



California ISO

# Business Practice Manual For Generator Interconnection Procedures (GIP BPM)

Version ~~98~~

Last Revised: ~~August~~ ~~June-25~~, 201~~9~~~~6~~

## Approval History

Approval Date: 09 01 2011

Effective Date: 09 01 2011

BPM Owner: Stephen Ruttly

BPM Owner's Title: Director, Grid Assets

## Revision History

Version	PRR	Date	Description
<u>9</u>	<u>1158</u>	<u>8/5/19</u>	<u>Interconnection process enhancements: Conditions for Partial Recovery of IFS, posting requirements for PTOs, and project name publication</u>
8	901	4/8/2016	Modified Affected System language from IPE
7	877	11/25/2015	Added Reassessment language
6	746	9/4/2014	Modified Affected System language
5	741	6/3/2014	Removed language added in Version 4, reverted to Version 3 language
4	707	04/07/2014	Replaced language resulting from the Affected System Stakeholder process
3	608	11-27-2012	Revised Version Released – reflected in PRR0608 and result of 2011 GIP 2 Tariff changes
2	514	01-01-2012	Revised Version Released – reflected in PRR0514 and result of 2011 GIP 2 stakeholder process
1		09-01-2011	1 <sup>st</sup> Version Released

Although this GIP BPM has the look and feel of the CAISO Tariff Appendix Y (GIP) it is written to provide the reader a more accurate chronological sequence of events

the Interconnection Customer needs to perform to interconnect to the Grid. The following Table of Contents summarizes that sequence.

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**GIP BPM**

**1. Introduction**

In this Introduction you will find the following information:

- The purpose of California Independent System Operator Corporation (ISO) 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 California CAISO Business Practice Manuals**

The BPMs developed by the 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

the CAISO and the markets. Each Business Practice Manual is posted in the BPM Library at: <http://bpmcm.aiso.com/Pages/BPMLibrary.aspx>. Updates to all BPMs are managed in accordance with the change management procedures included in the [BPM for Change Management](#).

#### Purpose of this Business Practice Manual

The GIP 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 Y which is referenced in this GIP BPM as the GIP; and
- General information on CAISO Tariff Appendix Y Generator Interconnection Procedures (GIP) processes.

The provisions of this BPM are intended to be consistent with the GIP. If the provisions of this BPM nevertheless conflict with the GIP, the CAISO is required to operate in accordance with the GIP. Any provision of the GIP 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 GIP.

## 1.2. References

Note to Reader: 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 GIP BPM:

- Other CAISO BPMs; and
- The CAISO FERC Electric Tariff, Amended and Restated Fifth Replacement.

The CAISO Website posts current versions of these documents.

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

### 1.3. Definitions

#### 1.3.1 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 GIP BPM. References to GIP BPM are to this GIP BPM. References to GIP are to the GIP. Definitions of these processes are provided in Section 1.4.2 of this BPM.

#### 1.3.2 Special Definitions for this GIP BPM

In this GIP BPM, the following words and expressions shall have the meanings set opposite them:

"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 GIP 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" is defined as 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 GIP Section 13.1 and GIP BPM Section 16.0.

"Dispute Resolution" shall mean the procedure set forth in GIP Section 13 and in this GIP BPM Section 17 for resolution of a dispute between the Parties.

"Fast Track Process" shall mean the procedure for evaluating an Interconnection Request for a certified Small Generating Facility no larger than 5 MW that is described in GIP Section 5 and this GIP BPM Section 6.3.

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

"Governmental Authority" shall mean any federal, state, local or other governmental, regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, CAISO, or Participating TO, or any Affiliate thereof.

"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.

"Independent Study Process" or "ISP" shall mean the procedure for evaluating an Interconnection Request for a Generating Facility independently of the process applicable to a Generating Facility assigned to a Queue Cluster or the Fast Track Process.

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

"Phased Generating Facility" shall mean a Generating Facility that is structured to be completed and to achieve Commercial Operation in two or more successive sequences that are specified in a GIA, such that each sequence comprises a portion of the total megawatt generation capacity of the entire Generating Facility.

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

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

"Roles and Responsibilities Agreement" shall mean the Agreement for the Allocation of Responsibilities with Regard to Generator Interconnection Procedures and Interconnection Study Agreements, a pro forma version of which is attached to the GIP or this GIP BPM.

