase I Interconnection Study (because it is lower under GIDAP Section 10.1 and GIDAP BPM 6.2.4.4), 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 MCR. Roles and Responsibilities of Participating TO and CAISO

#### **6.2.7.2. Roles and Responsibilities of Participating TO and CAISO**

As described in GIDAP BPM Section 6.2.4.2, Attachment A to GIDAP Appendix 4 is a pro forma contract between the CAISO and the applicable Participating TOs that clarifies the roles and responsibilities of the CAISO and Participating TOs with regard to Generator Interconnection Procedures and Interconnection Study Agreements. This contract agreement also applies to the Phase II studies.

### 6.2.7.3. Phase II Interconnection Study Procedures<sup>71</sup>

The CAISO shall coordinate the Phase II Interconnection Study with applicable Participating TO(s) and any Affected System that is affected by the Interconnection Request pursuant to GIDAP Section 3.7 and GIDAP BPM Section 6.1.4. Existing studies shall be used to the extent practicable when conducting the Phase II Interconnection Study. The CAISO will coordinate Base Case development with the applicable Participating TOs to ensure the Base Cases are accurately developed.

The CAISO shall use Reasonable Efforts to commence the Phase II Interconnection Study by May 1 of each year, and to complete and issue to Interconnection Customers the Phase II Interconnection Study report within two hundred five (205) calendar days after the annual commencement of the Phase II Interconnection Study. The CAISO will share applicable study results with the applicable Participating TO(s), for review and comment, and will incorporate comments into the study report. The CAISO will issue a final Phase II Interconnection Study report to the Interconnection Customer.

At the request of the Interconnection Customer or at any time the CAISO determines that it will not meet the required time frame for completing the Phase II Interconnection Study, the CAISO shall notify the Interconnection Customer as to the schedule status of the Phase II Interconnection Study and provide an estimated completion date with an explanation of the reasons why additional time is required.

Upon request, the CAISO shall provide the Interconnection Customer all supporting documentation, work papers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Phase II Interconnection Study, subject to confidentiality arrangements consistent with GIDAP Section 15.1 and GIDAP BPM Section 13.

#### (i) Reliability Network Upgrades, Local Delivery Network Upgrades, and Local Off-Peak Network Upgrades<sup>72</sup>

RNUs, LDNUs, and LOPNUs will be identified on the basis of all Interconnection Customers in the current Queue Cluster regardless of whether they have selected Option (A) or (B).

#### (ii) Area Delivery Network Upgrades<sup>73</sup>

<sup>71</sup> GIDAP Section 8.5.

<sup>72</sup> GIDAP Section 8.2.1.

<sup>73</sup> GIDAP Section 8.2.2.

The Phase II Interconnection Study will identify ADNUs for Interconnection Customers who have selected Option (B). The Deliverability Assessment Base Case for the Phase II Interconnection Study will include Option (A) Generating Facilities in the current Interconnection Study Cycle and earlier queued Generating Facilities that will utilize TP Deliverability in a total amount that fully utilizes but does not exceed the available TP Deliverability.

If the MW capacity of the Option (A) Generating Facilities and earlier queued Generating Facilities utilizing TP Deliverability in an area is less than or equal to the total TP Deliverability in any electrical area, the Deliverability Assessment Base Case will include all Option (A) and earlier queued Generating Facilities in the electrical area.

If the MW capacity of the Option (A) Generating Facilities and earlier queued Generating Facilities utilizing TP Deliverability in an area exceeds the TP Deliverability in any electrical area, the Deliverability Assessment Base Case will include a representative subset of Generating Facilities that fully utilizes but does not exceed the TP Deliverability.

After the CAISO has modeled the Option (A) Generating Facilities, as described above, the CAISO will add Option (B) Generating Facilities to the Deliverability Assessment Base Case. ADNUs that are identified as needed for each electrical area shall be assigned to Option (B) Generating Facilities based upon their flow impacts.

### (iii) **Operational Deliverability Assessment**<sup>74</sup>

The CAISO will perform an operational partial and interim Deliverability Assessment (operational Deliverability Assessment) as part of the Phase II Interconnection Study. The operational Deliverability Assessment will be performed for each applicable Queue Cluster Group Study group for each applicable study year through the prior year before all of the required Delivery Network Upgrades are in-service. Inclusion is automatic, but up to date COD and technical data should be provided to the CAISO prior to the start of the study in July of each year. Modifications not approved prior to the start of the study will not be included. The CAISO will consider operational Deliverability Assessment results stated for the first year in the pertinent annual Net Qualifying Capacity process that the CAISO performs for the next Resource Adequacy Compliance Year. The study results for any other years studied in operational Deliverability Assessment will be advisory and provided to the Interconnection Customer for its use only and for informational purposes only.

The operational Deliverability Assessment follows the On-Peak Deliverability Assessment methodology set forth on the CAISO Website at

<sup>74</sup> GIDAP Section 8.1.4.

<http://www.caiso.com/Documents/On-PeakDeliverabilityAssessmentMethodology.pdf>. The key components of the operational Deliverability Assessments are discussed below.

### Generation Interconnection Project Commercial Operation Date

The assessment models the generation projects according to their Commercial Operation Date (COD). The latest COD information will be collected as specified below:

- The COD in the Generator Interconnection Agreement (GIA) for executed GIAs, including any amendments, or those GIAs that were filed unexecuted at FERC;
- The estimated COD in an approved modification request;
- The estimated COD in the latest study report for projects that have completed the interconnection studies but have not executed the GIA; or
- The requested COD for projects in the current cluster.

The COD will be further scrutinized for feasibility and adjusted if deemed infeasible. Factors used to adjust the COD include:

- Status and progress of the interconnection study or GIA negotiation.
- The estimated time for the Participating TO to complete the Interconnection Facilities and Reliability Network Upgrades required for the generator interconnection.
- Other information provided by the Interconnection Customer, such as notice to proceed with development of Interconnection Facilities or Network Upgrades, and the Generating Facility's permitting, financing and construction status.

The adjusted COD will be used in the operational Deliverability Assessment. In particular, projects that have not signed GIAs or are not under construction are not considered as reasonable to have COD in the next year. The COD for such projects will be adjusted to a later future year based on the factors listed above.

### Study Years

The operational Deliverability Assessment will be performed for each applicable future year until the year before all the required Delivery Network Upgrades are scheduled to be in service for the study group. For example, if the 2013 Interconnection Study Cycle identifies Delivery Network Upgrades to be in service in 2019, the operational Deliverability Assessment will be performed for each year between 2014 and 2018.

### Modeling Requirements

For each study year, the operational Deliverability Assessment will model the generation projects with the most recent available COD(s), as described above, in or before the study year and Network Upgrade components that are projected to be in



service in or before the study year. In case a generation project will be implemented in phases as defined in the executed GIA, the phasing of the project will be modeled.

The resources, including generation, load, and import, will be modeled in accordance with the On-Peak Deliverability Assessment methodology.

#### Method for Allocating Partial Capacity Deliverability

Assuming the system conditions cannot accommodate the full deliverability of all generators in a study group that will be in Commercial Operation for the study year, available deliverability is allocated to each generator in the study group that has requested Full Capacity of Partial Capacity Deliverability Status as a function of the Queue Position, generator size, and generator flow impact on the transmission constraint that is binding in the deliverability power flow. A Generator may be allocated deliverability less than it has requested.

For each deliverability constraint, the available deliverability without the generation projects being tested is allocated to projects in the order from earlier queued projects to later queued projects until it is depleted. The projects in the same cluster are considered to have the same queue position. If there is available Partial Capacity deliverability for projects in the same cluster, the capacity is allocated using a weighted least square optimization.

The optimization allocation is formulated as:

$$\begin{aligned} \text{Min } & \sum_{i=1}^N \frac{1}{D_i} (\bar{D}_i - D_i)^2 \\ \text{s.t. } & \sum_{i=1}^N D_i \cdot SF_{il} \leq C_l, \quad l = 1, \dots, L \\ & 0 \leq D_i \leq \bar{D}_i, \quad i = 1, \dots, N \end{aligned}$$

where

N: number of generators

$D_i$ : Deliverable MW of generator  $i$

$\bar{D}_i$ : Upper limit of NQC<sup>75</sup> of generator  $i$

L: number of deliverability constraints

$C_l$ : available capacity on the deliverability constraint  $l$

$SF_{il}$ : shift factor of generator  $i$  output on deliverability constraint  $l$

#### (iv) Interim Energy-Only Interconnection Until DNUs Completed<sup>76</sup>

If it is determined that the Delivery Network Upgrades cannot be completed by the Interconnection Customer's identified Commercial Operation Date, the

<sup>75</sup> For intermittent generation, a range of output levels between the 20% and 50% production exceedance during summer peak load hours are studied.

<sup>76</sup> GIDAP Section 8.1.2.

Interconnection Study will include interim mitigation measures necessary to allow the Generating Facility to interconnect as an energy-only resource until the Delivery Network Upgrades for the Generating Facility are completed and placed into service, unless interim partial capacity deliverability measures are developed pursuant to GIDAP Section 8.1.4 and GIDAP BPM Section 6.2.7.3(iii).

#### **6.2.7.4. Phase II Cost Estimates and Responsibilities**

##### **Cost Estimate Details**<sup>77</sup>

With respect to the items detailed in GIDAP Section 8.1.1 and GIDAP BPM Section 6.2.7.1, the Phase II Interconnection Study shall specify and estimate the cost to physically and electrically connect the Interconnection Customer's Interconnection Facilities to the CAISO Controlled Grid in accordance with Good Utility Practice. The estimate shall include the cost of the equipment, engineering, procurement and construction work, as well as any financial impacts (*i.e.*, on Local Furnishing Bonds), which are determined as needed on the CAISO Controlled Grid in the updated Phase II Interconnection Study technical analyses. If there are any financial impacts, the schedule for effecting remedial measure addressing such financial impacts shall be specified.

The Phase II Interconnection Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Participating TO's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities.

##### **Cost Responsibility for Reliability Network Upgrades**<sup>78</sup>

Cost responsibility for final Reliability Network Upgrades identified in the Phase II Interconnection Study of an Interconnection Request shall be assigned to Interconnection Customers regardless of whether the Interconnection Customer has selected Option (A) or (B) or Energy-Only Deliverability Status, as follows:

- (i) The cost responsibility for final short circuit related General Reliability Network Upgrades shall be assigned to all Interconnection Requests in the Group Study proportional to the short circuit duty contribution of each Generating Facility. The short circuit duty contribution of each Generating Facility includes: (a) the direct contribution from the Generating Facility; and (b) the share of contribution from other Reliability Network Upgrades and Local Delivery Network Upgrades of which the costs are allocated to the Generating Facility.

<sup>77</sup> GIDAP Section 8.1.3.

<sup>78</sup> GIDAP Section 8.3.

- (ii) The cost responsibility for all other final General Reliability Network Upgrades shall be assigned to all Interconnection Requests in that Group Study proportional to the maximum megawatt electrical output of each proposed new Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request.
- (iii) The Interconnection Customer's Current Cost Responsibility will include its allocated cost share for Interconnection Reliability Network Upgrades that are Assigned Network Upgrades. The CAISO will allocate assigned Interconnection Reliability Network Upgrade costs proportional to the number of Interconnection Requests that have been assigned the Interconnection Reliability Network Upgrade in the current Queue Cluster;
- (iv) The Interconnection Customer's MCR will include the full cost of Assigned Network Upgrades that are Interconnection Reliability Network Upgrades until such time that the third Interconnection Financial Security postings are made covering the full cost of the Interconnection Reliability Network Upgrade, in which case the CAISO will reduce the Interconnection Customer's MCR to its allocated share pursuant to subsection (iii).
- (v) The Maximum Cost Exposure will include the full cost of Interconnection Reliability Network Upgrades that are Assigned Network Upgrades and Conditionally Assigned Network Upgrades. The CAISO will reduce the Maximum Cost Exposure consistent with subsection (iv).

### **Cost Responsibility for Delivery Network Upgrades**<sup>79</sup>

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.

<sup>79</sup> GIDAP Section 8.4.

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

#### **Cost Responsibility for Local Off-Peak Network Upgrades**<sup>80</sup>

The estimated costs 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.

#### **Cost Responsibility for Participating TO's Interconnection Facilities**

As stated in GIDAP BPM Section 6.2.4.5, the costs for the Participating TO's Interconnection Facilities estimated in the Phase II Interconnection Studies are estimates only that establish the basis for Interconnection Financial Security posting amounts. Interconnection Customers cost responsibility will equal the actual total costs for such facilities.

#### **6.2.7.5. Accelerated Phase II Studies**<sup>81</sup>

Under certain circumstances, the CAISO may perform an Accelerated Phase II Interconnection Study for an Interconnection Request. The Accelerated Phase II Interconnection Study shall be completed within one hundred fifty (150) calendar days following the later of (1) the posting of the initial Interconnection Financial Security or (2) the completion of the reassessment in preparation for the Phase II Interconnection Study under GIDAP Section 7.4 and GIDAP BPM Section 6.2.6.3.

An Accelerated Phase II Study may be performed where the Interconnection Request meets the following criteria;

- (i) the Interconnection Request was not grouped with any other Interconnection Requests during the Phase I Interconnection Study or was identified as interconnecting to a point of available transmission during the Phase I Interconnection Study; and

<sup>80</sup> GIDAP Section 8.4.1

<sup>81</sup> GIDAP Section 8.6.

- (ii) the Interconnection Customer is able to demonstrate that the general Phase II Interconnection Study timeline under GIDAP is not sufficient to accommodate the Commercial Operation Date of the Generating Facility.

In addition to the above criteria, the CAISO may apply to FERC in coordination with the Interconnection Customer for a waiver of the timelines in the GIDAP to meet the schedule required by an order, ruling, or regulation of the Governor of the State of California, the CPUC, or the California Energy Commission.

Interconnection Customers that are requesting an Accelerated Phase II Interconnection Study must submit the Affidavit for Projects Seeking an Accelerated Phase II study. The Interconnection Customer should contact the CAISO for the template affidavit.

The affidavit must include the following information:

1. The project name and queue number of the Generating Facility being attested to.
2. An attestation that the Interconnection Study timeline under GIDAP cannot accommodate the Commercial Operation Date of the Generating Facility.
3. The project's status. The Interconnection Customer must have obtained or demonstrated the ability to obtain the necessary regulatory approvals and permits allowing the Generating Facility to complete construction in time to meet the Commercial Operation Date.
4. The project's financing status. The Interconnection Customer must provide evidence of financing necessary to make the Interconnection Financial Security postings required in GIDAP Sections 11.2 and 11.3.

All affidavits must be notarized and printed on company letterhead. Each affidavit will be reviewed by the CAISO to ensure completeness and accuracy. If the CAISO determines that an affidavit is unacceptable, it will be returned for review and correction. The CAISO will work in good faith with the Interconnection Customer to resolve any issue.

#### **6.2.7.6. Contents of Phase II Interconnection Study Report**

Below is a general list of report information that may be included as part of the Phase II Interconnection Study reports. The content of Phase II Interconnection Study report information may vary based on the unique circumstances of a project.

- Generator interconnection data

- Study scopes and assumptions
- On-Peak Deliverability Assessment
- Off-Peak Deliverability Assessment
- Power flow analysis
- Reactive power deficiency analysis
- Transient stability evaluation
- Short circuit duty analysis
- Operational studies
- Preliminary protection requirement
- Interconnection plan of service requirements
- Participating TO's and Interconnection Customer's Interconnection Facilities
- Network upgrade requirements
- Identify Potentially Affected Systems
- Substation and transmission work scope and estimate
- Upgrades, cost estimates and construction duration estimates

### 6.2.8. Phase II Interconnection Study Results Meetings<sup>82</sup>

Within thirty (30) calendar days of providing the final Phase II Interconnection Study report to the Interconnection Customer, the applicable Participating TO(s), the CAISO and the Interconnection Customer shall meet to discuss the results of the Phase II Interconnection Study, including selection of the final Commercial Operation Date.

#### 6.2.8.1. Interconnection Customer Comments on Phase II Interconnection Study Report

Should the Interconnection Customer provide written comments on the final Phase II Interconnection Study report within ten (10) Business Days of receipt of the report, but in no case less than three (3) Business Days before the Results Meeting, whichever is sooner, then the CAISO will address the written comments in the Phase II Interconnection Study Results Meeting. Should the Interconnection Customer provide comments at any later time (up to the time of the Results Meeting), then such comments

<sup>82</sup> GIDAP Section 8.7.



shall be considered informal inquiries to which the CAISO will provide informal, informational responses at the Results Meeting, to the extent possible.

The Interconnection Customer may submit, in writing, additional comments on the final Phase II Interconnection Study report up to three (3) Business Days following the Results Meeting. Based on any discussion at the Results Meeting and any comments received, the CAISO (in consultation with the applicable Participating TO(s)) will determine, in accordance with Section 6.8, whether it is necessary to follow the final Phase II Interconnection Study Report with a revised study report or an addendum to the report. The CAISO will issue any such revised report or addendum no later than fifteen (15) Business Days following the Results Meeting.

#### **6.2.8.2. Meeting Minutes**

As is done for the Scoping Meeting and the Phase I Interconnection Study Results Meeting, the CAISO will prepare meeting minutes and provide the Interconnection Customer, and other attendees, with an opportunity to confirm their accuracy.

#### **6.2.8.3. Establish Final Commercial Operation Date**

At the Phase II Interconnection Study Results Meeting, the parties should be prepared to discuss and select the final Commercial Operation Date. The CAISO's practice is to incorporate the time frame for completion of the transmission build-out when determining the Commercial Operation Date.

### **6.2.9. Allocation Process for TP Deliverability<sup>83</sup>**

After the Phase II Interconnection Study reports are issued, the CAISO will perform the allocation of the TP Deliverability to eligible Generating Facilities according to, and in the order of, the allocation groups in GIDAP Section 8.9.2<sup>84</sup> and GIDAP BPM Section 6.2.9.4. The TP Deliverability available for allocation will be determined from the most recent Transmission Plan. Once a Generating Facility is allocated TP Deliverability, the facility will be required to comply with retention criteria specific in GIDAP Section 8.9.3 and BPM Section 6.2.9.5 in order to retain the allocation. A Generating Facility's compliance with the retention criteria shall be verified annually until the facility achieves Commercial Operation, at which time the allocation of TP Deliverability will be reflected in the On-Peak facility's Deliverability Status as an attribute of the facility that is no longer subject to the retention criteria.

Allocation of TP Deliverability shall not provide any Interconnection Customer or Generating Facility with any right to a specific MW of capacity on the CAISO Controlled Grid or any other

<sup>83</sup> GIDAP Section 8.9.

<sup>84</sup> As of the publishing date of GIDAP BPM-Version 16.0, GIDAP Section 8.9.2(3) incorrectly references Section 8.9.3.2, and not Section 8.9.2.3. The CAISO will correct this error in a future tariff amendment filing.

rights (such as title, ownership, rights to lease, transfer or encumber). Rather, an allocation of TP Deliverability will be reflected in the Generating Facility's On-Peak Deliverability Status for purposes of determining its Net Qualifying Capacity on an annual basis in accordance with CAISO Tariff Section 40.4.6.1 and Section 5.1 of the BPM for Reliability Requirements.

TP Deliverability is for On-Peak Deliverability only.

#### **6.2.9.1. Market Notice of Timeline, Submission of Affidavits and Commencement of Allocation Activities<sup>85</sup>**

The CAISO will issue a Market Notice to inform interested parties as to the timeline for commencement of allocation activities. The market notice will specify the due date for Interconnection Customer submittal of affidavits attesting to each proposed Generating Facility's eligibility status and retention information, the due date for the study deposit for Energy Only projects seeking TP Deliverability, and the anticipated release date of the allocation results to Interconnection Customers. There are two major components of the allocation process, which are described in detail in GIDAP BPM Sections 6.2.9.3 and 6.2.9.4, respectively.

The remainder of this GIDAP BPM Section 6.2.9.1 describes the affidavits that Interconnection Customers submit in support of the process for allocating TP Deliverability. The three different affidavits needed prior to the allocation process are listed below:

1. Affidavit for Queue Cluster 4 and earlier queued projects.
2. Affidavit to retain TP Deliverability allocations for Interconnection Customers that currently have a TP Deliverability allocation from a previous allocation cycle.
3. Affidavit for projects seeking allocation of TP Deliverability, including projects that have exercised the parking option, and eligible Energy Only projects.

All affidavits shall be notarized. All affidavits will be reviewed by the CAISO to ensure completeness and accuracy based on information available to the CAISO. If the CAISO determines that an affidavit is not acceptable it will be returned to the submitter for correction and resubmittal for further review. The CAISO and the Interconnection Customer shall work together to resolve any issue on a best efforts basis.

##### **(i) Affidavit for Cluster 4 and Earlier Queued Projects**

The first component of the GIDAP allocation procedures, as described in GIDAP BPM Section 6.2.9.3(a), requires that the CAISO identify MW quantities of TP Deliverability to be reserved for proposed Generating Facilities in Queue Cluster 4 and earlier that are expected to achieve Commercial Operation.

<sup>85</sup> GIDAP Section 8.9.

Specifically, GIDAP Section 8.9.1(a) requires the CAISO to identify commitments that will utilize MW quantities of TP Deliverability for proposed Generating Facilities in Queue Cluster 4 or earlier that have executed power purchase agreements (PPAs) with Load-Serving Entities and have GIAs that are in good standing.

For this purpose, each year following the completion of the current Queue Cluster's Phase II Interconnection Study, the CAISO will require all Interconnection Customers that meet the criteria just stated to provide an affidavit that attests to information associated with their PPAs and GIAs, as well as other information to assist in the evaluation of these Generating Facilities' progress toward Commercial Operation.

However, the content of these affidavits, if submitted, will not be used to determine the retention of TP Deliverability for any Cluster 4 and earlier-queued projects, i.e., they would receive the level of deliverability requested once they reach Commercial Operation and the required Network Upgrades are completed even if they do not meet the criteria of reserving TP Deliverability.

The affidavit must include:

- The name and queue number of the Generating Facility being attested to;
- An attestation to the existence of an executed and active PPA, and specify the MW of generating capacity covered under the PPA and the date the PPA was fully executed; and
- The name of the purchasing entity associated with the PPA.

(ii) **Affidavit for Retaining TP Deliverability Allocation**

- a) Generating Facilities in Queue Cluster 5 through 9 that have been allocated TP Deliverability or that parked pursuant to GIDAP Section 8.9.4 or 8.9.4.1 must demonstrate, by the date set forth in the Market Notice each year, and according to the process described in this GIDAP BPM, that the Generating Facility meets the criteria to retain its TP Deliverability as described in GIDAP Section 8.9.3.1.

For Generating Facilities in Queue Cluster 5 through 9 that claimed balance sheet financing when seeking a TP Deliverability allocation prior to November 27, 2018, those projects may cite those previous affidavit submittals when submitting retention affidavits in order to confirm their intention to continue their balance sheet financing choice.

- b) Generating Facilities in Queue Cluster 10 or later, that have been allocated TP Deliverability under GIDAP Section 8.9.2, on the date set forth in the Market Notice each year and according to the process described in this GIDAP BPM, must demonstrate that the Generating Facility meets the criteria to retain its TP Deliverability as described in GIDAP Section 8.9.3.

(iii) **Affidavit for projects seeking allocation of TP Deliverability, including projects that have exercised their parking option(s), eligible projects with Partial Capacity Deliverability Status, and eligible Energy Only projects**

This affidavit is applicable to Generating Facilities that fall into one of three categories. The first category consists of Generating Facilities that have just completed the GIDAP Phase II Interconnection Study process and are seeking an allocation of TP Deliverability for the first time. The second category consists of Generating Facilities that have completed the GIDAP Phase II Interconnection Study process in a previous Interconnection Study Cycle that have exercised the parking option or extended parking option, pursuant to GIDAP Section 8.9.4 or 8.9.4.1 respectively, including Partial Capacity Deliverability Status projects that elected to park any non-allocated portion of their project, and are seeking an allocation of TP Deliverability in the current Queue Cluster's allocation process. The third category includes Energy-Only Generating Facilities, including Partial Capacity Deliverability Status projects that elected to convert any non-allocated portion of their project to Energy Only, that are seeking TP Deliverability.

For Generating Facilities in Queue Cluster 5 through 9 that claimed balance sheet financing when seeking a TP Deliverability allocation and elected to park prior to November 27, 2018 and are seeking a TP Deliverability allocation after November 27, 2018, those projects may cite those previous affidavits when submitting retention affidavits in order to maintain the same treatment as the previous balance sheet financing claims.

Interconnection Customers may only attest that they are proceeding without a power purchase agreement (in allocation group 8.9.2(3), "group 3") in the allocation cycle immediately following receipt of their Phase II Interconnection Study. Interconnection Customers that request TP Deliverability in group 3 and do not receive TP Deliverability, or only receive a partial allocation, may continue to attest to group 3 status in subsequent TP Deliverability cycles in which they are eligible to seek an allocation. Interconnection Customers in group 3 may elect to park only that portion of their Interconnection Request (up to 100%) that does not receive TP Deliverability. Such parked portions may receive TP Deliverability in subsequent allocation cycles from any group for which they qualify (including allocation group 3). If an Interconnection Customer elects a group other than group 3 in subsequent allocation cycles, it may not select group 3 in a future allocation cycle. Interconnection Customers that receive TP Deliverability allocations for less than requested may also elect to permanently reduce their requested Interconnection Service Capacity to the amount of TP Deliverability received following the allocation.

The CAISO shall allocate available TP Deliverability to all or a portion of the full MW Interconnection Service Capacity of the Generating Facility as specified in the Interconnection Request based on the criteria defined in GIDAP BPM Section 6.2.9.4. Where a criterion is met by a portion of the full MW Interconnection Service Capacity of the Generating Facility, the eligibility score associated with that criterion shall apply to the portion that meets the criterion. Therefore, the affidavit must relate to the same

proposed Generating Facility as described in the Interconnection Request and, for each allocation group attested to, must specify the MW quantity of Interconnection Service Capacity that meets the criteria for inclusion in the allocation group. At a minimum, the Generating Facility must meet criteria established in one of the seven allocation groups defined in GIDAP Section 8.9.2.

Projects with Energy-Only Deliverability Status, including Partial Capacity Deliverability Status projects that elected to convert any non-allocated portion of their project to Energy Only, requesting Deliverability must submit to the CAISO a \$60,000 study deposit for each Generating Facility seeking TP Deliverability. The \$60,000 study deposit is due on the same due date of the Seeking TP Deliverability affidavit as established and provided in the annual Market Notice published in accordance with GIDAP BPM Section 6.2.9.1. A market notice is provided thirty (30) calendar days in advance of the TP Deliverability Affidavit due date. Refer to GIDAP Section 8.9.2 for further details.

The study deposit will be applied to pay for prudent costs incurred by the CAISO, the Participating TO(s), and/or third parties as applicable, to perform and administer the TP Deliverability studies for the Energy Only Interconnection Customers. Any and all costs of the Energy Only TP Deliverability study will be borne by the Energy Only Interconnection Customers seeking a TP Deliverability allocation. The CAISO will coordinate the study with the Participating TO(s). The Participating TO(s) will invoice the CAISO for any work within seventy-five (75) calendar days of completion of the study, and, within thirty (30) days thereafter, the CAISO will issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the study. If the actual cost of the study is greater than the deposit provided by the Interconnection Customer, the Interconnection Customer will pay the balance within thirty (30) days of being invoiced.

Any refunds will be processed in accordance with the CAISO's established business practice whereby interconnection deposit refunds are processed in batches and payments are disbursed monthly. If the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate a refund or if the Interconnection Customer has any outstanding invoice balance due to the CAISO on another project owned by the same Interconnection Customer, the thirty (30) calendar day period for the refund will be suspended until such issue(s) are cured.

The affidavit must include the following current information:

- (1) The TP Deliverability allocation group as identified above
- (2) PPA status (applicable to allocation Groups 1 and 4 only)

(3) Shortlist status (applicable to allocation Groups 2 and 5 only)

(4) Permitting status (applicable to allocation Groups 1 through 7)

(5) Land acquisition status (applicable to allocation Groups 1 through 7)

#### **6.2.9.2. Reassessment Study and TP Deliverability Allocation Study**

The CAISO will perform a multi-step study, in coordination with the Participating TOs, to allocate TP Deliverability to eligible generators and update Network Upgrade requirements for all generator projects that have completed their Phase II Interconnection Study or Facilities Study. The overall study consists of the first part of the reassessment, TP Deliverability allocation, and the second part of the reassessment.

In the first part of the reassessment, the CAISO will update the generator and transmission study models to reflect changes since the model setup was completed for the current Phase II Interconnection Study for the Queue Cluster. The study scope will include a Deliverability Assessment, a power flow analysis, and a stability analysis if applicable. The study will identify all deliverability constraints and updates RNU and LDNU requirements for Interconnection Requests queued earlier than the Queue Cluster going through the TP Deliverability allocation. Then the CAISO will perform a TP Deliverability allocation study for the Area Deliverability Constraints identified in the first part of the reassessment. The CAISO will adjust generator project models in the Deliverability Assessment to represent deliverability preserved for prior commitments and the scores of the generator projects seeking TP Deliverability allocation. The CAISO will allocate available TP Deliverability, if any, to the eligible generator projects in the descending order of scores pursuant to GIDAP BPM Section 6.2.9.4.

After the CAISO receives the Interconnection Customers' decisions on accepting TP Deliverability allocation results, the CAISO, in coordination with the Participating TOs, will perform the second part of the reassessment. The generator projects that have withdrawn will be removed from the study model. The CAISO will update the deliverability study model to reflect changes of requested deliverability status. The CAISO, in coordination with the applicable Participating TOs, will perform a Deliverability Assessment, a power flow analysis, a short circuit duty analysis, and a stability analysis if applicable to update the Network Upgrade requirements for the projects up to the Queue Cluster going through the TP Deliverability allocation.

#### **6.2.9.3. First Component of the Allocation Process: Representing TP Deliverability Used by Prior Commitments<sup>86</sup>**

Before allocating any TP Deliverability to specific Generating Facilities, the CAISO will identify the following commitments that will utilize MW quantities of TP Deliverability and will appropriately represent them during allocation of TP Deliverability in accordance with GIDAP BPM Section 6.2.9.4:

<sup>86</sup> GIDAP Section 8.9.1.



- (a) The proposed Generating Facilities corresponding to earlier queued Interconnection Requests meeting the criteria set forth below:
- (i) proposed Generating Facilities in Queue Cluster 4 or earlier that have executed and active PPAs with Load-Serving Entities and have GIAs that are in good standing; or
  - (ii) proposed Generating Facilities in Queue Cluster 5 and subsequent Queue Clusters that were previously allocated TP Deliverability and have met the retention criteria set forth in GIDAP Section 8.9.3.

As to both criterion (i) and criterion (ii), the CAISO would set aside TP Deliverability in MW amounts that reflect the Deliverability Status requested by the identified Generating Facilities for the expected Qualifying Capacity amounts, which will not necessarily be the same as their installed MW of capacity. For example, a wind or solar photovoltaic resource of 100 MW installed capacity that requested Full Capacity Deliverability Status would typically have a Qualifying Capacity somewhat less than 100 MW. A capacity level lower than 100 MW but higher than the Qualifying Capacity, as specified in the deliverability assessment methodology (link:

<http://www.caiso.com/Documents/On-PeakDeliverability>

AssessmentMethodology.pdf), would be reflected in the MW amount of TP Deliverability the CAISO sets aside before issuing new allocations. If the same Generating Facility requested Partial Capacity Deliverability Status, it would have an even smaller impact on the set-aside of TP Deliverability. For another example, a Generating Facility that met criterion (i) but requested Energy-Only Deliverability Status would not require any set aside of TP Deliverability.

- (b) any Maximum Import Capability included as a planning objective in the Transmission Plan; and
- (c) any other commitments having a basis in the Transmission Plan. For example, the CAISO's annual process for assigning deliverability status to distributed generating resources, which was approved by FERC in November 2012, could result in a commitment of TP Deliverability that would need to be reflected in this component of the process.

This first allocation component is performed for the purpose of determining the amount of TP Deliverability available for allocation to the current Queue Cluster and any eligible parked Generating Facilities from the previous two Queue Clusters in accordance with GIDAP Section 8.9.4 and GIDAP BPM Section 6.2.9.4.

The results of this first allocation component shall not affect the rights and obligations of proposed Generating Facilities in Queue Cluster 4 or earlier with respect to the construction and funding of Network Upgrades identified for such Generating Facilities, or

their requested Deliverability Status. Such rights and obligations will continue to be determined pursuant to the GIP and the Generating Facility's GIA.

#### **6.2.9.4. Second Component of the Allocation Process: Allocating TP Deliverability to the Current Queue Cluster and Parked Projects<sup>87</sup>**

If the CAISO determines, under GIDAP Section 8.9.1 and after completing the steps described in GIDAP BPM Section 6.2.9.3, that no TP Deliverability exists for allocation to Generating Facilities not previously allocated their requested amounts of TP Deliverability (which would include both the current Queue Cluster as well as parked projects from the prior two Queue Clusters), then no allocation of TP Deliverability shall be made to these Generating Facilities, which will not impact the retention of prior partial TP Allocations as long as the project meets the allocation retention requirements. If TP Deliverability is available for allocation, then the CAISO will allocate such capacity to eligible Generating Facilities in the current Interconnection Study Cycle and eligible parked Generating Facilities from the previous two Interconnection Study Cycles.

The CAISO will allocate available TP Deliverability to Generating Facilities (1) in order of the seven allocation groups described in GIDAP Section 8.9.2 and (2) within each allocation group, based on the Generating Facility's total points as established in items (1) through (4) below, based on the Interconnection Customers' demonstration, via the submitted affidavits, and in accordance with the criteria set forth in GIDAP Section 8.9.2.1. Where a criterion is met by a portion of the full MW Interconnection Service Capacity of the Generating Facility, within each allocation group, the eligibility score associated with that criterion shall apply to the portion that meets the criterion. The demonstration must relate to the same proposed Generating Facility as described in Appendix A to the Interconnection Request.

If the amount of projects meeting the threshold eligibility criteria can be deliverable within the available TP deliverability, the CAISO will allocate TP Deliverability to all of them. In this case the Option (A) or (B) projects that receive TP Deliverability may execute GIAs that reflect their allocations. If, however, not all projects in an allocation group that meet the threshold criteria can be fully accommodated, the CAISO will allocate available TP Deliverability based on the numerical scores determined from each affected project's affidavit. The affidavit scores reflecting each project's status with respect to the criteria below. The project receiving the highest score within the allocation group will receive a TP Deliverability allocation, based on availability, up to their full request, at which point, the project with the next highest score will receive a TP Deliverability allocation, based on availability, up to their full request, and so on.

#### **1. The Project's PPA Status (applicable to Allocation Groups 1 and 4 Only)**

<sup>87</sup> GIDAP Section 8.9.2.

Interconnection Customer must provide proof of having an executed and regulator-approved power purchase agreement. Power purchase agreements must have the point of interconnection, capacity, fuel type, technology, and site location in common with the Interconnection Customer and GIA. The power purchase agreement must match the project in site, POI, legal entity, and MW amount.

- a. (10 points) The Interconnection Customer represents to the CAISO that it has a regulator-approved PPA with a Load-Serving Entity to serve end users in its service area requiring the project to have Deliverability, or an executed PPA that does not require regulatory approval.
- b. (7 points) The Interconnection Customer has an executed PPA with a Load-Serving Entity to serve end users in its service area requiring the Project to have Deliverability, but such agreement has not yet received regulatory approval.

**2. The Project's Shortlist Status** (applicable to Allocation Groups 2 and 5 Only)

Interconnection Customer must provide proof/documentation of the project being selected/shortlisted and details of such request for offer /request for proposal or solicitation.

- a. (Minimum criteria, no points) The Interconnection Customer does not have an executed PPA, but the project is currently included on an active short list or other commercially recognized method of preferential ranking of power providers by a prospective purchasing Load Serving Entity in the CAISO balancing authority area requiring the project to have Deliverability.

**3. The Project's Permitting Status (All allocation Groups 1 – 7)**

- a. (10 points) The Interconnection Customer has received its final governmental permit or authorization allowing the Generating Facility to commence construction.
- b. (5 points) The Interconnection Customer has received a draft environmental report (or equivalent environmental permitting document) indicating likely approval of the requested permit and/or which indicates that the permitting authority has not found an environmental impact which would likely prevent the approval. For purposes of this requirement, a draft environmental report can take the form of a draft environmental impact report, draft environmental impact statement, environmental assessment, mitigated negative declaration, or CEC preliminary staff assessment. Findings that would qualify as those which would indicate likely approval include no environmental impacts found that cannot be mitigated to insignificance, or in the case of a National Environmental Policy Act document, the project has been identified as the preferred alternative. If Federal or State Endangered Species Act permits are required, draft environmental reports for such permits have been received and similarly either indicate likely approval or do not find an impact that would likely prevent approval.

- c. (3 points) The Interconnection Customer has applied for the necessary governmental permits or authorizations and the authority has deemed such documentation as data adequate for the authority to initiate its review process.
- d. (1 point) The Interconnection Customer has applied for the necessary governmental permit or authorization for the construction.

#### 4. The Project's Land Acquisition Status (All allocation Groups 1 – 7)

- a. (3 points) The Interconnection Customer can demonstrate a present legal right to begin construction of the Generating Facility on one hundred percent (100%) of the real property footprint necessary for the entire Generating facility.
- b. (2 points) The Interconnection Customer can demonstrate Site Exclusivity.
- c. (0 points) The Interconnection Customer has a Site Exclusivity deposit.

The tables below summarize the allocation ranking groups and scoring methodology described above for TP Deliverability allocation.

Allocation Group	Project/Capacity Status	Commercial Status	Can Build DNUs for Allocation?	Allocation Rank
1	Study/Parking Process	Executed or regulator-approved PPA requiring FCDS or interconnection customer is a LSE serving its own load	Yes	Allocated 1 <sup>st</sup>
2	Study/Parking Process	Shortlisted in a RFO/RFP	Yes	Allocated 2 <sup>nd</sup>
3 <sup>88</sup>	Study Process (Following Ph. II Only,) <sup>89</sup>	Proceeding without a PPA	Yes	Allocated 3 <sup>rd</sup>
4	Converted to Energy Only, or Energy Only projects that achieved commercial operation	Executed or regulator-approved PPA requiring FCDS	No	Allocated 4 <sup>th</sup>
5	Converted to Energy Only, or Energy Only projects that achieved commercial operation	Shortlisted in a RFO/RFP	No	Allocated 5 <sup>th</sup>
6	Converted to Energy Only	Commercial operation achieved	No	Allocated 6 <sup>th</sup>
7	Energy Only	Commercial operation achieved	No	Allocated 7 <sup>th</sup>

<sup>88</sup> Refer to Appendix DD, Section 8.9.2.2 for specific project limitations when Group 3 is selected.

<sup>89</sup> Refer to Section 6.2.9.1(iii) for projects that previously selected balance sheet financing in their seeking TP Deliverability affidavits.

Points	Permitting	PPA Status	Shortlist Status	Land Acquisition
10	Has Final government permit to construct	Has regulator-approved PPA or is LSE		
9				
7		Has executed PPA w/o regulatory approval		
5	Draft Environmental Report w/no significant impact that cannot be mitigated			
4				
3	Data adequate			Legal right to construct 100% of project
2				Site Exclusivity
1	Applied			
0 (Min. Req.)			No PPA, included in shortlist or actively negotiating	

Where the available amount of TP Deliverability can accommodate only one out of two or more Generating Facilities requesting TP Deliverability and such Generating Facilities are in the same allocation group and score equally under the criteria above, then the CAISO will allocate the TP Deliverability under GIDAP BPM Section 6.2.9.4 to such equally scoring Generating Facilities according to lowest LDNU cost estimates.

#### 6.2.9.5. Criteria for Retaining TP Deliverability Allocation<sup>90</sup>

For Interconnection Customers in Queue Cluster 10 or later, once a Generating Facility is allocated TP Deliverability under GIDAP Section 8.9.2 and GIDAP BPM Section 6.2.9.4, the Interconnection Customer must annually demonstrate, on the date set forth in the Market Notice and according to the process described in this GIDAP BPM, that the Generating Facility meets the criteria set forth in GIDAP Section 8.9.3 to retain its TP Deliverability. For Interconnection Customers in Queue Clusters 5 through 9, once a Generating Facility is allocated TP Deliverability under GIDAP Section 8.9.2 and GIDAP BPM Section 6.2.9.4, the Interconnection Customer must annually demonstrate, on the date set forth in the Market Notice and according to the process described in this GIDAP BPM, that the Generating Facility meets the criteria set forth in GIDAP Section 8.9.3.1 to retain its TP Deliverability.

Refer to GIDAP Section 8.9.3.2 for issues related to an Interconnection Customer's loss of a PPA or short list status.

<sup>90</sup> GIDAP Section 8.9.3.

#### 6.2.9.6. Parking for Option (A) Generating Facilities<sup>91</sup>

For an Option (A) Generating Facility in the current Interconnection Study Cycle which either was allocated less TP Deliverability than requested or does not desire to accept the amount allocated the Interconnection Customer shall select one of the following options:

- (1) Withdraw its Interconnection Request; or
- (2) Decline any allocated TP Deliverability amount and enter into a GIA for Energy-Only Deliverability Status for the entire Generating Facility. In such circumstances, upon execution of the GIA, any Interconnection Financial Security shall be adjusted to remove the obligation for Interconnection Financial Security pertaining to LDNUs; or
- (3) Park the Interconnection Request; in which case the Interconnection Request may remain in the Interconnection queue until the next allocation of TP Deliverability in which it may participate in accordance with the requirements of GIDAP Section 8.9.2 and GIDAP BPM Section 6.2.9.4. Under this option, the Interconnection Customer may decline any allocated TP Deliverability amount and park the entire amount of the Interconnection Request, or may accept all or a portion of the allocated amount and park to seek the balance of the TP Deliverability needed to fulfill its Interconnection Request in accordance with GIDAP BPM Section 6.2.9.7(iii). Parking an Interconnection Request does not confer a preference relative to any other Interconnection Request with respect to allocation of TP Deliverability; or
- (4) Elect one of the other options available under GIDAP BPM Section 6.2.9.7.

Interconnection Customers that have requested to park their Interconnection Request may request to come out of parking prior to participating in the next allocation of TP Deliverability. In such circumstances, the portion of the Interconnection Request that is concluding its parking early will be converted to Energy Only. Interconnection Customers that conclude their parking early will not be tendered a GIA until they have satisfied the second posting of Interconnection Financial Security.<sup>92</sup> Except for loss of power purchase agreement or shortlist status as described in GIDAP Section 8.9.3.2, Interconnection Customers that become Energy Only due to a request to come out of parking early may not reduce their Maximum Cost Responsibility, Current Cost Responsibility, or Interconnection Financial Security for any assigned Delivery Network Upgrades 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.<sup>93</sup>

<sup>91</sup> GIDAP Section 8.9.4.

<sup>92</sup> GIDAP Section 13.1.1

<sup>93</sup> GIDAP Section 6.7.2.6



#### 6.2.9.7. Partial Allocations of Transmission Based Deliverability to Option (A) and Option (B) Generating Facilities<sup>94</sup>

If a Generating Facility is allocated TP Deliverability in the current Interconnection Study Cycle in an amount less than the amount of Deliverability requested, then the Interconnection Customer must choose one of the following options:

- (i) Accept the allocated amount of TP Deliverability and reduce the MW Interconnection Service Capacity of the proposed Generating Facility such that the allocated amount of TP Deliverability will provide Full Capacity Deliverability Status to the reduced Interconnection Service Capacity; or
- (ii) Accept the allocated amount of TP Deliverability and adjust the Deliverability status of the proposed Generating Facility to achieve Partial Capacity Deliverability corresponding to the allocated TP Deliverability;
- (iii) For an Option (A) Generating Facility, accept the allocated amount of TP Deliverability and seek additional TP Deliverability for the remainder of the requested Deliverability of the Interconnection Request in the next allocation cycle. In such instance, the Interconnection Customer shall execute a GIA for the entire Generating Facility having Partial Capacity Deliverability corresponding to the allocated amount of TP Deliverability. Following the next cycle of TP Deliverability allocation, the GIA shall be amended as needed to adjust its Deliverability status to reflect any additional allocation of TP Deliverability. At the same time the Interconnection Customer may also adopt options (i) or (ii) above based on the final amount of TP Deliverability allocated to the Generating Facility. There will be no further opportunity for this Generating Facility to participate in any subsequent cycle of TP Deliverability allocation; or
- (iv) Decline the allocated amount of TP Deliverability and either withdraw the Interconnection Request or convert to Energy-Only Deliverability Status. In accordance with GIDAP BPM Section 6.9.2.6(3), an Interconnection Customer having an Option (A) Generating Facility that has not previously parked may decline the allocation of TP Deliverability and park until the next cycle of TP Deliverability allocation in the next Interconnection Study Cycle.

<sup>94</sup> GIDAP Section 8.9.5.

An Interconnection Customer that selects option (iii) or (iv) above may, at the time it selects the option, elect to reduce the Interconnection Service Capacity of its Generating Facility.

#### **6.2.9.8. Declining TP Deliverability Allocation<sup>95</sup>**

An Interconnection Customer having an Option (A) Generating Facility that has not previously parked and is allocated the entire amount of requested TP Deliverability may decline all or a portion of the TP Deliverability allocation and park the Generating Facility Request as described in GIDAP Section 8.9.4(3) and GIDAP BPM Section 6.2.9.6(iii). An Interconnection Customer that selects this option may, at the time it selects the option, elect to reduce the Interconnection Service Capacity of its Generating Facility.

#### **6.2.9.9. Required Customer Response to TP Deliverability Allocation<sup>96</sup>**

Upon completion of the allocation of TP Deliverability in accordance with GIDAP Section 8.9.2 and GIDAP BPM Section 6.2.9.4, the CAISO will provide the allocation results to the Interconnection Customers for eligible Generating Facilities in the current Queue Cluster and eligible parked Generating Facilities in the prior two Queue Clusters. Each of these Interconnection Customers will then have seven (7) calendar days to inform the CAISO of its decisions in accordance with GIDAP Sections 8.9.4, 8.9.5, and 8.9.6 and GIDAP BPM Sections 6.2.9.6, 6.2.9.7, and 6.2.9.8. No response will result in any allocation being deemed not accepted by the IC.

#### **6.2.9.10. Update to Interconnection Study Reports<sup>97</sup>**

Following completion of the reassessment and TP Deliverability allocation study, the CAISO will provide updates where needed to the governing interconnection study reports for all Generating Facilities whose Network Upgrades have been affected.

#### **6.2.9.11. Second and Third Financial Security Postings**

See GIDAP Section 11.2 and GIDAP BPM Section 8.4 for second and third Financial Security posting requirements.

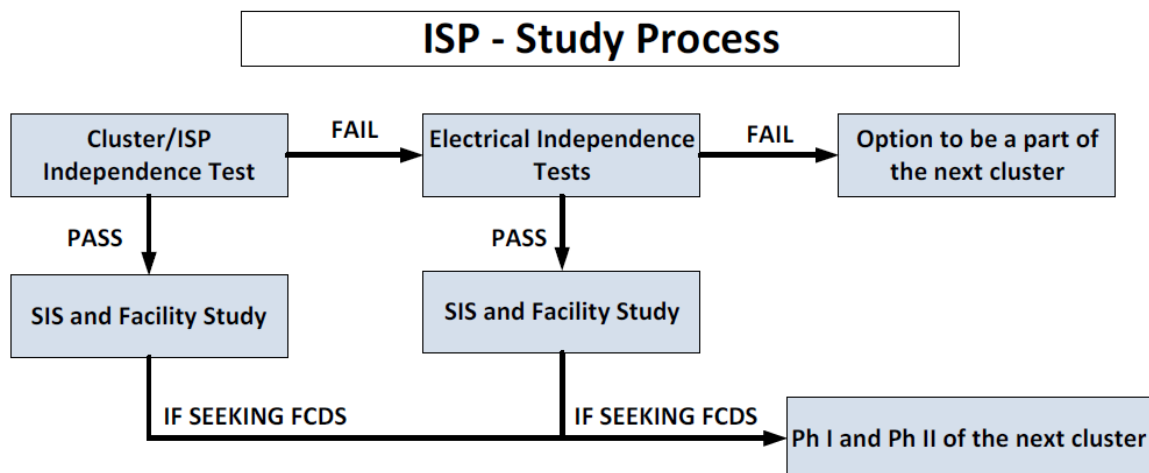
### **6.3. Independent Study Process<sup>98</sup>**

<sup>95</sup> GIDAP Section 8.9.6.

<sup>96</sup> GIDAP Section 8.9.8.

<sup>97</sup> GIDAP Section 8.9.8.

<sup>98</sup> GIDAP Section 4.



As discussed below, an Interconnection Request submitted in the Independent Study Process (ISP) will have its electrical independence tested against the study results of projects in the most recently completed studies of the latest cluster as well as earlier ISP projects in the CAISO queue. If the results of the CAISO and Participating TOs' determination of a project's electrical independence is not completed prior to the close of any given open Cluster Application Window the customer's ISP project will have to wait for the studies of the recently closed Cluster Application Window to be far enough along to be able to determine its electrical independence against the projects in that latest cluster. If the proposed Generating Facility is later found to not be electrically independent and chooses to enter the cluster study process, the Interconnection Customer must wait until the next open Cluster Application Window to submit an Interconnection Request.

An Interconnection Request may be submitted for the ISP at any time. However, Interconnection Customer may find it advantageous to submit its Interconnection Request for the ISP well in advance of an upcoming Cluster Application Window. This would facilitate a project that fails to qualify for the ISP to participate in the next Cluster Study Process if it chooses to do so.

~~\_\_\_An Interconnection Request may be submitted for the ISP at any time. However, even an Interconnection Customer may find it advantageous to submit its Interconnection Request for the ISP as early as possible before a Cluster Application Window closes, in order to receive a determination regarding independence before the window closes, in case the project fails to qualify for the ISP and wishes to participate in the Cluster Study Process and, therefore, minimize the wait time before the next open Cluster Application Window.~~

If an Interconnection Customer submits an Interconnection Request during an ~~n -new~~ open Cluster Application Window ~~to participate in the cluster process period~~ and later chooses to switch to the ISP, then that customer will have to wait for the studies of the recently closed Cluster Application Window to be far enough along in order to ~~determine the proposed perform the~~ Generating Facility's electrical independence ~~test~~ against the ~~study results of the~~ projects in that latest cluster.

## 6.3.1. ISP Eligibility Criteria

### 6.3.1.1. Commercial Operation Date<sup>99</sup>

The Interconnection Customer must provide with-in its Interconnection Request -the Criteria Eligibility Independent Study form, which is available on the CAISO website. The Interconnection Customer must demonstrate an objective demonstration that inclusion in a Queue Cluster will not accommodate the desired Commercial Operation Date (COD) for the Generating Facility. The desired COD must be physically and commercially achievable, by demonstrating all of the following:

- (i) The Interconnection Customer has obtained or can obtain all regulatory approvals and permits needed to complete construction in time to meet the requested COD.
- (ii) The Interconnection Customer is able to provide or can obtain a purchase order for generating equipment specific to the proposed Generating Facility, or a statement signed by an officer or authorized agent of the Interconnection Customer demonstrating that the Interconnection Customer has a commitment for the supply of its major generating equipment in time to meet the COD through a purchase agreement to which the Interconnection Customer is a party.
- (iii) The Interconnection Customer can provide reasonable evidence of adequate financing or other financial resources necessary to make the Interconnection Financial Security postings required in the GIDAP.
- (iv) The proposed Point of Interconnection must be either: (1) an existing facility on the CAISO controlled Grid that does not require any expansion in order to accommodate the interconnection of the Generating Facility; or (2) a facility approved in the Transmission Planning Process or identified as necessary through Interconnection Studies performed for other Interconnection Customers that is fully permitted, is under construction at the time the Interconnection Request is made, and is expected to be in service by the requested COD of the Generating Facility.
- (v) With respect to any Reliability Network Upgrades that are anticipated to be needed to interconnect the Generating Facility, and that are already part of an existing plan of service or have been identified as necessary through Interconnection Studies performed for other Interconnection Customers, or have been identified in the Transmission Planning Process, such Reliability Network Upgrades must be either in service or under construction and have a completion date no later than the requested COD of the Generating Facility.

<sup>99</sup> GIDAP Section 4.1.1.

### 6.3.1.2. Site Exclusivity<sup>100</sup>

The Interconnection Customer seeking to use the Independent Study Process track must also demonstrate Site Exclusivity. The customer may not utilize the Site Exclusivity Deposit under the Independent Study Process track.

### 6.3.1.3. Electrical Independence<sup>101</sup>

In addition to the qualifying criteria above and a demonstration of Site Exclusivity, the proposed Generating Facility must be electrically independent of other Interconnection Requests included in an existing Queue Cluster, pursuant to GIDAP Section 4.2 and GIDAP BPM Section 6.3.2 and, in addition, the proposed Generating Facility must be electrically independent of any other Generating Facility that is currently being studied under an earlier-queued Independent Study Process Interconnection Request.

### 6.3.1.4. CAISO Notice on COD and Site Exclusivity<sup>102</sup>

The CAISO will inform an Interconnection Customer whether it has satisfied the requirements set forth in GIDAP Sections 4.1.1 and 4.1.2 and GIDAP BPM Sections 6.3.1.1 and 6.3.1.2 within fifteen (15) Business Days of receiving the Interconnection Request.

### 6.3.1.5. CAISO Notice on Electrical Independence<sup>103</sup>

The CAISO will inform an Interconnection Customer whether it has satisfied the requirement that it be electrically independent of other Interconnection Requests, pursuant to GIDAP Section 4.2 and GIDAP BPM Section 6.3.2, within thirty (30) calendar days of receiving data necessary to determine whether the Interconnection Customer has satisfied such requirements. For a proposed Generating Facility in a study area with active Interconnection Requests in the current Queue Cluster or the Independent Study Process, such thirty (30) calendar day period will commence when the Phase I Interconnection Study results are available for the current Queue Cluster and all system impact studies (or combined system impact and facilities studies) have been completed for all earlier-queued Independent Study Process Interconnection Requests in the same study area.

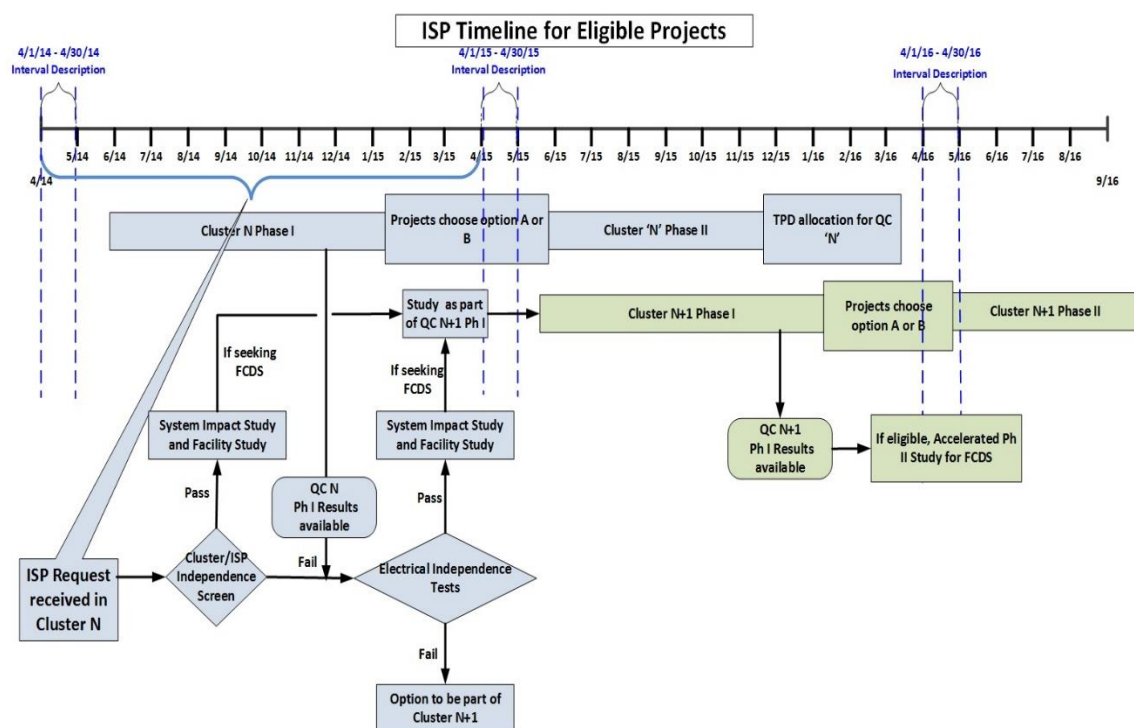
<sup>100</sup> GIDAP Section 4.1.2.

<sup>101</sup> GIDAP Section 4.1.3.

<sup>102</sup> GIDAP Section 4.1.4.

<sup>103</sup> GIDAP Section 4.1.5.

Any Interconnection Request that does not satisfy the criteria necessary to qualify for the Independent Study Process Track (*i.e.*, fails to satisfy any of the requirements set forth in GIDAP Sections 4.1.1, 4.1.2, and 4.1.3 and GIDAP BPM Sections 6.3.1.1, 6.3.1.2, and 6.3.1.3) shall be deemed withdrawn, without prejudice to the Interconnection Customer submitting a request at a later date, unless the Interconnection Customer notifies the CAISO in writing within ten (10) Business Days that it wishes the CAISO to hold the Interconnection Request for inclusion in the next Queue Cluster, in which event the CAISO will do so.



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

<sup>105</sup> GIDAP Section 4.2.



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

#### 6.3.2.1. Flow Impact Test/Behind the Meter Criteria<sup>106</sup>

An Interconnection Request for Independent Study must satisfy the set of requirements set forth in Section "A" for general Independent Study, and Section "B" for behind-the-meter Independent Study as outlined below.

##### A. General Independent Study Requests

The CAISO and the applicable Participating TO(s) will perform the flow impact test for an Interconnection Customer requesting its Interconnection Request to be processed under the Independent Study Process as follows:

- (i) The CAISO in coordination with the Participating TO will identify the transmission facility closest, in terms of electrical distance, to the proposed Point of Interconnection of the Generating Facility being tested that will be electrically impacted, either as a result of Reliability Network Upgrades identified or reasonably expected to be needed in order to alleviate power flow concerns caused by Generating Facilities currently being studied in a Queue Cluster, or as a result of Reliability Network Upgrades identified or reasonably expected to be needed to alleviate power flow concerns caused by earlier queued Generating Facilities currently being studied through the Independent Study Process. If the current Queue Cluster studies or earlier queued Independent Study Process studies have not yet determined which transmission facilities electrically impacted by the Generating Facility being tested require Reliability Network Upgrades to alleviate power flow concerns, and the CAISO cannot reasonably anticipate whether such transmission facilities will require such Reliability Network Upgrades from other data, then the CAISO will wait to conduct the independence analysis under this section until sufficient information exists in order to make this determination. If the flow impact on a Reliability Network Upgrade identified pursuant to these criteria cannot be tested due to the nature of the Upgrade, then the flow impact test will be performed on the limiting element(s) causing the need for the Reliability Network Upgrade.

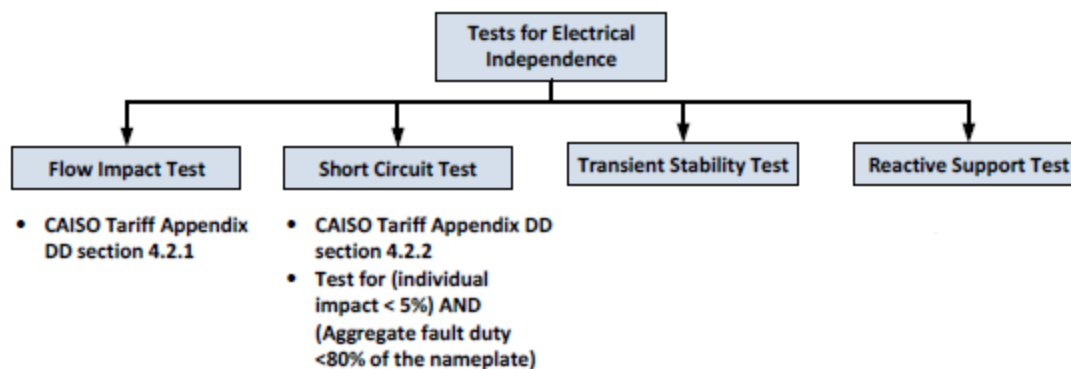
<sup>106</sup> GIDAP Sections 4.2.1, 4.2.1.1, and 4.2.1.2.

- (ii) The incremental power flow on the transmission facility identified in section (i) above that is caused by the Generating Facility being tested will be divided by the lesser of the Generating Facility's size or the transmission facility capacity. If the result is five percent (5%) or less, the Generating Facility shall pass the flow impact test. If the Generating Facility being tested is tested against the nearest transmission facility and that transmission facility has been impacted by a cluster that required an upgrade as a result of a contingency, then that contingency will be used when applying the flow impact test.
- (iii) If the Generating Facility being tested under the flow impact test is reasonably expected to impact transmission facilities that were identified, in section (i) above, when testing one or more earlier queued Generating Facilities currently being studied through the Independent Study Process, then an additional aggregate power flow test shall be performed on these earlier identified transmission facilities. The aggregate power flow test shall require that the aggregated power flow of the Generating Facility being tested, plus the flow of all earlier queued Generating Facilities currently being studied under the Independent Study Process that were tested against the transmission facilities described in the previous sentence, must be five (5) percent or less of those transmission facilities' capacity.

However, even if the aggregate power flow on any transmission facility tested pursuant to this section (iii) is greater than five (5) percent of the transmission facility's capacity but the incremental power flow as a result of the Generating Facility being tested is one (1) percent or less than of the transmission facility's capacity, the Generating Facility shall pass the test.

If the Generating Facility being tested is tested against the nearest transmission facility and that transmission facility has been impacted by a cluster that required an upgrade as a result of a contingency, then that contingency will be used when applying the flow impact test.

The Generating Facility being tested must pass both this aggregate test in this section (iii) as well as the individual flow test described in section (ii) above, in no particular order.



## B. Behind-the-Meter Expansion

A second set of alternative requirements apply to an Interconnection Request relating to a behind-the-meter expansion of Generating Facilities. The new requirements provide that an Interconnection Customer requesting that an Interconnection Request be processed under the Independent Study Process will pass the flow impact test if it satisfies all of the following technical and business criteria:

### (i) Technical criteria.

- The total nameplate capacity of the expanded Generating Facility does not exceed in the aggregate 125% of its previously studied Interconnection Service Capacity and the incremental increase in gross capacity does not exceed, in the aggregate, 100 MW, including any prior behind-the-meter capacity expansions implemented pursuant to GIDAP Section 4.2.1.2 and GIDAP BPM section 6.3.2.1.
- The behind-the-meter capacity expansion shall not take place until after the original Generating Facility has achieved Commercial Operation and all Network Upgrades for the original Generating Facility have been placed in service.
- The Interconnection Customer must install an automatic generator tripping scheme sufficient to ensure that the total output of the Generating Facility, including the behind-the-meter capacity expansion, does not at any time exceed the Interconnection Service Capacity studied in the Generating Facility's original Interconnection Request.
- The CAISO will have the authority to trip the generating equipment subject to the automatic generator tripping scheme or take any other actions necessary to omit the output of the Generating Facility so that the total output of the Generating Facility does not exceed the originally studied Interconnection Service Capacity amount.

(ii) **Business criteria.**

- The Deliverability Status (Full Capacity, Partial Capacity, or Energy-Only) of the original Generating Facility will remain the same after the behind-the-meter capacity expansion. The capacity expansion will have Energy-Only Deliverability Status, and the original Generating Facility and the behind-the-meter capacity expansion will be metered separately from one another and be assigned separate Resource IDs, except as set forth below.
- If the original Generating Facility has Full Capacity Deliverability Status and the behind-the-meter capacity expansion will use the same technology as the original Generating Facility, the Interconnection Customer may elect to have the original Generating Facility and the behind-the-meter capacity expansion metered together, in which case both the original Generating Facility and the behind-the-meter capacity expansion will have Partial Capacity Deliverability Status and a separate Resource ID will not be established for the behind-the-meter capacity expansion.
- A request for behind-the-meter expansion shall not operate as a basis under the CASO Tariff to increase the Deliverability of the Generating Facility beyond what was or would have been allocated to the original Generating Facility before the expansion, unless the expansion has received a separate TP Deliverability allocation.
- The GIA will be amended to reflect the revised operational features of the Generating Facility's behind the meter capacity expansion.
- An active Interconnection Customer may at any time request that the CAISO convert the Interconnection Request for behind-the-meter capacity expansion to an Independent Study Process Interconnection Request to evaluate an incremental increase in electrical output (MW Interconnection Service Capacity) for the existing Generating Facility. The Interconnection Customer must accompany such a conversion request with an appropriate Interconnection Study Deposit and agree to comply with other sections of GIDAP Section 4 and GIDAP BPM Section 6 applicable to an Independent Study Process Interconnection Request. In other words, the interconnection Customer can, at any time, request that the CAISO formally study the expanded capacity of the Generating Facility in the GIDAP Independent Study Process to formally add that capacity to its original Interconnection Service Capacity.

**6.3.2.2. Short Circuit Test<sup>107</sup>**

The Generating Facility shall pass the short circuit test if (i) the combined short circuit contribution from all the active Interconnection Requests in the Independent Study Process in the same study area is less than five (5) percent of the available capacity of the circuit breaker upgrade identified in GIDAP Section 4.2.1.1 or GIDAP BPM Section 6.3.2.1 and; (ii) total fault duty on each circuit breaker upgrade identified for the current Queue Cluster and active Independent Study Process Interconnection Requests in the same study area is less than eighty (80) percent of the nameplate capacity of the respective circuit breaker upgrade.

**6.3.2.3. Transient Stability Test**

The Generating Facility shall pass the transient stability test if the Generating Facility has requested interconnection in a study area where transient stability issues are not identified for active Interconnection Requests in the current Queue Cluster or Independent Study Process.

**6.3.2.4. Reactive Support Test**

The Generating Facility shall pass the reactive support test if the Generating Facility has requested interconnection in a study area where reactive support needs are not identified as requiring Reliability Network Upgrades for active Interconnection Requests in the current Queue Cluster or Independent Study Process.

**6.3.3. Scoping Meeting<sup>108</sup>**

Within five (5) Business Days after the CAISO notifies the Interconnection Customer that the Generating Facility associated with its Interconnection Request has satisfied the electrical independence test set forth in GIDAP Section 4.2 and GIDAP BPM Section 6.3.2, the CAISO shall establish a date agreeable to the Interconnection Customer and the applicable Participating TO(s) for the Scoping Meeting.

With input from the Participating TO, the CAISO shall determine whether the Interconnection Request is at or near the boundary of an affected Participating TO's service territory or of any other Affected System(s), and, if such is the case, then the CAISO shall invite the affected Participating TO(s) and/or Affected System Operator(s), in accordance with GIDAP Section 3.7 and GIDAP BPM Section 6.1.4, to the Scoping Meeting.

The purpose of the Scoping Meeting shall be to discuss the Interconnection Request and review existing studies relevant to the Interconnection Request. All parties will bring all

<sup>107</sup> GIDAP Section 4.2.2.

<sup>108</sup> GIDAP Section 4.3.

pertinent technical and non-technical information and documentation to the meeting, including but not limited to the following:

1. general facility loadings,
2. general instability issues,
3. general short circuit issues,
4. general voltage issues, and
5. general reliability issues.
6. any system studies previously performed

All parties should also bring personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. The CAISO shall prepare minutes from the meeting, and provide an opportunity for other attendees and the Interconnection Customer to confirm the accuracy thereof. The Scoping Meeting may be omitted by agreement of the Interconnection Customer, the Participating TO, and the CAISO.

The CAISO shall, no later than five (5) Business Days after the Scoping Meeting (or agreement to forego such Scoping Meeting), provide the Interconnection Customer with an Independent Study Process Study Agreement (in the form set forth in GIDAP Appendix 6), which shall contain an outline of the scope of the system impact and facilities study and a non-binding good faith estimate of the cost to perform the studies. The Interconnection Customer shall return the executed Independent Study Process Study Agreement or request an extension of time for good cause within thirty (30) Business Days thereafter, or the Interconnection Request shall be deemed withdrawn.

### 6.3.4. System Impact and Facilities Study<sup>109</sup>

#### 6.3.4.1. Scope and Purpose of the System Impact Study<sup>110</sup>

Instead of the Phase I and Phase II Interconnection Studies conducted under the Queue Cluster Study Process track, an Interconnection Request under the Independent Study Process track will be studied through the more traditional system impact and/or facilities studies.

The system impact and facilities study will consist of:

- a short circuit analysis;
- a stability analysis;
- a power flow analysis;
- an assessment of the potential magnitude of financial impacts, if any on Local Furnishing Bonds, and a proposed resolution; and
- any other studies that are deemed necessary.

<sup>109</sup> GIDAP Section 4.4.

<sup>110</sup> GIDAP Section 4.4.1.



For behind-the-meter capacity expansion, the short circuit analysis is performed for the installed capacity while the stability and power flow analyses are performed with the total output from the original capacity and capacity expansion limited by the approved MW injection at the Point of Interconnection for the original capacity.

#### **6.3.4.2. System Impact and Facilities Study Details<sup>111</sup>**

The system impact and facilities study shall state the assumptions upon which it is based, state the results of the analyses, and provide the requirement or potential impediments to providing the requested Interconnection Service. The system impact and facilities study shall specify and estimate the cost of the equipment, engineering, procurement, and construction work (including overheads) needed to implement the conclusions of the study, including, if applicable, the cost of remedial measures that address the financial impacts, if any, on Local Furnishing Bonds. The system impact and facilities study shall also identify (1) the electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment, (2) the nature and estimated cost of the Participating TO's Interconnection Facilities and Reliability Network Upgrades necessary to accomplish the Interconnection, and (3) an estimate of the time required to complete the construction and installation of such facilities or for effecting remedial measures that address the financial impact, if any, on Local Furnishing Bonds.

#### **6.3.4.3. System Impact and Facilities Study Timeline<sup>112</sup>**

The system impact and facilities study will be completed and the results transmitted to the Interconnection Customer within one hundred twenty (120) calendar days after the execution of an Independent Study Process Study Agreement. The Interconnection Customer shall execute the agreement(s) and deliver them to the CAISO and shall make its initial posting of Interconnection Financial Security in accordance with GIDAP Section 11.2 and BPM GIDAP Section 8, or its Interconnection Request shall be deemed withdrawn.

#### **6.3.4.4. System Impact and Facilities Study Cost Responsibility<sup>113</sup>**

Under the GIDAP Independent Study Process track, the MCR assigned to the Interconnection Customer for Network Upgrades is the cost estimates as determined through the System Impact Study and Facilities Study.

<sup>111</sup> GIDAP Section 4.4.2.

<sup>112</sup> GIDAP Section 4.4.3.

<sup>113</sup> GIDAP Sections 7.3 and 10.2.

In contrast to the cost estimation for Network Upgrades, which results in the Interconnection Customer's MCR, GIDAP cost estimation for Interconnection Facilities yields estimates with no cost responsibility cap. Accordingly, the costs for the Participating TO's Interconnection Facilities estimated in the System Impact Study and Facilities Study are estimates only that establish the basis for Interconnection Financial Security posting amounts. Interconnection Customers cost responsibility for Interconnection Facilities extends to the actual total costs for such facilities.

The System Impact Study report shall set forth the applicable cost estimates for RNUs and Participating TOs Interconnection Facilities that shall be the basis for the initial Interconnection Financial Security Posting under GIDAP Section 11.2 and GIDAP BPM Section 8.3.

#### **RNUs<sup>114</sup>**

The maximum value for the Interconnection Customer's Financial Security for RNUs shall be established in the System Impact Study and Facilities Study report.

The Interconnection Customer's Current Cost Responsibility, MCR, and Maximum Cost Exposure for RNUs and LDNUs shall be subject to further adjustment based on the results of the annual reassessment process, as set forth in GIDAP BPM Section 6.2.6.2.

#### **6.3.4.5. System Impact and Facilities Study Results Meeting<sup>115</sup>**

If requested by the Interconnection Customer, a Results Meeting shall be held between the CAISO, the applicable Participating TO(s), and the Interconnection Customer, as well as any potential Affected Systems to discuss the results of the system impact and facilities study report, including assigned costs. The CAISO shall prepare minutes from the meeting. Any such Results Meeting will be held within twenty (20) Business Days of the date the system impact study and facilities study report is provided to the Interconnection Customer.

Written comments on the system impact and facilities study report provided by the Interconnection Customer within ten (10) Business Days of receipt of the report, but in no event less than three (3) Business Days before the Results Meeting, whichever is sooner, will be addressed by the CAISO in the Results Meeting. Comments provided by the IC at any later time (up to the time of the Results Meeting), shall be considered informal inquiries to which the CAISO will provide informal, informational response at the Results Meeting, to the extent possible. The Interconnection Customer may submit, in writing,

<sup>114</sup> GIDAP Section 10.2.

<sup>115</sup> GIDAP Section 4.4.5.

additional comments on the final system impact and facilities study report up to three (3) Business Days following the Results Meeting.

#### **6.3.4.6. Initial Financial Security Posting**

See GIDAP Section 11.3 and GIDAP BPM Section 8.3 for initial Financial Security posting requirements. Interconnection Financial Security will be based on the Current Cost Responsibility for Network Upgrades, and Participating TO's Interconnection Facilities set forth in the system impact and facilities study.

### **6.3.5. Deliverability Assessment Performed as Part of Next Queue Cluster<sup>116</sup>**

Interconnection Customers under the Independent Study that request Partial or Full Capacity Deliverability Status will be deemed to have selected Option (A) under BPM Section 7.2 and, will have On-Peak Deliverability Assessment performed as part of the next scheduled Phase I and Phase II Interconnection Studies for the Queue Clusters study performed for the next Queue Cluster Window that opens after the CAISO received the request for Partial Capacity or Full Capacity Deliverability Status. If the On-Peak Deliverability Assessment identifies any LDNUs and ADNUs that are triggered by the Interconnection Request, the Interconnection Customer will be responsible to pay its proportionate share of the costs of those upgrades, pursuant to GIDAP Section 6, 7, and 8 and GIDAP BPM Sections 6.2.4 and 6.2.7, and for posting Interconnection Financial Security pursuant to the rules for Interconnection Customers in Queue Clusters pursuant to Section 11. If the Generating Facility (or increase in capacity of an existing Generating Facility) achieves its Commercial Operation Date before the Deliverability Assessment is completed and before any necessary Delivery Network Upgrades are in-service, the proposed Generating Facility (or increase in capacity) will be treated as an Energy-Only Deliverability Status Generating Facility until such Delivery Network Upgrades are in service. This Section shall not apply to Interconnection Customers requesting behind-the-meter capacity expansion under GIDAP Section 4.2.1.2. Separate rules regarding the Deliverability Status of such requests are set forth in that Section 4.2.1.2.

Interconnection Customers under the Independent Study that request Off-Peak Deliverability Status will have Off-Peak Deliverability Assessment performed as part of the next scheduled Phase I and Phase II Interconnection Studies for the Queue Clusters study performed for the next Queue Cluster Window that opens after the CAISO received the request for Off-Peak Deliverability Status. If the Off-Peak Deliverability Assessment identifies any LOPNUs that are triggered by the Interconnection Request, the Interconnection Customer will be responsible to pay its proportionate share of the costs of those upgrades, pursuant to GIDAP Section 6, 7, and 8 and GIDAP BPM Sections 6.2.4 and 6.2.7, and for posting Interconnection Financial Security pursuant to the rules for Interconnection Customers in Queue Clusters pursuant to Section 11.

<sup>116</sup> GIDAP Section 4.6.

### 6.3.6. Extensions of Commercial Operation Date for the Independent Study Process Track<sup>117</sup>

Extensions of the Commercial Operation Date for Interconnection Requests under the Independent Study Process will not be granted except for circumstances beyond the control of the Interconnection Customer. The reason for this is that the relatively near term Commercial Operation Date was an underpinning qualification for the Interconnection Customer to use this shortened process in the first place. Note also the timing of Deliverability Upgrades does not qualify as a reason for an extension in the Commercial Operation Date. Deliverability Upgrades are not considered, since the Independent Study Process is initially for an Energy-Only Deliverability Status interconnection. Any deliverability study analysis (if requested) would be done in the next available cluster study. The generator would need to go on-line as energy-only by the requested Commercial Operation Date.

### 6.3.7. Generator Interconnection Agreement

An Interconnection Customer in the Independent Study Process that requests Partial Capacity or Full Capacity Deliverability Status must still negotiate and execute a GIA reflecting Energy-Only Deliverability Status pursuant to the requirements and timelines set forth in GIDAP DD Section 13 and BPM Section 10. Upon completion of the Deliverability Assessment per GIDAP Section 4.6 and BPM Section 6.2.4.3, the Interconnection Customer's GIA will be amended as appropriate to reflect the results thereof.

## 6.4. Fast Track Process

### 6.4.1. Applicability to Proposed New Generating Facility<sup>118</sup>

An Interconnection Customer may request interconnection of a proposed Generating Facility to the CAISO Controlled Grid under the Fast Track Process if the Generating Facility is no larger than 5 MW and is requesting Energy-Only Deliverability Status and if the Interconnection Customer's proposed Generating Facility meets the codes, standards, and certification requirements of GIDAP Appendices 9 and 10, or if the applicable Participating TO notifies the CAISO that it has reviewed the design for or tested the proposed Small Generating Facility and has determined that the proposed Generating Facility may interconnect consistent with Reliability Criteria and Good Utility Practice.

### 6.4.2. Applicability to Existing Generating Facility<sup>119</sup>

<sup>117</sup> GIDAP Section 4.7.

<sup>118</sup> GIDAP Section 5.1.

<sup>119</sup> GIDAP Section 5.1.

If the Interconnection of an existing Generating Facility meets the qualifications for Interconnection under CAISO Tariff Section 25.1(d) or I but, at the same time, the Interconnection Customer also seeks to repower or reconfigure the existing Generating Facility in a manner that increases the gross Interconnection Service Capacity by not more than 5 MW, then the Interconnection Customer may request that the Fast Track Process be applied with respect to the repowering or reconfiguration of the existing Generating Facility that results in the incremental increase in MW. The delivery status of the existing Generating Facility will remain unchanged for the new Generating Facility. The incremental increase in capacity using the Fast Track Process will be Energy-Only in accordance with the Fast Track Process.

### 6.4.3. Initiating a Fast Track Request<sup>120</sup>

To initiate an Interconnection Request under the Fast Track Process, the Interconnection Customer must provide the CAISO with:

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

In lieu of a study agreement, the CAISO will provide the Interconnection Customer with a copy of the GIDAP Tariff sections (*i.e.*, Section 5) pertaining to the Fast Track Process. These provisions provide, among other things, that the Interconnection Customer shall pay for study costs. The customer will be asked to sign on the bottom of the letter acknowledging that the provisions apply and to return a duplicate letter bearing its signature to the CAISO.

### 6.4.4. Initial Review

#### 6.4.4.1. Timelines<sup>121</sup>

Within thirty (30) Calendar Days after the CAISO notifies the Interconnection Customer that the Interconnection Request is deemed complete, valid, and ready to be studied, the applicable Participating TO shall perform an initial review using the screens set forth in GIDAP Section 5.2.1 and in GIDAP BPM Section 6.4.4.2, and shall notify the Interconnection Customer of the results, in a report that provides the details of and data underlying its conclusion.<sup>122</sup>

<sup>120</sup> GIDAP Section 5.1.

<sup>121</sup> GIDAP Section 5.2.

<sup>122</sup> GIDAP Section 5.2.

**6.4.4.2. Screens<sup>123</sup>**

- (i) The proposed Generating Facility's Point of Interconnection must be on the CAISO Controlled Grid.
- (ii) For interconnection of a proposed Generating Facility to a radial transmission circuit on the CAISO Controlled Grid, the aggregated generation on the circuit, including the proposed Generating Facility, shall not exceed 15 percent of the line section annual peak load as most recently measured at the substation. For purposes of GIDAP Section 5.2.1.2, and this GIDAP BPM Section 6.4.4.2(ii) a line section shall be considered as that portion of a Participating TO's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the transmission line. This screen will not be required for a proposed interconnection of a Generating Facility to a radial transmission circuit with no load. In cases where the circuit lacks the telemetry needed to provide the annual peak load measurement data, the CAISO shall use power flow cases from the latest completed Queue Cluster studies (either Phase I or Phase II) to perform this screening.
- (iii) The proposed Generating Facility, in aggregate with other Generating Facilities on the transmission circuit, shall not contribute more than 10 percent to the transmission circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.

The CAISO shall use the short circuit study data from the latest completed Queue Cluster studies (either Phase I or Phase II) to test this screen.

- (iv) The proposed Generating Facility, in aggregate with other Generating Facilities on the transmission circuit, shall not cause any transmission protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5 percent of the short circuit interrupting capability; nor shall the interconnection be proposed for a circuit that already exceeds 87.5 percent of the short circuit interrupting capability.

The CAISO shall use the short circuit study data from the most recently completed Queue Cluster studies (either Phase I or Phase II) to test this screen.

- (v) A Generating Facility will fail this initial review, but will be eligible for a supplemental review, if it proposes to interconnect in an area where there are known transient stability, voltage, or thermal limitations identified in the most recently completed Queue Cluster studies or transmission planning process.

<sup>123</sup> GIDAP Section 5.3.



#### 6.4.4.3. Effect of Passing the Screening Process<sup>124</sup>

If the proposed interconnection passes the screening process the Interconnection Request shall be approved. Within fifteen (15) Business Days thereafter, the Participating TO will provide the Interconnection Customer with a Small Generator Interconnection Agreement for execution.

#### 6.4.4.4. Effect of Failing the Screening Process

- (i) If the proposed Interconnection fails the screenings process, but the CAISO and Participating TO determine that the Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards under these procedures, the Participating TO shall, within fifteen (15) Business Days, provide the Interconnection Customer with a Small Generator Interconnection Agreement for execution.
- (ii) If the proposed interconnection fails the screening process and the CAISO and Participating TO do not or cannot determine from the initial review that the Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or further study, the Participating TO shall provide the Interconnection Customer with the opportunity to attend a customer options meeting as described in GIDAP Section 5.4. If the Interconnection Customer is not willing to consider minor modifications or further study the Fast Track Interconnection Request will be deemed withdrawn; however, the Interconnection Customer may request the ISO to hold the Interconnection Request for processing in either the next Queue Cluster or under the Independent Study Process.

#### 6.4.4.5. Customer Options Meeting<sup>125</sup>

If the CAISO and Participating TO determine the Interconnection Request cannot be approved without (1) modifications at minimal cost; (2) a supplemental study or other additional studies or actions; or (3) incurring significant cost to address safety, reliability, or power quality problems, the CAISO and Participating TO shall notify the Interconnection Customer within five (5) Business Days of that determination and provide copies of all data and analyses underlying their conclusion. Within ten (10) Business Days of the CAISO and Participating TO's determination, the CAISO and Participating TO shall offer to convene a customer options meeting with the CAISO and Participating TO to review possible Interconnection Customer facility modifications or the screen analysis and related results, to determine what further steps are needed to permit the Generating Facility to be connected safely and reliably. At the time of notification of the CAISO and Participating TO's determination, or at the customer options meeting, the CAISO and Participating TO shall:

<sup>124</sup> GIDAP Sections 5.3.2 and 5.3.4.

<sup>125</sup> GIDAP Section 5.4.

- (i) Offer to perform facility modifications or modifications to the Participating TO's electric system (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Participating TO's electric system. The CAISO will confer with the Participating TO to determine if the Interconnection Request can be approved with minor modifications being performed to the Participating TO's electric system at minimal cost. If the Participating TO is able to develop a non-binding good faith estimate for minor modifications without performing a supplemental review, and if the Interconnection Customer agrees to pay for the modifications to the Participating TO's electric system, the Participating TO will provide the Interconnection Customer with an executable interconnection agreement within ten (10) Business Days of the customer options meeting; or
- (ii) Offer to perform a supplemental review in accordance with GIDAP Section 5.5 and provide a non-binding good faith estimate of the costs of such review as described in section 6.4.5.2 of this BPM; or
- (iii) Offer to include the Interconnection Request in either the next Queue Cluster Window or the Independent Study Process, subject to the eligibility criteria set forth in GIDAP Section 4.1, and the provision of the study deposit set forth in GIDAP Section 3.5. Within fifteen (15) Business Days of the customer options meeting the Interconnection Customer shall provide the CAISO, in writing, with its election on how to proceed with its Interconnection Request. If the Interconnection Customer does not make an election within this time period, the CAISO will deem the Interconnection Request withdrawn.

#### 6.4.4.6. Supplemental Review<sup>126</sup>

#### 6.4.4.7. Purpose of Supplemental Review

The purpose of the Supplemental Review is to reassess whether a Generating Facility can safely and reliably interconnect pursuant to the Fast Track Process.

If the Supplemental Study concludes the Small Generating Facility cannot be interconnected safely and reliably, the Interconnection Request will be deemed withdrawn, without prejudice to the Interconnection Customer resubmitting its Interconnection Request for processing in either a Queue Cluster or under the Independent Study Process.

The Interconnection Customer shall be responsible for the CAISO and Participating TO's actual costs for conducting the supplemental review as described in 6.4.5.2

#### 6.4.4.8. Additional Deposit

<sup>126</sup> GIDAP Section 5.5.

To accept the offer of a supplemental review, the Interconnection Customer shall agree in writing and submit a deposit for the estimated costs of the supplemental review in the amount of the good faith estimate determined by the CAISO and Participating TO, both within fifteen (15) Business Days of the offer, or elect one of the options set forth in GIDAP Section 5.4.3.

#### **6.4.4.9. Refund**

The Interconnection Customer must pay any review costs that exceed the deposit within twenty (20) Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the CAISO and Participating TO will return such excess, without interest, within twenty (20) Business Days of the invoice.

#### **6.4.4.10. Timelines**

Within thirty (30) Business Days following receipt of the deposit for a supplemental review, or some longer period agreed to by the Interconnection Customer, CAISO, and Participating TO, the CAISO and Participating TO shall:

1. Perform a supplemental review using the screens set forth in GIDAP Section 5.5;
2. Notify in writing the Interconnection Customer of the results; and
3. Include with the notification copies of the analysis and data underlying the CAISO and Participating TO's determinations under the screening process.

Unless the Interconnection Customer provided instructions for how to respond to the failure of any of the supplemental review screens in GIDAP Section 5.5 at the time the Interconnection Customer accepted the offer of supplemental review, the CAISO and Participating TO shall notify the Interconnection Customer following the failure of any of the screens, or if they are unable to perform the screen in GIDAP Section 5.5.4.1, within two (2) Business Days of making such determination to obtain the Interconnection Customer's permission to:

1. Continue evaluating the proposed interconnection under GIDAP Section 5.5.4;
2. Terminate the supplemental review and offer the Interconnection Customer the options set forth in GIDAP Section 5.4.3; or
3. Terminate the supplemental review upon withdrawal of the Interconnection Request by the Interconnection Customer.

The Interconnection Customer may specify the order in which the CAISO and Participating TO will complete the screens in GIDAP Section 5.5.4.

In conducting the screening process below, the CAISO and Participating TO will use power flow or short circuit study data from the most recently completed Queue Cluster studies (either Phase I or Phase II).

1. **Minimum Load Screen:** Where 12 months of line section minimum load data (including onsite load but not station service load served by the proposed Generating Facility) are available, can be calculated, can be estimated from existing data, or determined from a power flow model, the aggregate Generating Facility capacity on the line section is less than 100 percent of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed Generating Facility. If minimum load data is not available, or cannot be calculated, estimated, or determined, the CAISO and Participating TO shall include the reason(s) that they are unable to calculate, estimate, or determine minimum load in their supplemental review results notification under GIDAP Section 5.5.4.
  - (i) The type of generation used by the proposed Generating Facility will be taken into account when calculating, estimating, or determining circuit or line section minimum load relevant for the application of the Minimum Load Screen under GIDAP Section 5.5.4. Solar photovoltaic (PV) generation systems with no battery storage use daytime minimum load (i.e. 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV systems utilizing tracking systems), while all other generation use absolute minimum load.
  - (ii) When the Minimum Load Screen under GIDAP Section 5.5.4 is being applied to a Generating Facility that serves some station service load, only the net injection into the Participating TO's electric system will be considered as part of the aggregate generation.
  - (iii) The CAISO and Participating TO will not consider as part of the aggregate generation for purposes of this screen generating facility capacity known to be already reflected in the minimum load data.
2. **Voltage and Power Quality Screen:** In aggregate with existing generation on the line section, the proposed Generating Facility shall not cause the violation of voltage standards, as set forth in the CAISO's Planning Standards, on any part of the CAISO Controlled Grid.
3. **Safety and Reliability Screen:** The location of the proposed Generating Facility and the aggregate generation capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without studying the Generating Facility in either the Queue Cluster or Independent Study processes. The CAISO and Participating TO shall give due consideration to the following and other factors in determining potential impacts to safety and reliability applying this screen.
  - (i) Whether the line section has significant minimum loading level dominated by a small number of customers (e.g., several large commercial customers).
  - (ii) Whether the loading along the line section is uniform or even.

- (iii) Whether the proposed Generating Facility is located in close proximity to the substation (i.e., less than 2.5 electrical circuit miles), and whether the line section from the substation to the Point of Interconnection is a Mainline rated for normal and emergency ampacity. For purposes of this screen, a Mainline is the three-phase backbone of a circuit and will typically constitute lines with wire sizes of 4/0 American wire gauge, 336.4 kcmil, 397.5 kcmil, 477 kcmil and 795 kcmil.
- (iv) Whether the proposed Generating Facility incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribe time.
- (v) Whether operational flexibility is reduced by the proposed Generating Facility, such that transfer of the line section(s) of the Generating Facility to a neighboring circuit/substation may trigger overloads or voltage issues.
- (vi) Whether the proposed Generating Facility employs equipment or systems certified by a recognized standards organization to address technical issues such as, but not limited to, islanding, reverse power flow, or voltage quality.
- (vii) If the proposed interconnection passes the supplemental screening process in GIDAP Sections 5.5.4.1, 5.5.4.2, and 5.5.4.3, the Interconnection Request shall be approved and the Participating TO will provide the Interconnection Customer with an executable interconnection agreement within the timeframes established in GIDAP Sections 5.5.5.1 and 5.5.5.2. If the proposed interconnection fails any of the supplemental review screens and the Interconnection Customer does not withdraw its Interconnection Request, it shall be treated in accordance with GIDAP Section 5.5.5.3.

If the proposed interconnection passes the supplemental screening process in GIDAP Sections 5.5.4.1, 5.5.4.2, and 5.5.4.3 above and does not require construction of facilities by the Participating TO on its own system, the interconnection agreement shall be provided within ten (10) Business Days after the notification of the supplemental review results.

If interconnection facilities or minor modifications to the Participating TO's system are required for the proposed interconnection to pass the supplemental screening process in GIDAP Sections 5.5.4.1, 5.5.4.2, and 5.5.4.3 above, and the Interconnection Customer agrees to pay for the modifications to the Participating TO's electric system, the interconnection agreement, along with a non-binding good faith estimate for the interconnection facilities and/or minor modifications, shall be provided to the Interconnection Customer within fifteen (15) Business Days after receiving written notification of the supplemental review results.

If the proposed interconnection would require more than interconnection facilities or minor modifications to the Participating TO's system to pass the supplemental screening process in GIDAP Sections 5.5.4.1, 5.5.4.2, and 5.5.4.3, the CAISO and Participating TO shall notify the Interconnection Customer, at the same time they notify the Interconnection Customer with the supplemental review results, and offer the options set forth in GIDAP Section 5.4.3. If the Interconnection Customer does not make an election

within fifteen (15) Business Days, the CAISO will deem the Interconnection Request withdrawn.

## 6.5. 10 kW Inverter Process<sup>127</sup>

### 6.5.1. Applicability

Using the screens contained in the Fast Track Process in the Generator Interconnection Deliverability Allocation Procedures (GIDAP) a Small Generating Facility, no larger than 10kW, may be interconnected safely and reliably.

The Interconnection Customer should check with the Participating TO before submitting the Application if disconnection equipment is required.

### 6.5.2. Initiating a Request

The Interconnection Customer completes the Interconnection Request (Application) and submits it to the Participating TO. See the GIDAP Appendix 7 for the application form.

**Contact Information** – The Interconnection Customer must provide the contact information for itself as the legal applicant. If another entity is responsible for interfacing with the Participating TO, that contact information must be provided on the Application;

**Ownership Information** – Enter the legal names of the owner(s) of the Small Generating Facility. Include the percentage ownership (if any) by any utility or public utility holding company, or by any entity owned by either; and

**UL1741 Listed** – This standard (“Inverters, Converters, and Controllers for Use in Independent Power Systems”) addresses the electrical interconnection design of various forms of generating equipment. Many manufacturers submit their equipment to a Nationally Recognized Testing Laboratory (NRTL) that verifies compliance with UL1741. This "listing" is then marked on the equipment and supporting documentation.

Unless the Participating TO determines and demonstrates that the Small Generating Facility cannot be interconnected safely and reliably, the Participating TO will approve the Application and return it to the Interconnection Customer.

After installation, the Interconnection Customer returns the Certificate of Completion to the Participating TO. Prior to parallel operation, the Participating TO may inspect the Small Generating Facility for compliance with standards, which may include a witness test, and may schedule appropriate metering replacement, if necessary.

<sup>127</sup> GIDAP Appendix 7.



The Participating TO notifies the Interconnection Customer in writing that interconnection of the Small Generating Facility is authorized. If the witness test is not satisfactory, the Participating TO has the right to disconnect the Small Generating Facility. The Interconnection Customer has no right to operate in parallel until a witness test has been performed, or previously waived on the Application.

### 6.5.3. Timelines

The Participating TO will acknowledge receipt of the Interconnection Customer's receipt of the Application within three (3) Business Days of receiving the Interconnection Customer's request.

The Participating TO will evaluate the Application for completeness and notify the Interconnection Customer within ten (10) Business Days of receipt that the Application is or is not complete and, if not, advises what material is missing;

The Participating TO shall complete this process within fifteen (15) Business Days using the screens contained in the Fast Track Process in the Generator Interconnection and Deliverability Allocation Procedures (GIDAP).

The Participating TO is obligated to complete this witness test within ten (10) Business Days of the receipt of the Certificate of Completion. If the Participating TO does not inspect within ten (10) Business Days or by mutual agreement of the Parties, the witness test is deemed waived.

## 6.6. Deliverability for Generators Interconnection to Non-Participating TO Facilities inside the CAISO Balancing Authority Area Additional Deliverability Assessment Options

This process applies to Generating Facilities that interconnect to the transmission facilities of a Non-Participating TO located within the CAISO Balancing Authority Area that wish to obtain Full Capacity Deliverability Status or Partial Capacity Deliverability Status under the CAISO Tariff. Such Generating Facilities will be eligible to be studied by the CAISO for Full or Partial Capacity Deliverability Status pursuant to the following provisions:

- (a) The Generating Facility seeking Full or Partial Capacity Deliverability Status under the CAISO Tariff must submit a request to the CAISO to study it for such Status. Such study request will be in the form of the CAISO's pro forma Interconnection Request, must include the Generating Facility's intended Point of Delivery to the CAISO Controlled Grid, and must be submitted during a Cluster Application Window. The Generating Facility will be required to satisfy the same study deposit and Interconnection Financial Security posting requirements as an Interconnection Customer.

- (b) The Non-Participating TO that serves as the interconnection provider to the Generating Facility must treat the CAISO as an Affected System in the interconnection study process for the Generating Facility.
- (c) As part of the Non-Participating TO's interconnection study process, the CAISO, in its sole discretion and on a case-by-case basis, will determine the adequacy of transmission on the Non-Participating TO's system for the Generating Facility to be deemed fully deliverable to the elected Point of Delivery to the CAISO Controlled Grid. Only those proposed Generating Facilities (or proposed increases in Generating Facility capacity) for which the CAISO has determined there is adequate transmission capacity on the Non-Participating TO system to provide full Deliverability to the applicable Point of Delivery will be eligible to be assessed for Full or Partial Capacity Deliverability Status under the CAISO Tariff.
- (d) If the Generating Facility is eligible for study for Full or Partial Capacity Deliverability Status, the CAISO will include the Generating Facility in the Interconnection Study process for the Queue Cluster associated with the Cluster Application Window in which the Generating Facility has submitted its study request. The Point of Delivery with the CAISO will be treated as the Point of Interconnection for purposes of including the Generating Facility in a Group Study with any applicable CAISO Interconnection Customers in the relevant Queue Cluster. Pursuant to the Queue Cluster Interconnection Study process the Generating Facility will be allocated its share of costs for any applicable LDNUs or ADNUs.
- (e) The Generating Facility shall be permitted to select an Option (A) or Option (B) Deliverability option under GIDAP Section 7.2 (and will be treated as an Option (B) Generating Facility if a selection is not provided to the CAISO) and permitted to participate in TP Deliverability allocation under GIDAP Section 8.
- (f) The CAISO, Participating TO, and Interconnection Customer will execute any necessary agreements for reimbursement of study costs incurred it to assure cost attribution for any Network Upgrades relating to any Deliverability status conferred to each such interconnection customer under the Non-Participating TO's tariff.

The Non-Participating TO's interconnection customer will receive repayment of funds expended for the construction of the LDNUs, and, as applicable, ADNUs, on the CAISO Controlled Grid in the same manner as CAISO Interconnection Customers, as specified in GIDAP Section 14.3.2.

## 7. Modifications

### 7.1. Timing and Scope of Modifications<sup>128</sup>

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

<sup>128</sup> GIDAP Section 6.7.2.1.

interconnection that may improve the costs and benefits (including reliability) of the interconnection. To the extent that 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.

The CAISO will not withhold consent to timely requests for modifications which are not Material Modifications. A Material Modification is defined in CAISO Tariff Appendix A as "a modification that has a material impact on the cost or timing of any Interconnection Request or any other valid Interconnection Request with a later queue priority date." Modification requests can be considered material if they adversely impact the timeline of the Queue Cluster's Interconnection Study Cycle, adversely impact the Participating TO (such as shifting costs from the Interconnection Customer to the Participating TO), or adversely affect the timing for the construction of Network Upgrades which are intended to be utilized by multiple Interconnection Customers.

## 7.2. Types of Modifications<sup>129</sup>

Interconnection Customers have an opportunity for certain modifications made during the proper window period of ten (10) Business Days following the Phase I Interconnection Study Results Meeting. Such modifications are permitted as they are non-material. These modifications are: (a) a decrease in the MW capacity of the proposed Generating Facility; 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 control equipment; (b) modifying the technical parameters associated with the Generating Facility technology or Generating Facility step-up transformer impedance characteristics; (c) modifying the interconnection configuration, while not changing the Point of Interconnection; (d) modifying the In-Service Date, Initial Synchronization Date, Trial Operation Date, and/or Commercial Operation Date that meets the criteria set forth in GIDAP 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 GIDAP 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 as addressed in GIDAP BPM Section 7.3.2.3; (g) change from Off-Peak Deliverability Status to Off-Peak Energy Only; (h) *De minimis* reductions in capacity pursuant to GIDAP Section 7.5.13, although during this phase of the study consistent with item (a) any decrease in Generating Facility Capacity is allowed; and (i) Permissible Technological Advancements consistent with GIDAP Section 6.7.2.4 and Section 6.6 of the BPM for Generator Management.

<sup>129</sup> GIDAP Section 6.7.2.2.

For any modification other than these, the Interconnection Customer may 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. Any change to the Point of Interconnection, except for that specified by the CAISO in an Interconnection Study or otherwise allowed under GIDAP Section 6.7.2 and GIDAP BPM 7, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request to accommodate such modification.

The Interconnection Customer shall remain eligible for the Phase II Interconnection Study if the modification is in accordance with GIDAP Section 6.7.2 and GIDAP BPM Section 7 – in other words, if the request is not for a Material Modification. If a modification is a Material Modification, and the Interconnection Customer nevertheless intends to implement the change, then the Interconnection Request must be withdrawn, with the result that the Interconnection Customer steps out of the queue and may re-submit the modified Interconnection Request as a wholly new and separate request in a subsequent Queue Cluster or if it qualifies, under one of the other study tracks.

### 7.3. Examples of Allowed Modifications

The following are examples of modifications that are allowed at various points in the interconnection study process, and their impacts.

#### 7.3.1. Re-calculation of Initial Financial Security Posting <sup>130</sup>

The CAISO, in coordination with the applicable Participating TO(s) may determine, based on best engineering judgment without conducting a re-study, whether modifications, withdrawals, or system changes eliminate the need for any Network Upgrades identified in the Phase I Interconnection Study report. If the CAISO and applicable Participating TO(s) should determine that one or more Delivery Network Upgrades identified in the Phase I Interconnection Study are no longer needed, then, solely for purposes of calculating the amount of the Interconnection Customer's initial Financial Security posting under GIDAP Section 11.2, such Delivery Network Upgrade(s) will be considered to be removed from the plan of service described in the Interconnection Customer's Phase I Interconnection Study report and the cost estimates for such upgrades shall not be included in the calculation of Interconnection Financial Security in GIDAP Section 11.2.

The CAISO will inform in a timely manner any Interconnection Customers so affected, and provide the Interconnection Customers with written notice of the revised initial Interconnection Financial Security posting amounts. No determination under this Section

<sup>130</sup> GIDAP BPM Section 6.7.3.

shall affect either (i) the timing for the initial Interconnection Financial Security posting or (ii) the Interconnection Customer's MCR for Network Upgrades established by the Phase I Interconnection Study report.<sup>131</sup>

### 7.3.2. Changes from Full or Partial Deliverability Status to Partial Capacity or Energy-Only Deliverability Status

Interconnection Customers may elect to convert to Energy Only, Partial Capacity Deliverability Status, or a lower fraction of Partial Capacity Deliverability Status at any time. The process and impact to cost responsibility and financial security will depend on when the election is made.

#### 7.3.2.1. Elections Made Between Phase 1 and Phase II Studies:

Within ten (10) Business Days following the Phase I Interconnection Study Results Meeting, the Interconnection Customer is required to complete and submit to the CAISO the form set forth in Appendix B to GIDAP Appendix 3. In that form, the Interconnection Customer may change the proposed project's designation from Full or Partial Capacity Deliverability Status to Partial Capacity or Energy-Only Deliverability Status.<sup>132</sup>

For Interconnection Customers that elect Energy-Only Deliverability Status, this election will eliminate the Deliverability Network Upgrade portion of the first Interconnection Financial Security posting required of the Interconnection Customer, but it will not lower the Phase I MCR. The reason the MCR remains the same is that no restudy will be performed based on such project changes and the Interconnection Customer's allocation of Reliability Network Upgrades as determined in the Phase II studies could be higher than the reduced first Interconnection Financial Security posting amount that is based on the project's election to move from Full Capacity to Energy-Only Deliverability Status.

For Interconnection Customers that elect modification involving decreases in Deliverability Status as permitted under GIDAP BPM Section 7.3.1, the CAISO, in coordination with the applicable Participating TO(s), will determine, based on best engineering judgment, whether such modifications will eliminate the need for any Delivery Network Upgrades identified in the Phase I Interconnection Study report. The CAISO and applicable Participating TO(s) will not conduct any re-studies in making this determination.

If the CAISO and applicable Participating TO(s) should determine that one or more Delivery Network Upgrades identified in the Phase I Interconnection Study are no longer needed, then, solely for purposes of calculating the amount of the Interconnection Customer's initial Financial Security Posting under GIDAP BPM Section 8.3.2 and GIDAP

<sup>131</sup> GIDAP Section 6.7.3.

<sup>132</sup> GIDAP Sections 7.

Section 11.2.3, such Delivery Network Upgrade(s) will be considered to be removed from the plan of service described in the Interconnection Customer's Phase I Interconnection Study report and the cost estimates for such upgrades shall not be included in the calculation of Interconnection Financial Security. The CAISO will inform in a timely manner any Interconnection Customers so affected, and provide the Interconnection Customers with written notice of the revised initial Interconnection Financial Security posting amounts. No determination under this GIDAP BPM Section 7.3.2 and GIDAP Section 7.4.2 shall affect either (i) the timing for the initial Interconnection Financial Security posting or (ii) the Interconnection Customer's MCR for Network Upgrades established by the Phase I Interconnection Study report.

#### **7.3.2.2. Elections Made Following the TP Deliverability Allocation Process:**

Interconnection Customers may decline all or a portion of the TP Deliverability allocation in accordance with Section 6.2.9.8 of this BPM. Changes to Network Upgrades and associated cost responsibilities will be done in accordance with Section 6.2.9.10 of this BPM. Any impact to financial security postings will be done in accordance with Section 6.2.9.11 of this BPM.

#### **7.3.2.3. Other Elections Made After the Phase II Study:**

Interconnection Customers electing to convert to Energy Only, Partial Capacity Deliverability Status, or a lower fraction of Partial Capacity Deliverability Status after the Phase II study not associated with BPM Section 7.3.2.2 can do so by submitting a written request to the CAISO. The requested deliverability status will become effective immediately upon submittal of the request; however, changes to Network Upgrades and associated cost responsibilities and financial security posting amounts will be assessed as part of the reassessment study process as described in Section 7.4 of Appendix DD to the CAISO tariff. Specifically, the Interconnection Customer will continue to be responsible for costs of Delivery Network Upgrades still required to serve other generation projects in the CAISO Generator Interconnection Queue.

### **7.3.3. Other Modifications**

The CAISO has followed the business practice of allowing (subject to certain qualifications and conditions to mitigate modification consequences to non-materiality) certain modifications to a Generating Facility even though the modification request was made outside of the window period (from receipt of the Phase I Interconnection Study Report through ten (10) Business Days [see GIDAP Section 7] following the Phase I Interconnection Study Results Meeting). In general, the changes are allowed according to the following criteria:

- The change does not result in increases in a Generating Facility's electrical output.



- The status of the Generating Facility does not change from Energy-Only or Partial Capacity Deliverability Status to Full Capacity Deliverability Status.
- The status of the Generating Facility does not change from Off-Peak Energy Only to Off-Peak Deliverability Status
- Changes in technologies are allowed if the change does not trigger additional reliability concerns or impact necessary upgrades such that the change shifts costs or delays the timing of other Interconnection Requests with a later queue priority date.

Where the CAISO has granted modifications after the conclusion of an Interconnection Customer's Phase II Interconnection Study phase, the CAISO must be able to evaluate the change and find it acceptable without the need to undertake a re-study to meaningfully evaluate it. In general, one of the indicia that signals whether a post Phase II modification request is material or not is whether a re-study is necessary. If so, then the requested change is material, and thus not permissible within the scope of the existing Interconnection Request.

## 7.4. Commercial Operation Date Extensions<sup>133</sup>

Interconnection Customers that receive TP Deliverability on the basis of proceeding without a power purchase agreement ("group 3") will be converted to Energy Only if they fail to proceed toward their Commercial Operation Date in accordance with the requirements and restrictions in GIDAP Section 8.9.2.2 and as specified in their GIA. One such restriction states that an Interconnection Customer may not modify its Commercial Operation Date beyond the earlier of (a) the date established in its Interconnection Request when it requests TP Deliverability or (b) seven (7) years from the date the CAISO received its Interconnection Request. If an Interconnection Customer has not yet selected a final Commercial Operation Date following the Phase II Results Meeting<sup>134</sup>, the Commercial Operation Date established in the Interconnection Request will be later of: (i) the date established in the Appendix B to the Generator Interconnection Study Process Agreement; or (ii) the earliest achievable Commercial Operation Date listed in the Phase II study report.

Any permissible extension of the Commercial Operation Date of a Generating Facility will not alter the Interconnection Customer's obligation to finance and/or provide the third Interconnection Financial Security for the Network Upgrades where the Network Upgrades are required to meet the earlier Commercial Operation Date(s) of other Generating Facilities that have also been assigned cost responsibility for the Network Upgrades.

<sup>133</sup> GIDAP Section 14.3.1.

<sup>134</sup> GIDAP Section 8.7

## 8. Interconnection Financial Security

An Interconnection Customer is required to provide Interconnection Financial Security in order to securitize its obligations under the GIDAP and Interconnection Agreement to finance the Network Upgrades and Participating TO's Interconnection Facilities identified in the Interconnection Studies for interconnection of the proposed Generation Facility (or Generating Facility addition). Additionally, the security also assures continued viability of the Interconnection Customer with respect to its Interconnection Request.

### 8.1. Acceptable Interconnection Financial Security Instruments<sup>135</sup>

The Interconnection Financial Security posted by an Interconnection Customer may be any combination of the following types of Interconnection Financial Security Instruments provided in favor of the applicable Participating TO(s):

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

Interest on a cash deposit standing to the credit of the applicable Participating TO(s) in an interest-bearing escrow account under subpart (d) of GIDAP Section 11.1 will accrue to the Interconnection Customer's benefit and will be added to the Interconnection Customer's account on a monthly basis. In practice, the CAISO has found that the Participating TOs are reluctant to accept cash deposits and hold them directly. In such circumstances, an Interconnection Customer may wish to look into the possibility of using a private escrow company. The CAISO does not hold Interconnection Financial Security funds on behalf of the Participating TO.

- e. a certificate of deposit in the name of the applicable Participating TO(s) issued by a bank or financial institution that has a credit rating of A or better by Standard and Poor's or A2 or better by Moody's; or

<sup>135</sup> GIDAP Section 11.1

- f. a payment bond certificate in the name of the applicable Participating TO(s) issued by a bank or financial institution that has a credit rating of A or better by Standard and Poor's or A2 or better by Moody's.

If at any time the guarantor of the Interconnection Financial Security fails to maintain the credit rating required by GIDAP Section 11.1, the Interconnection Customer shall provide to the applicable Participating TO(s) replacement Interconnection Financial Security meeting the requirements of GIDAP Section 11.1 within five (5) Business Days of the change in credit rating.

The CAISO requires the publication and use of standardized forms of Interconnection Financial Security to the greatest extent possible. To find these forms please go to the CAISO Website and select the following sequence of tabs:

Planning >Generator Interconnection>Generator interconnection application process Instruments”.

## 8.2. Financial Security Amounts Calculated in Adjusted (Year Spent) Dollars<sup>136</sup>

All required financial security posting amounts shall be calculated in adjusted (i.e. year spent) dollars and Interconnection Customer required postings shall be made in adjusted dollars.

## 8.3. Initial Posting of Interconnection Financial Security<sup>137</sup>

The Interconnection Customer shall post, with notice to the CAISO, two separate Interconnection Financial Security postings:

- (a) a posting relating to the applicable Network Upgrades;
- (b) a posting relating to the Participating TO's Interconnection Facilities.

Interconnection Customers that are also Participating TO are not required to post Interconnection Financial Security to themselves. Notwithstanding this exemption, Interconnection Customers that are also Participating TO (i) must post Interconnection Financial Security required for Network Upgrades or Participating TO's Interconnection Facilities on other Participating TO's systems where required for interconnection; and (ii) must remit to the CAISO an amount equal to any non-fundable portion of the Interconnection Financial Security that would have been forfeited upon withdrawal or termination of the project absent this exemption pursuant to GIDAP Sections 7.6 and 11.4.

<sup>136</sup> GIDAP Section 2.4.3.3

<sup>137</sup> GIDAP Section 11.2

### 8.3.1. Timing of Posting (also covered in 6.2.7.2.1 & 6.3.4.7.1)<sup>138</sup>

- (a) Queue Cluster Process: Any time after the issuance of the final Phase I Interconnection Study report but no later than ninety (90) calendar days after the issuance of the final Phase I Interconnection Study Report.

Revised Queue Cluster Study Reports: If the CAISO revises a final Phase I Interconnection Study report pursuant to Section 6.8, the initial postings will be due from the Interconnection Customer by the later of ninety (90) calendar days after issuance of the original final Phase I Interconnection Study Report or forty (40) calendar days after issuance of the revised final Phase I Interconnection Study Report.

- (b) Revised Independent Study Process: on or before sixty (60) calendar days after the CAISO issues the results of the Interconnection System Impact Study.

Revised Independent Study Process Reports: If the CAISO revises a final System Impact Study report pursuant to Section 6.8, the initial postings will be due from the Interconnection Customer by the later of ninety (90) calendar days after issuance of the original final System Impact report or thirty (30) calendar days after issuance of the revised System Impact Study report.

### 8.3.2. Posting for Network Upgrades.

#### 8.3.2.1 Small Generator Interconnection Customers

Each Interconnection Customer for a Small Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Small Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument.

1) **Interconnection Customers selecting Energy Only Deliverability Status must post for RNUs.**

The posting amount for such RNUs shall equal the lesser of:

- fifteen percent (15%) of the total Current Cost Responsibility for RNUs allocated to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades, or
- \$20,000 per megawatt of electrical output of the Small Generating Facility or the amount of megawatt increase in the Interconnection Service Capacity of each existing Generating Facility as identified in its Interconnection Request, including any requested modifications.

However, in no event shall the minimum posting amount be less than \$50,000.

<sup>138</sup> GIDAP Section 11.2.2

In addition, if an Interconnection Customer changes the Deliverability Status from Full Capacity to Energy-Only within five (5) Business Days following the Phase I Interconnection Study Results Meeting, the required Interconnection Financial Security for Network Upgrades shall then be capped at an amount no greater than the Current Cost Responsibility allocated to the Interconnection Customer in the Phase I Interconnection Study for RNUs.

**2) Interconnection Customers selecting Option (A) Full Capacity or Partial Capacity Deliverability Status must post for RNUs and LDNUs.**

The posting amount for such allocated ANUs shall equal the lesser of:

- fifteen percent (15%) of the total Current Cost Responsibility allocated to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades, or
- \$20,000 per megawatt of electrical output of the Small Generating Facility or the amount of megawatt increase in the Interconnection Service Capacity of each existing Generating Facility as identified in its Interconnection Request, including any requested modifications.

However, in no event shall the minimum posting amount be less than \$50,000.

**3) Interconnection Customers selecting Option (B) Full Capacity or Partial Capacity Deliverability Status must post for RNUs, LDNUs and ADNUs.**

The posting amount for such allocated RNUs, LDNUs and ADNUs shall equal the lesser of:

- fifteen percent (15%) of the total Current Cost Responsibility allocated to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades, or
- \$20,000 per megawatt of electrical output of the Small Generating Facility or the amount of megawatt increase in the Interconnection Service Capacity of each existing Generating Facility as identified in its Interconnection Request, including any requested modifications.

However, in no event shall the minimum posting amount be less than \$50,000.

**8.3.2.2 Large Generator Interconnection Customers**

Each Interconnection Customer for a Large Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Large Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument.

**1) Interconnection Customers selecting Energy Only Deliverability Status must post for RNUs.**

The posting amount for such RNUs shall equal the lesser of:

- fifteen percent (15%) of the total Current Cost Responsibility allocated to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades, or
- \$20,000 per megawatt of electrical output of the Large Generating Facility or the amount of megawatt increase in the Interconnection Service Capacity of each existing Generating Facility as identified in its Interconnection Request, including any requested modifications, or
- \$7,500,000, the initial posting cap for a Large Generating Facility

However, in no event shall the minimum posting amount be less than \$500,000.

In addition, if an Interconnection Customer changes the Deliverability Status from Full Capacity to Energy-Only within five (5) Business Days following the Phase I Interconnection Study Results Meeting, the required Interconnection Financial Security for Network Upgrades shall then be capped at an amount no greater than the total Current Cost Responsibility allocated to the Interconnection Customer in the Phase I Interconnection Study for RNUs.

**2) Interconnection Customers selecting Option (A) Full Capacity or Partial Capacity Deliverability Status must post for RNUs and LDNUs.**

The posting amount for such RNUs and LDNUs shall equal the lesser of:

- fifteen percent (15%) of the total Current Cost Responsibility allocated to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades, or
- \$20,000 per megawatt of electrical output of the Large Generating Facility or the amount of megawatt increase in the Interconnection Service Capacity of each existing Generating Facility as identified in its Interconnection Request, including any requested modifications, or
- \$7,500,000, the initial posting cap for a Large Generating Facility.

However, in no event shall the minimum posting amount be less than \$500,000.

**3) Interconnection Customers selecting Option (B) Full Capacity or Partial Capacity Deliverability Status must post for RNUs, LDNUs and ADNUs.**

The posting amount for such RNUs, LDNUs and ADNUs shall be equal to the lesser of:

- fifteen percent (15%) of the total Current Cost Responsibility allocated to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades, or



- \$20,000 per megawatt of electrical output of the Large Generating Facility or the amount of megawatt increase in the Interconnection Service Capacity of each existing Generating Facility as identified in its Interconnection Request, including any requested modifications, or
- \$7,500,000, the initial posting cap for a Large Generating Facility

However, in no event shall the minimum posting amount be less than \$500,000.

### 8.3.3. Posting for Participating TO Interconnection Facilities<sup>139</sup>

#### 8.3.3.1. Small Generator Interconnection Customers<sup>140</sup>

Each Interconnection Customer for a Small Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Small Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument in an amount equal to the lesser of:

- fifteen (15) percent of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Participating TO's Interconnection Facilities, or
- \$20,000 per megawatt of electrical output of the Small Generating Facility or the amount of megawatt increase in the Interconnection Service Capacity of each existing Generating Facility as identified in its Interconnection Request, including any requested modifications, or

However, in no event shall the minimum posting amount be less than \$50,000.

#### 8.3.3.2. Large Generator Interconnection Customers<sup>141</sup>

Each Interconnection Customer for a Large Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Large Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument in an amount equal to the lesser of:

- fifteen (15) percent of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Participating TO's Interconnection Facilities, or
- \$20,000 per megawatt of electrical output of the Large Generating Facility or the amount of megawatt increase in the Interconnection Service Capacity of each existing

<sup>139</sup> GIDAP Section 11.2.4

<sup>140</sup> GIDAP Section 11.2.4.1

<sup>141</sup> GIDAP Section 11.2.4.2

Generating Facility identified in its Interconnection Request, including any requested modifications, or

- \$7,500,000, the initial posting cap for a Large Generating Facility.

However, in no event shall the minimum posting amount be less than \$500,000.

#### **8.3.4. Cost Estimates Less than Minimum Posting Amounts<sup>142</sup>**

If either the Current Cost Responsibility for Network Upgrades or the costs for Participating TO Interconnection Facilities are less than their respective minimum posting amounts that would apply under GIDAP Sections 11.2.3 or 11.2.4 and GIDAP BPM Sections 8.3.2 or 8.3.3, then the posting amount required will be equal to the estimated cost for Network Upgrades or the cost of the Participating TO Interconnection Facilities, as applicable.

#### **8.3.5. Consequences for Failure to Post<sup>143</sup>**

The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this Section shall result in the Interconnection Request being deemed withdrawn and subject to GIDAP Section 3.8 “Withdrawal.” The Interconnection Customer shall provide the CAISO and the Participating TO with written notice that it has posted the required Interconnection Financial Security no later than the applicable final day for posting.

#### **8.3.6. Recalculation of Initial Posting Requirement<sup>144</sup>**

If withdrawals, modifications, or system changes occur after the completion of the Phase I Interconnection Study, pursuant to GIDAP Section 6.7.2 and GIDAP BPM Section 7.3.1, and the CAISO, in consultation with the applicable Participating TO(s), is able to reasonably determine, prior to the date for initial posting of Interconnection Financial Security, that as a result of such changes (solely or in combination with other modifications made by Interconnection Customers) some of the Network Upgrades and/or Participating TO Interconnection Facilities identified in the Phase I Interconnection Study will no longer be required, then the calculation of the initial posting of Interconnection Financial Security will not include those Network Upgrades and/or Participating TO Interconnection Facilities that are no longer needed. Such determination will be made based on the CAISO’s and Participating TO’s best engineering judgment and will not include any re-studies.

### **8.4. Second Posting of Interconnection Financial Security**

The Interconnection Customer shall post, with notice to the CAISO, two separate Interconnection Financial Security postings:

- (a) a second posting relating to the Network Upgrades;

<sup>142</sup> GIDAP Section 11.2.5

<sup>143</sup> GIDAP Section 11.2.6

<sup>144</sup> GIDAP Section 11.2.7

- (b) a second posting relating to the Participating TO's Interconnection Facilities.

The cost estimates for calculating the second and third Interconnection Financial Security Posting shall be set forth in the Phase II Interconnection Study report the System Impact Study, or the Facilities Study.

Any Financial Security instrument that was used to satisfy a Generating Facility's Initial Posting of Interconnection Financial Security that remains in good standing and is eligible to meet the requirements of the Generating Facility's Second Posting of Interconnection Financial Security may continue to be used. Any additional Financial Security amount above the Initial Posting that may be needed to fulfill the Generating Facility's Second Posting of Interconnection Financial Security may be met by any qualifying Financial Security instrument that brings the total Financial Security Posting to the Generating Facility's Second Posting requirement.

#### 8.4.1. Timing of Posting<sup>145</sup>

- (a) **Queue Cluster process track:** The postings set forth in this Section for Interconnection Customers in a Queue Cluster shall be made any time after issuance of the final Phase II Interconnection Study report but no later than one hundred eighty (180) calendar days after issuance of the final Phase II Interconnection Study report for Interconnection Customers in a Queue Cluster.

**If Queue Cluster Study Reports are revised:** If the CAISO revises a final Phase II Interconnection Study report pursuant to Section 6.8, the second postings will be due by the later of one hundred-eighty (180) calendar days after issuance of the original final Phase II Interconnection Study report or sixty (60) calendar days after issuance of the revised final Phase II Interconnection Study report.

- (b) **For the Independent Study Process track:** Any time after issuance of the final System Impact and Facilities Study report under the Independent Study Process but no later than one hundred twenty (120) calendar days after the CAISO provides the results of the Facilities Study for Interconnection Customers in the Independent Study.

**Revised Independent Study Track Reports.** If the CAISO revises the final Facilities Study report pursuant to Section 6.8, the postings will be due by the later of one hundred-twenty (120) calendar days after the issuance of the original final Facilities Study report or thirty (30) calendar days from the issuance of the revised Facilities Study report.

#### 8.4.2. Requirements for Parked Option (A) Generating Facilities<sup>146</sup>

For an Interconnection Customer choosing Option (A) whose Generating Facility was not allocated TP Deliverability in the first TP Deliverability allocation following its receipt of the final Phase II Interconnection Study, and who chooses to park the Interconnection Request, the posting due date will be extended by 12 months.

<sup>145</sup> GIDAP Section 11.3.1.1

<sup>146</sup> GIDAP Section 11.3.1.3

For an Interconnection Customer choosing Option (A) whose Generating Facility was allocated TP Deliverability for less than the full amount of its Interconnection Request, and who chooses to seek additional TP Deliverability for the remainder of the requested Deliverability of the Interconnection Request in the next allocation cycle, the postings for allocated RNUs, LDNUs, and Participating TO Interconnection Facilities corresponding to the initial allocation of TP Deliverability will be due in accordance with the dates specified in GIDAP Section 11. The posting due date for the LDNUs corresponding to the remainder of the requested Deliverability will be extended by 12 months.

### 8.4.3. Posting for Network Upgrades

#### 8.4.3.1. Small Generator Interconnection Customers<sup>147</sup>

For each Interconnection Customer for a Small Generating Facility assigned to a Queue Cluster or an Interconnection Customer for a Small Generating Facility in the Independent Study Process, the second Interconnection Financial Security instrument shall adjust the amount of security.

**1) Interconnection Customers selecting Energy Only Deliverability Status must post for RNUs.**

The posting amount will be the lesser of:

- i. \$1 million, the second posting cap for a Small Generating Facility, or
- ii. thirty (30) percent of the Current Cost Responsibility allocated to the Interconnection Customer for RNUs in either the final Phase II Interconnection Study report, or for Independent Study Process Interconnection Customers, the System Impact Study, or Facilities Study, whichever is lower.

However, in no event shall the minimum posting amount be less than \$100,000.

**2) For Interconnection Customers who have Option (A) Generating Facilities must post for RNUs and LDNUs.**

The posting amount will be the lesser of:

- i. \$1 million, the second posting cap for a Small Generating Facility, or
- ii. thirty (30) percent of the Current Cost Responsibility allocated to the Interconnection Customer for RNUs and LDNUs in the final Phase II Interconnection Study or, for Independent Study Process Interconnection Customers, in either the System Impact Study or Facilities Study, whichever is lower

However, in no event shall the minimum posting amount be less than \$100,000.

**3) For Interconnection Customers who have Option (B) Generating Facilities:**

<sup>147</sup> GIDAP Section 11.3.1.4.1

The posting amount will be the lesser of:

- i. \$1 million, the second posting cap for a Small Generating Facility, or
- ii. The sum of:
  - a) thirty (30) percent of the Current Cost Responsibility allocated to the Interconnection Customer for RNUs and LDNUs in the final Phase II Interconnection Study or, for Independent Study Process Interconnection Customers, in either the System Impact Study or Facilities Study, whichever is lower; plus,
  - b) thirty (30) percent of the Current Cost Responsibility allocated to the Interconnection Customer for ADNUs in the final Phase II Interconnection Study

Where the Option (B) Interconnection Customer's Generating Facility is allocated TP Deliverability, the cost allocated to the Interconnection Customer for ADNUs will be adjusted to reflect the allocation of TP Deliverability, as described below:

- (a) If the allocation of TP Deliverability is for the full Deliverability of the Interconnection Request, then the ADNU cost allocation will equal zero (0).
- (b) If the allocation of TP Deliverability is less than the full Deliverability of the Interconnection Request, then the ADNU cost allocation will be reduced pro rata.

However, in no event shall the minimum posting amount be less than \$100,000.

#### **8.4.3.2. Large Generator Interconnection Customers**

Each Interconnection Customer for a Large Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Large Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument that brings up the amount of security.

##### **1) For Interconnection Customers selecting Energy Only Deliverability Status**

The posting amount will be the lesser of:

- i. \$15 million, the second posting cap for a Large Generating Facility, or
- ii. thirty (30) percent of the Current Cost Responsibility allocated to the Interconnection Customer for RNUs in the, final Phase II Interconnection Study, System Impact Study, or Facilities Study, whichever is lower.

However, in no event shall the minimum posting amount be less than \$500,000.

##### **2) For Interconnection Customers, who have Option (A) Generating Facilities**

The posting amount will be the lesser of:

- i. \$15 million, the second posting cap for a Large Generating Facility, or
- ii. thirty (30) percent of the Current Cost Responsibility allocated to the Interconnection Customer for RNUs and LDNUs in the final Phase II Interconnection Study or, for Independent Study Process Interconnection Customers, in either the System Impact Study or Facilities Study, whichever is lower.

However, in no event shall the minimum posting amount be less than \$500,000.

### **3) For Interconnection Customers who have Option (B) Generating Facilities:**

The posting amount will be the lesser of:

- i. \$15 million, the second posting cap for a Small Generating Facility, or
- ii. The sum of:
  - a) thirty (30) percent of the Current Cost Responsibility allocation to the Interconnection Customer for RNUs and LDNUs in the final Phase II Interconnection Study or, for Independent Study Process Interconnection Customers, in either the System Impact Study or Facilities Study, whichever is lower; plus
  - b) thirty (30) percent of the Current Cost Responsibility allocation to the Interconnection Customer for ADNUs in the final Phase II Interconnection Study

Where the Option (B) Interconnection Customer's Generating Facility is allocated TP Deliverability, the cost allocation to the Interconnection Customer for ADNUs will be adjusted to reflect the allocation of TP Deliverability, as described below:

- a) If the allocation of TP Deliverability is for the full Deliverability of the Interconnection Request, then the ADNU cost allocation will equal zero (0).
- b) If the allocation of TP Deliverability is less than the full Deliverability of the Interconnection Request, then the ADNU cost allocation will be reduced pro rata.

However, in no event shall the minimum posting amount be less than \$500,000.

#### **8.4.3.3. Cost Estimates Less than Minimum Posting Amounts.**

If the costs of the estimated Network Upgrades are less than the posting amounts set forth in GIDAP Section 11.3.1.4 and GIDAP BPM Section 8.4.3 then posting amount required will be equal to the estimated Network Upgrade amount.



## 8.4.4. Posting for Participating TO Interconnection Facilities<sup>148</sup>

### 8.4.4.1. Small Generator Interconnection Customers<sup>149</sup>

Each Interconnection Customer for a Small Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Small Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument such that the total Interconnection Financial Security posted by the Interconnection Customer for Participating TO Interconnection Facilities equals the lesser of:

- \$1 million, the second posting cap for a Small Generating Facility, or
- thirty (30) percent of the total cost assigned to the Interconnection Customer for Participating TO Interconnection Facilities in the final Phase II Interconnection Study or Facilities Study.

However, in no event shall the minimum posting amount be less than \$100,000.

### 8.4.4.2. Large Generator Interconnection Customers<sup>150</sup>

Each Interconnection Customer for a Large Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Large Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument such that the total Interconnection Financial Security posted by the Interconnection Customer for Participating TO Interconnection Facilities the lesser of:

- \$15 million, the second posting cap for a Large Generating Facility, or
- thirty (30) percent of the total cost assigned to the Interconnection Customer for Participating TO Interconnection Facilities in the final Phase II Interconnection Study or Facilities Study.

However, in no event shall the minimum posting amount be less than \$500,000.

## 8.4.5. Cost Estimates Less than Minimum Posting Amounts<sup>151</sup>

If the costs of the estimated Participating TO Interconnection Facilities are less than the posting amounts set forth in GIDAP Section 11.3.1.5 and GIDAP BPM Section 8.4.4, the posting amount required will be equal to the estimated Participating TO Interconnection Facilities amount.

<sup>148</sup> GIDAP Section 11.3.1.5

<sup>149</sup> GIDAP Section 11.3.1.5.1

<sup>150</sup> GIDAP Section 11.3.1.5.2

<sup>151</sup> GIDAP Section 11.3.1.5.3

#### 8.4.6. Posting for Stand Alone Network Upgrade(s) 152

An Interconnection Customer, or two or more Interconnection Customers, may propose to build Network Upgrades that have been determined to be Stand Alone Network Upgrades, or to assume responsibility for stand-alone tasks (e.g., telecommunications, environmental, or property work).<sup>153</sup> The ability of Interconnection Customers to perform this work is subject to the **conditions below**:

- **Agreement** of the Participating TO and the CAISO: During active negotiation of a Generator Interconnection Agreement, the Participating TO and the CAISO may agree to the construction of a Stand Alone Network Upgrade, or task by the Interconnection Customer(s). The CAISO will not provide agreement for an Interconnection Customer to construct a Stand Alone Network Upgrade, or task while a project is parked.<sup>154</sup> Such agreement will take into consideration all Interconnection Customers that require the Stand Alone Network Upgrade to complete their interconnection and the ability of the Interconnection Customer proposing to build the Stand Alone Network Upgrade to complete its construction in a manner that satisfies the requirements of all Interconnection Customers requiring the Stand Alone Network Upgrade.
- **Financial Security**: The Interconnection Customer(s) must post the Interconnection Financial Security for the Stand Alone Network Upgrades or tasks in its/their initial and second Interconnection Financial Security postings when due.
- **Timing & Costs**: The Interconnection Customer(s) should inform the Participating TO at, or soon after, the Phase I study results meeting that they request to build any identified Stand Alone Network Upgrade or task. This will allow the Participating TO to provide cost estimates specific to the Stand Alone Network Upgrades or tasks in the Phase II study report, which will be the basis for the costs included in the GIA. If the Interconnection Customer(s) requests to build the Stand Alone Network Upgrades or task after the Phase II study report has been completed, then the Interconnection Customer(s) will be responsible for the costs associated with developing the cost estimates for the Stand Alone Network Upgrades or tasks and the reissuance of the Phase II study report.
- **Reimbursement of SANU Construction Costs**: An Interconnection Customer that constructs a Stand Alone Network Upgrade, or task is entitled to receive reimbursement for construction costs up to the cost estimate provided by the PTO in the Interconnection Customer's Phase II study report, or Reassessment report, as applicable. The reimbursable amount will be documented in the GIA. Reimbursement of the costs to construct Stand Alone RNUs will not exceed the RNU reimbursement cap established in Appendix DD Section 14.3.2.

<sup>152</sup> GIDAP Section 11.3.1.4.4

<sup>153</sup> CAISO Tariff Appendix A definition of Stand Alone Network Upgrades

<sup>154</sup> GIDAP Section 8.9.4

- Negotiations: If the Participating TO and the CAISO agree, the Generator Interconnection Agreement will document the scope of work to be performed by the Interconnection Customer(s), and any work, and associated charges, that will be retained by the Participating TO.
- Milestone schedule for the scope of work to be performed by the Interconnection Customer(s), which must support the earliest In-Service Date of the projects that are party to the customer agreement described below. If, at any time, the Interconnection Customer(s) fails to meet the milestone schedule and the Participating TO or CAISO refuse to agree to proposed revisions to the milestone schedule, the scope of work to be performed by the Interconnection Customer(s) will revert to the Participating TO.
- Original and revised Current Cost Responsibility, MCR, and Maximum Cost Exposure for each Interconnection Customer financially responsible for funding the Stand Alone Network Upgrade or task. The Interconnection Customer(s)' Current Cost Responsibility, MCR, and Maximum Cost Exposure will be reduced by the cost of the Stand Alone Network Upgrade or task and the Participating TO's oversight charges will be added.

The Interconnection Customer(s) will be allowed to decrease its/their posting amounts to reflect the revisions once the Generator Interconnection Agreement is fully executed. However, if the Interconnection Customer(s) subsequently withdraws, the amount of the Interconnection Financial Security determined to be refundable under Section 11.4.2 of Appendix DD will be reduced by the amount of the Interconnection Financial Security posting the Interconnection Customer avoided through the self-build option.

- PTO oversight costs. The Participating TO may provide an oversight or administrative cost associated with the Participating TO cost for oversight of the work to be performed by the Interconnection Customer(s). The oversight charges will be documented in the GIA. Oversight costs will be counted as reimbursable costs.

Separate customer agreement: Interconnection Customers electing to build Stand Alone Network Upgrade or tasks jointly must maintain an effective agreement among them. This customer agreement, its effective date and its parties will be referenced in the GIA. Notice must be provided to the CAISO and the Participating TO of termination or any changes to the parties or construction schedule within 15 (15) calendar days of the termination or change. In the event an Interconnection Customer who is party to the customer agreement withdraws its Interconnection Request, the customer agreement must remain valid and be revised. The CAISO and the Participating TO must approve any changes to the construction schedule and may require an amendment to the GIA to document changes to the milestones.

- Participating TO reversion: If at any time the responsibility for constructing the Stand Alone Network Upgrade, or task provided in the Generator Interconnection Agreement, reverts to the Participating TO:
  - The Interconnection Customer's Current Cost Responsibility, MCR, and Maximum Cost Exposure will be revised to reflect that the Participating TO will build the Stand Alone Network Upgrade.

The Interconnection Customer(s) must revise its/their Interconnection Financial Security posting to reflect the revised Current Cost Responsibility, within thirty (30) calendar days after notice from the Participating TO that the construction has reverted to the Participating TO. Failure to make a timely posting adjustment will result in the withdrawal of the Interconnection Request in accordance with Section 3.8 of the GIDAP.

#### **8.4.7. Early Commencement of Construction Activities<sup>155</sup>**

If the start date for Construction Activities of Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer is prior to one hundred eighty (180) calendar days after issuance of the final Phase II Interconnection Study report for Interconnection Customers in a Queue Cluster or prior to one hundred twenty (120) calendar days after issuance of the final Facilities Study report for Interconnection Customers in the Independent Study Process, that start date must be set forth in the Interconnection Customer's GIA, and the Interconnection Customer shall make its second posting of Interconnection Financial Security pursuant to GIDAP Section 11.3.2 "Third Posting" (GIDAP BPM Section 8.5.1) rather than GIDAP Section 11.3.1 "Second Posting" (GIDAP BPM Section 8.4.1).

#### **8.4.8. Consequences for Failure to Post<sup>156</sup>**

The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this Section shall constitute grounds for termination of the GIA pursuant to LGIA Article 2.3 or SGIA Article 3.3, whichever is applicable. If a GIA has not been fully executed by the posting date the failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this Section shall result in the Interconnection Request being deemed withdrawn and subject to GIDAP Section 3.8 "Withdrawal." The Interconnection Customer shall provide the CAISO and the Participating TO with written notice that it has posted the required Interconnection Financial Security no later than the applicable final day for posting.

### **8.5. Third Posting of Interconnection Financial Security**

#### **8.5.1. Timing of Posting (also covered in 6.2.10.11.1 & 6.3.5.6.1)<sup>157</sup>**

After the second posting for a Queue Cluster has been made but no later than the start of Construction Activities for Network Upgrades or Participating TO's Interconnection Facilities

<sup>155</sup> GIDAP Section 11.3.1.6

<sup>156</sup> GIDAP Section 11.3.1.7

<sup>157</sup> GIDAP Section 11.3.2

on behalf of the Interconnection Customer, whichever is earlier, the Interconnection Customer shall modify the previous Interconnection Financial Security postings.

After the first posting for Independent Study Process Customers has been made but no later than the start of Construction Activities for Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer, whichever is earlier, the Interconnection Customer shall modify the previous Interconnection Financial Security postings.

### 8.5.2. Posting for Network Upgrades<sup>158</sup>

The Interconnection Customer shall modify its Interconnection Financial Security Instrument for Network Upgrades so that the postings equals one hundred (100) percent of the Current Cost Responsibility allocated to the Interconnection Customer for Network Upgrades as determined in GIDAP Section 11.3.1.4.1 for Small Generator Interconnection Customers or in GIDAP Section 11.3.1.4.2 for Large Generator Interconnection Customers, not to exceed the MCR.

#### 8.5.2.1. Option (B) Generating Facility not allocated TP Deliverability

An Interconnection Customer whose Option (B) Generating Facility was not allocated TP Deliverability and elects to have a party other than the applicable Participating TO(s) construct a LDNU or ADNU is not required to make the third posting for its cost responsibilities for such LDNU or ADNU.

However, such Interconnection Customer will be required to demonstrate its financial capability to pay for the full cost of construction of its share, as applicable, of the LDNU or ADNU pursuant to CAISO Tariff Section 24.4.6.1.

An Interconnection Customer's election to have a party other than an applicable Participating TO construct a LDNU or ADNU does not relieve the Interconnection Customer of the responsibility to fund or construct such LDNU or ADNU.

Upon the Interconnection Customer's demonstration to the CAISO that the Interconnection Customer has expended the amount of the avoided third posting requirement, equaling one hundred (100) percent of the total cost allocated to the Interconnection Customer for LDNUs and ADNUs, on the construction of such LDNUs or ADNUs, the Interconnection Customer's second posting for these facilities will be returned to the Interconnection Customer, unless the Participating TO and Interconnection Customer agree to an alternative arrangement.

### 8.5.3. Posting for Participating TO Interconnection Facilities<sup>159</sup>

The Interconnection Customer shall modify this instrument so that it equals one hundred (100) percent of the assigned ADNU costs and the Current Cost Responsibility assigned to the Interconnection Customer for Participating TO Interconnection Facilities in the final Phase II Interconnection Study for Interconnection Customers in a Queue Cluster, or the final Facilities Study for Interconnection Customers in the Independent Study Process.

<sup>158</sup> GIDAP Section 11.3.2.1

<sup>159</sup> GIDAP Section 11.3.2.2

#### 8.5.4. Separation of Third Posting<sup>160</sup>

If an Interconnection Customer's Network Upgrades and/or Interconnection Facilities are separated into two or more specific components and/or into two or more separate and discrete phases of construction and the Participating TO is able to identify and separate the costs of the identified separate components and/or phases of construction, then the Participating TO, the CAISO, and the Interconnection Customer may negotiate, as part of the Generator Interconnection Agreement, a division of the third Interconnection Financial Security posting into discrete Interconnection Financial Security amounts and may establish specific milestone dates (however, outside dates must be included and adhered to) for posting the amounts corresponding to each component and/or phase of construction related to the Network Upgrades and/or Interconnection Facilities described in the Generator Interconnection Agreement. Outside dates are required to ensure that the Generating Facility continues to demonstrate viability.

#### 8.5.5. Failure to Post Third Posting Requirement

The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this Section shall constitute grounds for termination of the GIA pursuant to LGIA Article 2.3 or SGIA Article 3.3, whichever is applicable.

#### 8.5.6. Conversion of Conditionally Assigned Network Upgrades

If at any time an Interconnection Customer's Interconnection Studies are revised to reflect that Conditionally Assigned Network Upgrades have become Assigned Network Upgrades, the Interconnection Customer's Current Cost Responsibility, MCR, Maximum Cost Exposure, Generator Interconnection Agreement, and Interconnection Financial Security will be revised to reflect the conversion, as applicable.

### 8.6. Effect of Revisions and Addenda to Final Interconnection Study Reports<sup>161</sup>

#### 8.6.1. Substantial Error or Omission; Revised Study Report<sup>162</sup>

Should the CAISO discover, through written comments submitted by an Interconnection Customer or otherwise, that a final Phase I or Phase II Interconnection Study Report (which can mean a final Phase I or Phase II Interconnection Study Report for cluster studies or a final System Impact or Facilities report for the Independent Study Process) contains a substantial error or omission, the CAISO will cause a revised Cluster or ISP final report to be issued to the Interconnection Customer. A substantial error or omission shall mean an error or omission that results in one or more of the following:

- i) understatement or overstatement of the Interconnection Customer's cost responsibility for either Network Upgrades or Participating TO Interconnection

<sup>160</sup> GIDAP Section 11.3.2.3

<sup>161</sup> GIDAP Section 6.8

<sup>162</sup> GIDAP Section 6.8.1



Facilities by more than five (5) percent or one million dollars (\$1,000,000), whichever is greater; or

- ii) results in a delay to the schedule by which the Interconnection Customer can achieve Commercial Operation, based on the results of the final Interconnection Study, by more than one year.

A dispute over the plan of service by an Interconnection Customer shall not be considered a substantial error or omission unless the Interconnection Customer demonstrates that the plan of service was based on an invalid or erroneous study assumption that meets the criteria set forth above.

### **8.6.2. Other Errors or Omission; Addendum<sup>163</sup>**

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

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

### **8.6.3. Only Substantial Errors or Omission Adjust Posting Dates<sup>164</sup>**

Unless the error or omission is a substantial error resulting in the issuance of a revised final Interconnection Study report, the correction of an error or omission shall not operate to delay any deadline for posting Interconnection Financial Security set forth in GIDAP Section 11. In the case of a substantial error or omission resulting in the issuance of a revised final Phase I or Phase II Interconnection Study report, the deadline for posting Interconnection Financial Security shall be extended as set forth in GIDAP Section 11.2.2 and GIDAP Section 11.3.1.2, and GIDAP BPM Sections 8.3.1 and 8.4.1. In addition to issuing a revised final report, the CAISO will promptly notify the Interconnection Customer of any revised posting amount and extended due date.

An Interconnection Customer's dispute of a CAISO determination that an error or omission in a final Study report does not constitute substantial error shall not operate to change the amount of Interconnection Financial Security that the Interconnection Customer must post or to postpone the applicable deadline for the Interconnection Customer to post Interconnection Financial Security. In case of such a dispute, the Interconnection Customer shall post the amount of Interconnection Financial Security in accordance with GIDAP Section 11, and GIDAP BPM Sections 8.3.1 and 8.4.1, subject to refund in the event that the Interconnection Customer prevails in the dispute.

<sup>163</sup> GIDAP Section 6.8.2

<sup>164</sup> GIDAP Section 6.8.3

## 8.7. Offset Due to Monies Associated With Engineering and Procurement Agreements

Amounts received by a Participating TO associated with an Engineering & Procurement Agreement will offset an Interconnection Customer's financial security posting when that Interconnection Customer's next financial posting becomes due.

Any work associated with an Interconnection Customer's Engineering & Procurement Agreement completed prior to the issuance of the Phase II study is to be memorialized in that Interconnection Customer's Phase II study report.

## 8.8. Effect due to Network Upgrades Identified on Multiple Participating TO Systems

An Interconnection Customer's Network Upgrades may extend into more than one CAISO Participating TO's system. In such situations, there are two Participating TOs who will construct different portions of the Network Upgrades identified in the interconnection studies based on which Network Upgrades are attached to the each Participating TO's system.

For the initial and second financial security posting the Interconnection Customer will generally be permitted to make a single financial security posting to the interconnecting Participating TO to secure the Interconnection Customer's cost responsibility for network upgrades, rather than having to make one posting to each Participating TO.

The amount of the posting will be the total amount for Network Upgrades, and the interconnecting Participating TO will effectively "hold" this money for the affected system Participating TO.

## 8.9. Financial Security Requirements for Interconnection Customers with Partial Termination Provisions in LGIA

With respect to Interconnection Customers that have partial termination provisions in their LGIA, the partial termination charge included therein will not increase the customer's responsibility for the costs of Network Upgrades and Participating TO interconnection facilities as determined pursuant to the GIDAP.

The IC will have to post Interconnection Financial Security greater than 100% of its cost responsibility for Network Upgrades and Participating TO interconnection facilities because it will have to post 100% of its financial security obligation for Network Upgrades and Participating TO Interconnection Facilities at start of construction and separately post security to cover the partial termination charge.

Upon any exercise of a partial termination, the customer's financial security covering network upgrade costs will be reduced by the principal amount attributable to the phase of Network Upgrades for which the customer exercised partial termination.

## 8.10. Withdrawal Or Termination- Effect On Financial Security<sup>165</sup>

The withdrawal of an Interconnection Request or termination of a GIA shall allow the applicable Participating TO(s) to liquidate the Interconnection Financial Security, or balance thereof, posted by the Interconnection Customer for Network Upgrades at the time of withdrawal.

To the extent the amount of the liquidated Interconnection Financial Security plus capital, if any, separately provided by the Interconnection Customer to satisfy its obligation to finance Network Upgrades exceeds the current MCR for Network Upgrades assigned to the Interconnection Customer, in the latest study results, for example:

- Phase I
- Phase II
- Addendums
- Revisions
- Reassessments
- Downsizing

the applicable Participating TO(s) shall remit to the Interconnection Customer the excess amount.

Withdrawal of an Interconnection Request or termination of a GIA shall result in the release to the Interconnection Customer of any Interconnection Financial Security posted by the Interconnection Customer for Participating TO Interconnection Facilities, except with respect to any amounts necessary to pay for costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer for the Participating TO's Interconnection Facilities and for which the applicable Participating TO(s) has not been reimbursed.

## 8.11. Determining Refundable Portion of the Interconnection Financial Security for Network Upgrades.

### 8.11.1. Withdrawal Between the First Posting and the Deadline for the Second Posting<sup>166</sup>

If the Interconnection Customer ~~either~~ withdraws its Interconnection Request ~~or terminates its GIA~~ at any time between the initial posting and the deadline for the second posting of the Interconnection Financial Security for applicable Network Upgrades, then the applicable Participating TO(s) shall liquidate and retain the Interconnection Financial Security for the applicable Network Upgrades and reimburse the Interconnection Customer the lesser of:

- a. the Interconnection Financial Security plus (any other provided security plus any separately provided capital) less (all costs and expenses incurred or irrevocably committed to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer), or

<sup>165</sup> GIDAP Section 11.4

<sup>166</sup> GIDAP Section 11.4.2.1

- b. the Interconnection Financial Security plus (any other provided security plus any separately provided capital) minus the lesser of fifty (50) percent of the value of the posted Interconnection Financial Security for Network Upgrades, or \$10,000 per requested and approved, pre-downsized megawatt of the Generating Facility Capacity.

The following two examples are provided to demonstrate the calculation of the Interconnection Financial Security refund based on a withdrawal in this time period.

**Example 1:**

Project size: 100 MW

Interconnection Financial Security (IFS) posted for Network Upgrades (NUs):  
\$20,000,000

50% of posted amount or \$10,000/MW, whichever is less is calculated:

50% of \$20,000,000 = \$10,000,000

\$10,000 x 100 MW = \$1,000,000

The lesser amount, \$1,000,000 is deducted from the posted security.

\$20,000,000 (deposit)

- 1,000,000 (\$10,000/MW)

\$19,000,000 Refund

**Example 2:**

1,250 MW project

IFS posted for NUs: \$20,000,000

50% of posted amount or \$10,000/MW, whichever is less is calculated:

50% of \$20,000,000 = \$10,000,000

\$10,000 x 1,250 MW = \$12,500,000

The lesser amount, \$10,000,000 is deducted from the posted security.

\$20,000,000 (deposit)

- 10,000,000 (50%)

\$10,000,000 Refund

If an Interconnection Customer withdraws an Energy Only project that previously posted for Local Delivery Network Upgrade(s) and the most recent study report shows that the Delivery Network Upgrade(s) that the IC had posted on is no longer needed, then the Interconnection Customer is eligible to be reimbursed the entire amount posted for Local Delivery Network Upgrade(s) that is no longer needed. The following example demonstrates the calculation of the Interconnection Financial Security Refund based on the withdrawal of an Energy Only project that posted for the Local Deliverability Network Upgrades that were removed as a required cost responsibility in its latest study report and the project had not adjusted its postings prior to withdrawing.

**Example 3:**

Project size: 1,250 MW

Interconnection Financial Security (IFS) posted:

Reliability Network Upgrades (RNUs): \$20,000,000  
 Local Deliverability Network Upgrades (LDNUs): \$5,000,000

50% of posted amount or \$10,000/MW, whichever is less is calculated:

50% of \$20,000,000<sup>167</sup> = \$10,000,000

\$10,000 x 1,250MW = \$12,500,000

The lesser amount, \$10,000,000 is deducted from the posted security.

\$20,000,000 (deposit)

- 10,000,000 (50%)

\$10,000,000 + \$5,000,000 (LDNUs)=\$15,000,000 Refund

### 8.11.2. Withdrawal Between the Second Posting and the Commencement of Construction Activities<sup>168</sup>

If the Interconnection Customer either withdraws or terminates its GIA at any time between the second posting of the Interconnection Financial Security for applicable Network Upgrades and the Commencement of Construction Activities for such Network Upgrades, then the applicable Participating TO(s) shall liquidate and retain the Interconnection Financial Security for the applicable Network Upgrades and reimburse the Interconnection Customer the lesser of:

- a. the Interconnection Financial Security plus (any other provided security plus any separately provided capital) less (all costs and expenses incurred or irrevocably committed to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, and less any posting amount reduction due to Interconnection Customer(s)' election to self-build Stand Alone Network Upgrades), or
- b. the Interconnection Financial Security plus (any other provided security plus any separately provided capital) minus the lesser of fifty (50) percent of the value of the posted Interconnection Financial Security for Network Upgrades or \$20,000 per requested and approved, pre-downsized megawatt of the Generating Facility Capacity.

The following two examples, assume (b) is the lesser of (a) and (b) above, are provided to demonstrate the calculation of the Interconnection Financial Security refund based on a withdrawal in this time period.

#### **Example 1:**

Project size: 100 MW

IFS posted for NUs: \$20,000,000

50% of posted amount or \$20,000/MW, whichever is less is calculated:

<sup>167</sup> Only the \$20,000,000 posting for RNUs is used in this calculation because the \$5,000,000 posting for LDNUs has been removed from the IFS posting requirement for the project.

<sup>168</sup> GIDAP Section 11.4.2.2

50% of \$20,000,000 = \$10,000,000  
 \$20,000 x 100 MW = \$2,000,000

The lesser amount, \$2,000,000 is deducted from the posted security.

\$20,000,000 (deposit)  
 - 2,000,000 (\$20,000/MW)  
 \$18,000,000 Refund

### **Example 2:**

1,000 MW project  
 \$20,000,000 NU Financial Security deposit posted

50% of posted amount or \$20,000/MW, whichever is less is calculated:

50% of \$20,000,000 = \$10,000,000  
 \$20,000 x 1,000 MW = \$20,000,000

The lesser amount, \$10,000,000 is deducted from the posted security.

\$20,000,000 (deposit)  
 - 10,000,000 (50%)  
 \$10,000,000 Refund

If an Interconnection Customer withdraws an Energy Only project that previously posted for Local Delivery Network Upgrade(s) and the most recent study report shows that the Delivery Network Upgrade(s) that the IC had posted on is no longer needed, then the Interconnection Customer is eligible to be reimbursed the entire amount posted for Local Delivery Network Upgrade(s) that is no longer needed. The following example demonstrates the calculation of the Interconnection Financial Security Refund based on the withdrawal of an Energy Only project that posted for the Local Deliverability Network Upgrades that were removed as a required cost responsibility shown in the its latest study report and the project had not adjusted its postings prior to withdrawing.

### **Example 3:**

Project size: 1,000 MW

Interconnection Financial Security (IFS) posted:  
 Reliability Network Upgrades (RNUs): \$20,000,000  
 Local Deliverability Network Upgrades (LDNUs): \$5,000,000

50% of posted amount or \$10,000/MW, whichever is less is calculated:

50% of \$20,000,000<sup>169</sup> = \$10,000,000  
 \$20,000 x 1,000 MW = \$20,000,000

The lesser amount, \$10,000,000 is deducted from the posted security.

\$20,000,000 (deposit)  
 - 10,000,000 (50%)

<sup>169</sup> Only the \$20,000,000 posting for RNUs is used in this calculation because the \$5,000,000 posting for LDNUs has been removed from the IFS posting requirement for the project.



$$\$10,000,000 + \$5,000,000 \text{ (LDNUs)} = \$15,000,000 \text{ Refund}$$

If an Interconnection Customer withdraws an Energy Only project that previously posted for Local Delivery Network Upgrade(s) and the most recent study report shows that the Delivery Network Upgrade(s) that the IC had posted on is no longer needed, then the Interconnection Customer is eligible to be reimbursed the entire amount posted for Local Delivery Network Upgrade(s) that is no longer needed. The following example demonstrates the calculation of the Interconnection Financial Security Refund based on the withdrawal of an Energy Only project that posted for the Local Deliverability Network Upgrades that were removed as a required cost responsibility shown in the its latest study report and the project had not adjusted its postings prior to withdrawing.

### **Example 3:**

Project size: 1,000 MW

Interconnection Financial Security (IFS) posted:

Reliability Network Upgrades (RNUs): \$20,000,000

Local Deliverability Network Upgrades (LDNUs): \$5,000,000

50% of posted amount or \$10,000/MW, whichever is less is calculated:

$$50\% \text{ of } \$20,000,000^{170} = \$10,000,000$$

$$\$20,000 \times 1,000 \text{ MW} = \$20,000,000$$

The lesser amount, \$10,000,000 is deducted from the posted security.

\$20,000,000 (deposit)

- 10,000,000 (50%)

$$\$10,000,000 + \$5,000,000 \text{ (LDNUs)} = \$15,000,000 \text{ Refund}$$

### **8.11.3. Determining Refundable Portion for discrete Network Upgrades**

If an executed Generator Interconnection Agreement with discrete third Interconnection Financial Security postings, as described in Section 8.5.4, is terminated the refundable portion determination will be based on the stage each discrete Network Upgrade component/phase is in at the time of withdrawal. It is possible that one discrete Network Upgrade component/phase has reached the Construction Activities stage and other discrete Network Upgrade components/phases have not. In such a case the refundable portion of each discrete Network Upgrade component/phase that has reached the Construction Activities stage will be determined in accordance with Section 8.11.4, and the refundable portion of any discrete Network Upgrade component/phase that has yet to reach the

<sup>170</sup> Only the \$20,000,000 posting for RNUs is used in this calculation because the \$5,000,000 posting for LDNUs has been removed from the IFS posting requirement for the project.

Construction Activities stage will be determined in accordance with Section 8.11.2. Section 8.11.3 (Special Treatment Based on Failure to Obtain Necessary Permit or Authorization from Governmental Authority) will be applied as applicable. The example below is provided for clarity.

**Assumptions:**

100 MW Generating Facility with discrete Network Upgrade component/phase postings for 2 upgrades, NU1 and NU2.

Discrete NU1 cost = \$6 million; third Interconnection Financial Security posting of \$6 million has been made.

Discrete NU2 cost = \$12 million; second Interconnection Financial Security posting has been made ( $30\% \times \$12 \text{ million} = \$3.6 \text{ million}$ ) third Interconnection Financial Security posting has not been made.

Project withdraws from the interconnection queue.

Calculation of Network Upgrade security non-refundable portion:

Non-refundable portion of Interconnection Financial Security for discrete NU1 = \$6 million (complete posting)

Non-refundable portion of Interconnection Financial Security for discrete NU2 = provisions applicable to second posting = lower of 50% of posting amount or \$20,000/MW =  $50\% \times \$3.6 \text{ million} = \$1.8 \text{ million}$

Total Network Upgrade non-refundable portion = \$6 million + \$1.8 million = \$7.8 million

#### **8.11.4. Special Treatment Based on Failure to Obtain Necessary Permit or Authorization from Governmental Authority.<sup>171</sup>**

If, at any time after the second posting requirement, the Interconnection Customer withdraws the Interconnection Request or terminates the GIA, as applicable, in accordance with Section 11.4.1(b), and the Delivery Network Upgrades to be financed by the Interconnection Customer are also to be financed by one or more other Interconnection Customers, then Section 11.4.2.2 shall apply, except that the Interconnection Customer shall not be reimbursed for its share of any actual costs incurred or irrevocably committed by the applicable Participating TO(s) for Construction Activities.

#### **8.11.5. After Commencement of Construction Activities.<sup>172</sup>**

Except as otherwise provided in Section 11.4.2.3, once Construction Activities on Network Upgrades on behalf of the Interconnection Customer commence, any withdrawal of the Interconnection Request or termination of the GIA by the Interconnection Customer will be treated as follows:

<sup>171</sup> GIDAP Section 11.4.2.3

<sup>172</sup> GIDAP Section 11.4.2.4

The applicable Participating TO(s) shall liquidate and retain the Interconnection Financial Security, or balance thereof, posted by the Interconnection Customer for Network Upgrades at the time of withdrawal.

To the extent the amount of the liquidated Interconnection Financial Security plus capital, if any, separately provided by the Interconnection Customer to satisfy its obligation to finance Network Upgrades exceeds the total MCR for Network Upgrades allocated to the Interconnection Customer, the applicable Participating TO(s) shall remit to the Interconnection Customer the excess amount and retain the remaining balance.

Withdrawal of an Interconnection Request or termination of a GIA shall result in the release to the Interconnection Customer of any Interconnection Financial Security posted by the Interconnection Customer for Participating TO Interconnection Facilities, except with respect to any amounts necessary to pay for costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer for the Participating TO's Interconnection Facilities and for which the applicable Participating TO(s) has not been reimbursed in accordance with this Section.

#### **8.11.6. Notification to CAISO and Accounting by Applicable Participating TO(s).<sup>173</sup>**

The applicable Participating TO(s) shall notify the CAISO within one (1) Business Day of liquidating any Interconnection Financial Security. Within twenty (20) calendar days of any liquidating event, the applicable Participating TO(s) shall provide the CAISO and Interconnection Customer with an accounting of the disposition of the proceeds of the liquidated Interconnection Financial Security and remit to the CAISO all proceeds not otherwise reimbursed to the Interconnection Customer or applied to costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer in accordance with this Section.

All non-refundable portions of the Interconnection Financial Security remitted to the CAISO in accordance with this Section shall be treated in accordance with CAISO Tariff Section 37.9.4.

#### **8.11.7. Adjusting Financial Security Postings Following Annual Reassessment Process<sup>174</sup>**

For Interconnection Customers having selected Option (B), the most recent reassessment conducted under GIDAP Section 7.4 or GIDAP BPM Section 6.2.6.3 in any Interconnection Study Cycle following the Interconnection Customer's receipt of its Phase II Interconnection study report shall provide the most recent cost estimates for the Interconnection Customer's ADNUs and the Interconnection Customer shall adjust its Interconnection Financial Security for Network Upgrades to correspond to the most recent estimate for ADNUs.

The calculation for the amount that the Interconnection Customer may receive differs depending on the length of time that has passed between the final Phase II study

<sup>173</sup> GIDAP Section 11.4.2.5

<sup>174</sup> GIDAP Section 11.5

report and of the withdrawal/termination. The difference in the calculation is attributable to an upper limit on how much “unspent deposit” will be retained.

### 8.11.8. Timing and Determining Amounts of Refunds

When there is a withdrawal or interconnection agreement termination prior to the start of construction, the “unspent portion” of any retained financial security does not accrue to the Participating TO. Rather, the CAISO disburses these funds in the same way that collected monetary penalties are disbursed under the CAISO Tariff.

GIDAP Section 11.4.2 and GIDAP BPM Section 8.10 outlines the effect of an Interconnection Customer’s withdrawal (or deemed withdrawal) from the queue and/or termination of an executed interconnection agreement.

## 9. Engineering and Procurement Agreement<sup>175</sup>

Prior to executing a GIA, an Interconnection Customer may, in order to advance the implementation of its interconnection, request and the applicable Participating TO(s) shall offer the Interconnection Customer, an Engineering & Procurement (E&P) Agreement that authorizes the applicable Participating TO(s) to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, the applicable Participating TO(s) shall not be obligated to offer an Engineering & Procurement Agreement if the Interconnection Customer is in Dispute Resolution as a result of an allegation that the Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the GIDAP. The Engineering & Procurement Agreement is an optional procedure. The Engineering & Procurement Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

The Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If the Interconnection Customer withdraws its application for interconnection or either Party terminates the Engineering & Procurement Agreement, to the extent the equipment ordered can be canceled under reasonable terms, the Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, the applicable Participating TO(s) may elect: (i) to take title to the equipment, in which event the applicable Participating TO(s) shall refund the Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to the Interconnection Customer, in which event the Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

<sup>175</sup> GIDAP Section 12.

## 10. Generator Interconnection Agreement (GIA)<sup>176</sup>

### 10.1. General<sup>177</sup>

The draft GIA shall be in the form of the FERC-approved form of GIA set forth in CAISO Tariff Appendix EE or Appendix FF, as applicable.

### 10.2. GIA Negotiations and Associated Timelines<sup>178</sup>

GIDAP Section 13 provides no more than one hundred twenty (120) calendar days for the negotiation of the GIA after the Participating TO tenders a draft GIA to the CAISO and the Interconnection Customer, unless otherwise agreed by the Parties. The sections below provide for the following timeline:

- a. The Participating TO, in consultation with the CAISO, issues the draft GIA, with draft appendices, to the CAISO and the Interconnection Customer for review on or before the tender date. The tender date is identified by subtracting from the In-Service Date the sum of (i) one hundred eighty (180) calendar days and (ii) the longest estimated time to construct any of the Interconnection Facilities and Network Upgrades needed by this or any dependent project, as indicated in the applicable study report, prior to the In-Service Date. The Parties will discuss the GIA tender date at the Phase II Results Meeting. The applicable Participating TO may tender the draft GIA any time after the Phase II Study report is issued and before the tender date on its own accord or at the request of either the CAISO or the Interconnection Customer.
- b. After the Participating TO tenders the draft GIA to the Interconnection Customer and the CAISO, the Parties negotiate the draft GIA for not more than one hundred twenty (120) calendar days, unless otherwise agreed to by the Parties. Because the GIA itself is a *pro forma* agreement, alteration of the GIA terms renders the document non-conforming and requires separate justification at FERC (meaning the GIA cannot simply be submitted via the Electronic Quarterly Reports<sup>179</sup> process). Only unique circumstances warrant

<sup>176</sup> GIDAP Section 13.

<sup>177</sup> GIDAP Section 13.1.1.

<sup>178</sup> GIDAP Sections 13.1.1, 13.1.2 and 13.2.

<sup>179</sup> In Order No. 2001, the Federal Energy Regulatory Commission ("FERC") required public utilities, and all other entities granted market based rate authority, to electronically file an Electric Quarterly Report ("EQR") summarizing the contractual terms and conditions in their agreements for all jurisdictional services (including market-based power sales, cost-based power sales, and transmission service) and transaction information for short-term and long-term market-based power sales and cost-based power sales during the most recent calendar quarter. <http://www.ferc.gov/docs-filing/eqr.asp>

alteration of the *pro forma* terms, and such departure must be justified and equal or superior to the *pro forma* terms.

- c. If the Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft GIA. Within seven (7) calendar days of such request, the Interconnection Customer will request submission of the unexecuted GIA with FERC or initiate Dispute Resolution procedures pursuant to GIDAP Section 15.5 and GIDAP BPM Section 15. If the Interconnection Customer requests termination but fails to request either the filing of the unexecuted GIA or initiate Dispute Resolution within seven calendar days, it will be deemed to have withdrawn its Interconnection Request.
- d. Within one hundred twenty (120) calendar days of tendering the GIA, the parties should complete negotiation of the draft GIA, unless otherwise agreed by the parties;
- e. Neither the CAISO nor the Participating TO may declare an impasse until the negotiation period has ended (i.e., 120 calendar days after the draft GIA was tendered). If the CAISO or the Participating TO declares an impasse, that party will file the GIA unexecuted with FERC within twenty one (21) calendar days.
- f. If within one hundred twenty (120) calendar days of tendering the draft GIA the Interconnection Customer has not executed and returned the GIA, requested filing of an unexecuted GIA, or initiated Dispute Resolution under GIDAP Section 15.5 and GIDAP BPM Section 15, the Interconnection Customer shall be deemed to have withdrawn its Interconnection Request unless all parties agree that further time is necessary to negotiate.
- g. Within ten (10) Business Days after completion of the negotiation process, the CAISO will provide to the Interconnection Customer a final GIA for execution.

### 10.3. Feasible Project Milestone Dates<sup>180</sup>

After the Phase II Study report is issued, Interconnection Customers must ensure that their project milestone dates are achievable based on the time needed to construct the longest lead time Network Upgrade, Interconnection Facility, or Generating Facility as set forth in the project's governing study report and the time needed to negotiate the GIA. Failure to submit a timely request to extend the project milestone dates will result in the Interconnection Request being deemed withdrawn.

<sup>180</sup> GIDAP Section 13.2.1



## 10.4. Execution and Filing<sup>181</sup>

Once the Interconnection Customer receives a final GIA for execution, the Interconnection Customer shall either:

- i. execute the appropriate number of originals of the tendered GIA as specified in the directions provided by the CAISO and return them to the CAISO, as directed, for completion of the execution process; or
- ii. request in writing that the applicable Participating TO(s) and CAISO file a GIA in unexecuted form with FERC;

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

## 10.5. Commencement of Interconnection Activities<sup>182</sup>

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

## 10.6. Interconnection Customer to Meet Participating TO Handbook Requirements<sup>183</sup>

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

<sup>181</sup> GIDAP Section 13.3.

<sup>182</sup> GIDAP Section 13.4.

<sup>183</sup> GIDAP Section 13.5.

Handbook. If the Participating TO's Interconnection Handbook is in conflict with the GIA the GIA governs.<sup>184</sup>

## 11. Construction and Funding of Participating TO's Interconnection Facilities and Network Upgrades

### 11.1. Construction Schedule<sup>185</sup>

The applicable Participating TO(s) and the Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of the applicable Participating TO's Interconnection Facilities and the Network Upgrades.

### 11.2. Construction Sequencing

#### 11.2.1. General<sup>186</sup>

In general, the sequence of construction of Stand Alone Network Upgrades or other Network Upgrades for a single Interconnection Request, or Network Upgrades identified for the interconnection of Generating Facilities associated with multiple Interconnection Requests, shall be determined, to the maximum extent practical, in a manner that accommodates the proposed Commercial Operation Date set forth in the GIA of the Interconnection Customer(s) associated with the Stand Alone Network Upgrades or other Network Upgrades.

#### 11.2.2. Construction of Network Upgrades That Are or Were an Obligation of an Entity Other than the Interconnection Customer<sup>187</sup>

The applicable Participating TO(s) shall be responsible for financing and constructing any Network Upgrades necessary to support the interconnection of the Generating Facility of an Interconnection Customer with a GIA whenever the Network Upgrades were included in the Interconnection Base Case Data for a Phase II Interconnection Study on the basis that they were Network Upgrades associated with Generating Facilities of Interconnection Customers that have an executed GIA (or its equivalent predecessor agreement) or unexecuted GIA (or its equivalent predecessor agreement) filed with FERC, and such GIA specifies that the Participating TO would construct the Network Upgrades, and either:

<sup>184</sup> See definition of Interconnection Handbook in the LGIA (CAISO Tariff App CC, Article 1, Definitions).

<sup>185</sup> GIDAP Section 14.1.

<sup>186</sup> GIDAP Section 14.2.1.

<sup>187</sup> GIDAP Section 14.2.2.

- i. the Network Upgrades will not otherwise be completed because such GIA or equivalent predecessor agreement was subsequently terminated or the Interconnection Request has otherwise been withdrawn; or
- ii. the Network Upgrades will not otherwise be completed in time to support the Interconnection Customer's In-Service Date because construction has not commenced in accordance with the terms of such GIA (or its equivalent predecessor agreement).

Where the Participating TO is constructing ADNUs for Option (B) Interconnection Customers and one of the two conditions above occurs, the Participating TO shall continue to construct such ADNUs with financing provided from the Interconnection Financial Security of those Option (B) Interconnection Customers' Interconnection referred to above, with any additional financing requirements to be reapportioned among those remaining Option (B) Interconnection Customers who still need the ADNUs.

The obligation under GIDAP Section 14.2.2 and this GIDAP BPM Section 11.2.2 arises only after the CAISO, in coordination with the applicable Participating TO(s), determines that the Network Upgrades remain needed to support the interconnection of the Interconnection Customer's Generating Facility notwithstanding, as applicable, the absence or delay of the Generating Facility that is contractually, or was previously contractually, associated with the Network Upgrades.

Further, to the extent the timing of such Network Upgrades was not accounted for in determining a reasonable Commercial Operation Date among the CAISO, applicable Participating TO(s), and the Interconnection Customer as part of the Phase II Interconnection Study, the applicable Participating TO(s) will use Reasonable Efforts to ensure that the construction of such Network Upgrades can accommodate the Interconnection Customer's proposed Commercial Operation Date. If, despite Reasonable Efforts, it is anticipated that the Network Upgrades cannot be constructed in time to accommodate the Interconnection Customer's proposed Commercial Operation Date, the Interconnection Customer may commit to pay the applicable Participating TO(s) any costs associated with expediting construction of the Network Upgrades to meet the original proposed Commercial Operation Date. The expediting costs shall be in addition to the Interconnection Customer's Current Cost Responsibility and MCR.

### **11.2.3. Construction of Network Upgrades that are Part of the CAISO's Transmission Plan<sup>188</sup>**

An Interconnection Customer with a GIA, in order to maintain its In-Service Date as specified in the GIA, may request that the CAISO and applicable Participating TO(s) advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such

<sup>188</sup> GIDAP Section 14.2.3.

In-Service Date and (ii) would otherwise not be completed, pursuant to an approved CAISO Transmission Plan covering the PTO Service Territory of the applicable Participating TO(s), in time to support such In-Service Date. Upon such request, the applicable Participating TO(s) will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the applicable Participating TO(s) any associated expediting costs. The Interconnection Customer shall be entitled to refunds, if any, in accordance with the GIA, for any expediting costs paid.

### 11.3. Network Upgrades<sup>189</sup>

With the exception of LDNUs and ADNUs for Option (B) Generating Facilities that were not allocated TP Deliverability, Network Upgrades will be constructed by the applicable Participating TO(s). Interconnection Customers may, at their discretion, select parties other than the applicable Participating TOs to construct certain LDNUs and ADNUs required by their Option (B) Generating Facilities that are not allocated TP Deliverability, if such LDNUs and ADNUs are eligible for construction by parties other than the applicable Participating TO pursuant to CAISO Tariff Section 24.5.2. Such ADNUs and LDNUs will be incorporated into the CAISO Controlled Grid pursuant to the provisions for Merchant Transmission Facilities in CAISO Tariff Sections 24.4.6.1 and 36.11. Unless the Interconnection Customer elects construction by a party other than the applicable Participating TO, the applicable Participating TO(s) will be obligated to construct the LDNUs and ADNUs. This GIDAP BPM Section 11.3 shall not apply to an Interconnection Customer's right to build Stand Alone Network Upgrade(s) in accordance with the GIA.

#### 11.3.1. Initial Funding<sup>190</sup>

Assigned Network Upgrades shall be funded by the Interconnection Customer(s) either by means of drawing down the Interconnection Financial Security or by the provision of additional capital, at each Interconnection Customer's election, up to the Interconnection Customer's Current Cost Responsibility. The Current Cost Responsibility may be adjusted consistent with this GIDAP and up to the Interconnection Customer's MCR, but the applicable Participating TO(s) shall be responsible for funding any capital costs for the RNUs and LDNUs that exceed the MCR assigned to the Interconnection Customer(s).

- a) Where the funding responsibility for any RNUs and LDNUs has been assigned to a single Interconnection Customer, the applicable Participating TO(s) shall invoice the Interconnection Customer under Large Generator Interconnection Agreement (LGIA) Article 12.1 or Small Generator Interconnection Agreement (SGIA) Article 6.1,

<sup>189</sup> GIDAP Section 14.3.

<sup>190</sup> GIDAP Section 14.3.1.

whichever is applicable, up to the Interconnection Customer's Current Cost Responsibility allocated for the RNUs or LDNUs, respectively.

- b) Where the funding responsibility for an RNU has been assigned to more than one Interconnection Customer in accordance with the GIDAP and this GIDAP BPM, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, for such RNU in accordance with their respective cost responsibilities. Each Customer may be invoiced up to their Current Cost Responsibility.
- c) Where the funding responsibility for an LDNU has been assigned to more than one Interconnection Customer, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, for such LDNUs based on their respective cost responsibilities. Each Interconnection Customer may be invoiced up to their Current Cost Responsibility.
- d) Where the funding responsibility for an ADNU being constructed by one or more Participating TO has been assigned to more than one Option (B) Interconnection Customer, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, for such ADNUs based on their respective cost responsibilities.

Any permissible extension of the Commercial Operation Date of a Generating Facility will not alter the Interconnection Customer's obligation to finance Network Upgrades where the Network Upgrades are required to meet the earlier Commercial Operation Date(s) of other Generating Facilities that have also been assigned cost responsibility for the Network Upgrade(s).

## 12.Repayment of Amounts Advanced for Network Upgrades and Refund of Interconnection Financial Security

### 12.1.Repayment of Amounts Advanced Regarding Non-Phased Generating Facilities<sup>191</sup>

Upon the Commercial Operation Date of a Generating Facility that is not a Phased Generating Facility, the Interconnection Customer shall be entitled to a repayment for the Interconnection Customer's contribution to the cost of Network Upgrades as follows.

<sup>191</sup> GIDAP Section 14.3.2.1.

For RNUs, in accordance with the Interconnection Customer's allocated costs for RNUs, up to a maximum of the effective escalation reimbursement value per MW of Interconnection Service Capacity as specified in the GIA, as described below.

Interconnection Customers that request to expand a Generating Facility by submitting a new Interconnection Request will be eligible for RNU reimbursement based on the Generating Facility capacity following expansion. When the original Generating Facility reaches its Commercial Operation Date the RNU reimbursement will be based on the Generating Facility capacity and total cost for RNUs at that time. When the Generating Facility expansion reaches Commercial Operation, the CAISO will calculate the RNU reimbursement based on the entire facilities capacity and total cost for RNUs and subtract the original Interconnection Request's RNU reimbursement amount. This will determine the remaining eligible reimbursement under the cap for the expansion Interconnection Request's RNUs, if any.

For RNU reimbursement for Transfer of Surplus Interconnection Service, 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. Please refer to Section 6.5.11.2 of the Generator Management BPM for more information.<sup>192</sup>

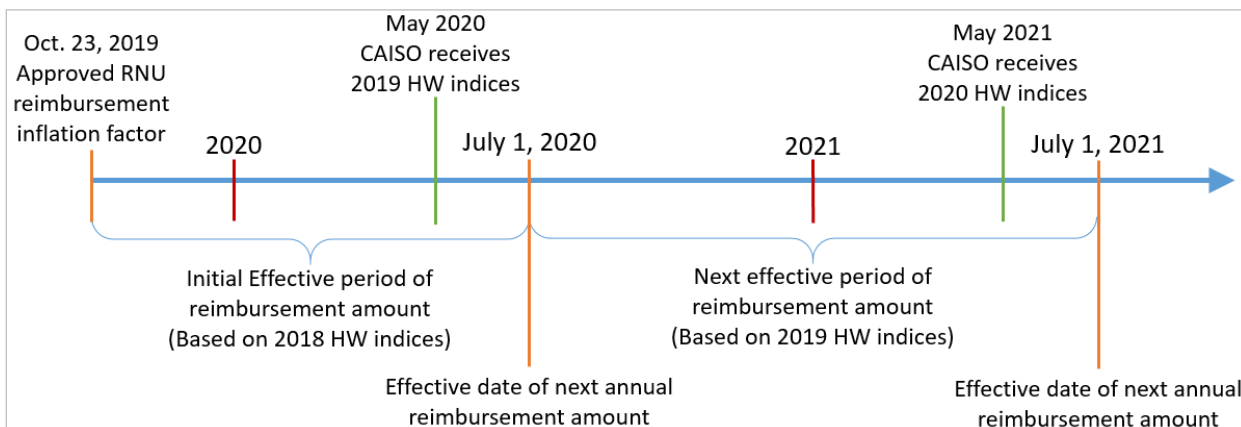
The CAISO will adjust the dollar per MW maximum RNU reimbursement amount annually and publish the amount on the CAISO Website according to Section 6.4 of the GIDAP. Effective October 23, 2019, Interconnection Customers, who have not received or not started receiving payment for RNUs, will be entitled to repayment for RNUs up to a maximum amount corresponding to the annual escalated reimbursement amount for the year in which the Interconnection Customer's Generating Facility achieves its Commercial Operation Date.

- The CAISO will adjust the RNU reimbursement amount by utilizing the Handy-Whitman Index of Public Utility Construction Costs index for "Total Transmission Plant (Pacific Region)" to establish an annual escalation factor.
- The CAISO receives the previous calendar year's index in May and expects to analyze and establish each year's reimbursement amount by June 30<sup>th</sup>.
- The annual reimbursement amount established, as calculated in May/June, will be effective from July 1 of that year to June 30<sup>th</sup> of the following year.
- Upon posting the next year's reimbursement amount to the CAISO website, the CAISO will publish a Market Notice to notify stakeholders of the adjusted reimbursement amount.

<sup>192</sup> GIDAP Section 3.4.



RNU reimbursement amount annual adjustment timeline example:



- For LDNUs, except for LDNUs for Option (B) Generating Facilities that were not allocated TP Deliverability, in accordance with the Interconnection Customer's allocated cost for LDNUs.
- Option (B) Generating Facilities that were not allocated TP Deliverability will not receive repayment for LDNUs or ADNUs.

Such repayment amount shall be paid to the Interconnection Customer by the applicable Participating TO(s) on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the Generating Facility's Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years of the Commercial Operation Date.

For Network Upgrades for which the Interconnection Customer did not receive repayment, the Interconnection Customer will be eligible to receive Merchant Transmission Congestion Revenue Rights (CRRs) in accordance with the CAISO Tariff Section 36.11 and the Congestion Revenue Rights BPM Section 14 Generator Interconnection Driven Reliability Network Upgrade Merchant Transmission CRR Process associated with the Network Upgrades, or portions thereof that were funded by the Interconnection Customer. Such CRRs would take effect upon the Commercial Operation Date of the Generating Facility in accordance with the GIA.

## 12.2. Repayment of Amounts Advanced Regarding Phased Generating Facilities<sup>193</sup>

Upon the Commercial Operation Date of each phase of a Phased Generating Facility, the Interconnection Customer shall be entitled to a repayment for the Interconnection Customer's

<sup>193</sup> GIDAP Section 14.3.2.2.

contribution to the cost of Network Upgrades for that completed phase in accordance with the Interconnection Customer's Current Cost Responsibility allocated for the phase and subject to the limitations specified in GIDAP Section 14.3.2.1 and GIDAP BPM Section 12.1, if all of the following conditions are satisfied:

- a) The Generating Facility is capable of being constructed in phases;
- b) The Generating Facility is specified in the GIA as being constructed in phases;
- c) The completed phase corresponds to one of the phases specified in the GIA;
- d) The phase has achieved Commercial Operation and the Interconnection Customer has tendered notice of the same pursuant to the GIA;
- e) All parties to the GIA have confirmed that the completed phase meets the requirements set forth in the GIA and any other operating, metering, and interconnection requirements to permit generation output of the entire capacity of the completed phase as specified in the GIA;
- f) The Network Upgrades necessary for the completed phase to meet the desired level of Deliverability are in service; and
- g) The Interconnection Customer has posted one hundred (100) percent of the Interconnection Financial Security required for the Network Upgrades for all the phases of the Generating Facility (or if less than one hundred (100) percent has been posted, then all required Interconnection Financial Security instruments to the date of commencement of repayment).

Upon satisfaction of these conditions (a) through (g), the Interconnection Customer shall be entitled to receive a partial repayment of its financed costs in an amount equal to the percentage of the Generating Facility declared to be in Commercial Operation multiplied by the cost of the Network Upgrades associated with the completed phase. The Interconnection Customer shall be entitled to repayment in this manner for each completed phase until the entire Generating Facility is completed.

A reduction in the Interconnection Service Capacity of the Generating Facility pursuant to Article 5.19.4 of the LGIA shall not diminish the Interconnection Customer's right to repayment pursuant to this GIDAP BPM Section 12.2. If the GIA includes a partial termination provision and the partial termination right has been exercised with regard to a phase that has not been built, then the Interconnection Customer's eligibility for repayment under this GIDAP BPM Section 12.2 as to the remaining phases shall not be diminished. If the Interconnection Customer completes one or more phases and then defaults on the GIA, the Participating TO and the CAISO shall be entitled to offset any losses or damages resulting from the default against any repayments made for Network Upgrades related to the completed phases provided that the party seeking to

exercise the offset has complied with any requirements which may be required to apply the stream of payments utilized to make the repayment to the Interconnection Customer as an offset.

Any repayment amount for completion of a phase shall include any tax gross-up or other tax-related payments associated with the Network Upgrades not refunded to the Interconnection Customer, and shall be paid to the Interconnection Customer by the applicable Participating TO(s) on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the date by the requirements of items (a) through (g) above have been fulfilled,; or (2) any alternative payment schedule that associates the completion of Network Upgrades with the completion of particular phases and that is mutually agreeable to the Interconnection Customer and Participating TO.

### 12.3. Interest Payments and Assignment of Rights<sup>194</sup>

Any phased or non-phased repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. The Interconnection Customer may assign such repayment rights to any person.

### 12.4. Special Provisions for Affected Systems, Other Affected Participating TOs<sup>195</sup>

The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected Participating TO(s), as applicable. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected Participating TO(s) as well as the repayment by the owner of the Affected System and/or other affected Participating TO(s). If the affected entity is another Participating TO, the initial form of agreement will be the GIA, as appropriately modified.

In instances where the Affected Systems upgrades and the Participating TO's upgrades are interdependent, the Interconnection Customer shall be responsible for facilitating any post-GIA meetings and related coordination.

Interconnection Studies will list separate cost estimates for facilities and Network Upgrades required on the interconnecting Participating TO and affected Participating TO's systems. These individual costs will sum to a single, combined MCR and a single, combined Maximum Cost Exposure for the Interconnection Customer.

<sup>194</sup> GIDAP Section 14.3.2.3.

<sup>195</sup> GIDAP Section 14.4.

The Interconnection Customer will post its initial and second Interconnection Financial Security to the interconnecting Participating TO only, for the facilities and Network Upgrades on both the interconnecting and affected participating TO's systems. The Interconnection Customer will post its third Interconnection Financial Security to each Participating TO, not to exceed the Current Cost Responsibility.

Any repayment by the owner of the Affected System shall be in accordance with FERC Order No. 2003-B (109 FERC ¶ 61,287). Each Participating TO will repay amounts received for Network Upgrades subject to the single, combined maximum RNU reimbursement based upon the Interconnection Customer's Interconnection Service Capacity. If the amount funded for the Reliability Network Upgrades exceeds the maximum RNU reimbursement cap, each Participating TO will repay the Interconnection Customer proportional to its share of the Interconnection Customer's payment to each Participating TO for the Reliability Network Upgrades.

## 13. Confidentiality<sup>196</sup>

Confidential Information shall include, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this GIDAP BPM Section 13 warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

These confidentiality provisions are limited to information provided pursuant to the GIDAP and this GIDAP BPM.

### 13.1. Scope<sup>197</sup>

Confidential Information shall not include information that the receiving Party can demonstrate:

- 1) is generally available to the public other than as a result of a disclosure by the receiving Party;

<sup>196</sup> GIDAP Section 15.1.

<sup>197</sup> GIDAP Section 15.1.1.

- 2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party;
- 3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential;
- 4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party;
- 5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or breach of the GIA; or
- 6) is required, in accordance with GIDAP Section 15.1.6 and GIDAP BPM Section 13.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the GIDAP. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

## 13.2. Release of Confidential Information<sup>198</sup>

No Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, Affiliates (limited by FERC's Standards of Conduct requirements set forth in Part 358 of FERC's Regulations, 18 C.F.R. Part 358), or to Affected Systems, or to parties who may be or considering providing financing to or equity participation with the Interconnection Customer, or to potential purchasers or assignees of the Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this GIDAP BPM Section 13.2 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this GIDAP BPM Section 13.2.

## 13.3. Rights<sup>199</sup>

Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

<sup>198</sup> GIDAP Section 15.1.2.

<sup>199</sup> GIDAP Section 15.1.3.

### 13.4. No Warranties<sup>200</sup>

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.

### 13.5. Standard of Care<sup>201</sup>

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under these procedures or its regulatory requirements.

### 13.6. Order of Disclosure<sup>202</sup>

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of these confidentiality provisions. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

### 13.7. Remedies<sup>203</sup>

Monetary damages are inadequate to compensate a Party for another Party's breach of its obligations under GIDAP Section 15.1 and this GIDAP BPM Section 13. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party breaches or threatens to breach its obligations under GIDAP Section 15.1 and this GIDAP BPM Section 13, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the breach of GIDAP Section 15.1 and this GIDAP BPM Section 13, but shall be in addition to all other

<sup>200</sup> GIDAP Section 15.1.4.

<sup>201</sup> GIDAP Section 15.1.5.

<sup>202</sup> GIDAP Section 15.1.6.

<sup>203</sup> GIDAP Section 15.1.7.



remedies available at law or in equity. Further, the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with GIDAP Section 15.1 and this GIDAP BPM Section 13.

### 13.8. Disclosure to FERC, its Staff, or a State<sup>204</sup>

Notwithstanding anything in GIDAP Section 15.1 and this GIDAP BPM Section 13 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. Section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other applicable Parties when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. Section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules and regulations.

### 13.9. Disclosure to Others<sup>205</sup>

Subject to the exception in GIDAP Section 15.1.8 and GIDAP BPM Section 13.8, any Confidential Information shall not be disclosed by the other Parties to any person not employed or retained by the other Parties, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Parties, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under the GIDAP and this GIDAP BPM or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to an RTO or ISO or to a sub-regional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other

<sup>204</sup> GIDAP Section 15.1.8.

<sup>205</sup> GIDAP Section 15.1.9.

Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures

### **13.10. Disclosure of Information Already In Public Domain<sup>206</sup>**

This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a breach of this provision).

### **13.11. Disbursement of Interconnection Customer Confidential Information<sup>207</sup>**

The Participating TO or CAISO shall, at the Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

## **14. Delegation of Responsibility<sup>208</sup>**

The CAISO and the Participating TOs may use the services of subcontractors as deemed appropriate to perform their obligations under the GIDAP. The applicable Participating TO or CAISO shall remain primarily liable to the Interconnection Customer for the performance of its respective subcontractors and compliance with its obligations of the GIDAP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

## **15. Disputes<sup>209</sup>**

If an Interconnection Customer disputes withdrawal of its Interconnection Request under GIDAP Section 3.8 and GIDAP BPM Section 5.5, the CAISO will forward any information regarding the disputed withdrawal received under GIDAP Section 3.8 and GIDAP BPM Section 5.5 within one (1) Business Day to the GIDAP Executive Dispute Committee, consisting of the Vice President responsible for administration of the GIDAP, the CAISO Vice President responsible for customer affairs, and an additional Vice President. The GIDAP Executive Dispute Committee shall have five (5) Business Days to determine whether or not to restore the Interconnection Request. If the GIDAP Executive Dispute Committee concludes that the Interconnection Request should have been withdrawn, the Interconnection Customer may seek relief in accordance with the CAISO ADR Procedures.

<sup>206</sup> GIDAP Section 15.1.10.

<sup>207</sup> GIDAP Section 15.1.11.

<sup>208</sup> GIDAP Section 15.2.

<sup>209</sup> GIDAP Section 15.5.

All disputes, other than those arising from GIDAP Section 3.8 and GIDAP BPM Section 5.5, arising out of or in connection with the GIDAP or this GIDAP BPM whereby relief is sought by or from the CAISO shall be settled in accordance with the CAISO ADR Procedures.

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

### 15.1. Submission<sup>210</sup>

In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with the GIA, the GIDAP, or their performance, such Party (the disputing Party) shall provide the other Party with written notice of the dispute or claim (Notice of Dispute). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) calendar days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of the GIA and GIDAP.

### 15.2. External Arbitration Procedures<sup>211</sup>

Any arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) calendar days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) calendar days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association (Arbitration Rules) and any applicable FERC regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of GIDAP Section 15.5 and this GIDAP BPM Section 15, the terms of GIDAP Section 15.5 and this GIDAP BPM Section 15 shall prevail.

<sup>210</sup> GIDAP Section 15.5.1.

<sup>211</sup> GIDAP Section 15.5.2.

### 15.3. Arbitration Decisions<sup>212</sup>

Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) calendar days of appointment and shall notify the Parties in writing of such decision and the reasons therefore. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the GIA and shall have no power to modify or change any provision of the GIA and in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

### 15.4. Costs<sup>213</sup>

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

### 15.5. Non-binding Alternative Dispute Resolution<sup>214</sup>

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 nonbinding 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 this Section 15.5.5 shall serve as an alternative to, and not a replacement of, the Section 15.5 arbitration process. 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 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

<sup>212</sup> GIDAP Section 15.5.3.

<sup>213</sup> GIDAP Section 15.5.4.

<sup>214</sup> GIDAP Section 15.5.5.

the GIDAP and GIA in any manner. 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.

## 16. Local Furnishing Bonds

### 16.1. Participating TOs That Own Facilities Financed by Local Furnishing Bonds<sup>215</sup>

This provision is applicable only to a Participating TO that has financed facilities for the local furnishing of electric energy with Local Furnishing Bonds. Notwithstanding any other provisions of this , the Participating TO and the CAISO shall not be required to provide Interconnection Service to the Interconnection Customer pursuant to this and the GIA if the provision of such Interconnection Service would jeopardize the tax-exempt status of any Local Furnishing Bond(s) issued for the benefit of the Participating TO.

### 16.2. Alternative Procedures for Requesting Interconnection Service<sup>216</sup>

If a Participating TO determines that the provision of Interconnection Service requested by the Interconnection Customer would jeopardize the tax-exempt status of any Local Furnishing Bond(s) issued for the benefit of the Participating TO, it shall advise the Interconnection Customer and the CAISO within thirty (30) calendar days of receipt of the Interconnection Request.

The Interconnection Customer thereafter may renew its request for the same interconnection Service by tendering an application under Section 211 of the Federal Power Act, in which case the Participating TO, within ten (10) calendar days of receiving a copy of the Section 211 application, will waive its rights to a request for service under Section 213(a) of the Federal Power Act and to the issuance of a proposed order under Section 212(c) of the Federal Power Act, and the CAISO and Participating TO shall provide the requested Interconnection Service pursuant to the terms and conditions set forth in this and the GIA.

## 17. Change In CAISO Operational Control<sup>217</sup>

<sup>215</sup> GIDAP Section 15.6.1.

<sup>216</sup> GIDAP Section 15.6.2.

<sup>217</sup> GIDAP Section 15.7.

If the CAISO no longer has control of the portion of the CAISO Controlled Grid at the Point of Interconnection during the period when an Interconnection Request is pending, the CAISO shall transfer to the applicable former Participating TO or successor entity which has ownership of the Point of Interconnection any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net deposit amount and the costs that the former Participating TO or successor entity incurs to evaluate the request for interconnection shall be paid by or refunded to the Interconnection Customer, as appropriate. The CAISO shall coordinate with the applicable former Participating TO or successor entity which has ownership of the Point of Interconnection to complete any Interconnection Study, as appropriate, that the CAISO has begun but has not completed. If the CAISO has tendered a draft GIA to the Interconnection Customer but the Interconnection Customer has neither executed the GIA nor requested the filing of an unexecuted GIA with FERC, unless otherwise provided, the Interconnection Customer must complete negotiations with the applicable former Participating TO or successor entity which has the ownership of the Point of Interconnection.