"10 kW or less Inverter Interconnection Study Process" shall mean as set forth in the GIP Appendix 7 and 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 GIP, or the Participating TO has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

## 2. GIP Applicability and Comparability

This GIP BPM applies to Interconnection Requests that are processed under the GIP. The GIP Phase 1 was accepted by FERC on December 16, 2010, with an effective date of December 19, 2010. GIP Phase 2 was accepted by FERC on January 30, 2012 with an effective date of January 31, 2012. With the advent of the GIP, the CAISO processes both small generator Interconnection Requests (generation up to 20 MW) and large generator Interconnection Requests (greater than 20 MW) under the GIP. This is a departure from the FERC standardization standard for generator interconnection under FERC Orders 2003 (LGIP) and 2006 (SGIP), which contemplates two separate tariff procedures and two separate process paths for large and small generators.

Interconnection Requests that the CAISO received during the timeframe between December 19, 2010 (the effective date of the GIP) and through the fourth Queue Cluster Application Window are being processed under the GIP. Accordingly, requests received for the fourth queue Cluster Application Window (for which the corresponding window period was March 1-31) are being processed under the GIP. All Interconnection Requests received in the fifth queue Cluster Application Window and afterward are being processed under the CAISO's Generator Interconnection and Deliverability Allocation Process ("GIDAP"), which is a CAISO Tariff Appendix DD. FERC accepted the GIDAP on July 25, 2012 which is also the effective date.

**ISO transition of generation procedures to a cluster approach, earlier legacy tariffs, and "transition clusters"** - The ISO's generator interconnection process has been undergoing

transition since 2008 because the CAISO has modified its process from a traditional serial study process to what is largely a cluster study process. As a result, the CAISO Tariff contains several legacy interconnection tariffs.

For Large Generating Facilities (greater than 20 MW), the legacy tariffs are:

- The standard LGIP (CAISO Tariff Appendix U): projects being processed under this process are commonly referred to as the LGIP “serial study” projects. When processing of these projects is completed, Appendix U will be phased out.
- Amendment 39 (a pre-FERC Order 2003 process)—(CAISO Tariff Appendix W) which will be phased out after processing of remaining Amendment 39 process request is completed.
- The CAISO began the transition from serial approach to cluster approach in mid-2008. Cluster processing commenced with the LGIP “transition cluster” under the 2008 Cluster LGIP. The CAISO tariff amendment that created the Cluster LGIP approach was commonly referred to as the Generator Interconnection Process Reform or GIPR. The GIP Phase 1 refined and modified prior CAISO Tariff Appendix Y and so it essentially “overwrote” the prior LGIP cluster processing rules under GIPR—therefore, there is no Cluster LGIP (no GIPR), legacy tariff. GIP Phase 2 also “overwrote” GIP Phase 1 to the extent any of its new features changed GIP provisions. Large generator Interconnection Requests which began under the Cluster LGIP (under prior CAISO Tariff Appendix Y) are being processed the remaining way through the interconnection process under the GIP Phase 2 (which is the revised versions of CAISO Tariff Appendix Y).

Conceptually, the CAISO considers the interconnection queue as one queue, regardless of which CAISO operative tariff provisions under which a project-sponsor submitted an Interconnection Request. Consequently, the CAISO interconnection queue consists of projects that were part of various legacy tariff processes as well as the current GIP process. The CAISO describes these queue components and the generator requests within them in its quarterly reporting to FERC on the ISO’s progress in processing projects in the interconnection queue. These quarterly reports are a source for readers of this BPM to obtain more information on the components of the queue. They can be found on the CAISO Website by searching for the “*Interconnection Queue Quarterly Progress Report*.”

**Legacy processing and transition to cluster study for small generation requests in process on December 18, 2010** - Because the GIP calls for small generator interconnection requests to be processed together with large generator requests, small generator interconnection requests received after December 18, 2010 but before the opening of the queue Cluster 5 Cluster Application Window are being processed under the GIP. In general, a substantial number of the pending small generator Interconnection Requests submitted to the

CAISO before December 18, 2010 have been “transitioned” to the GIP for completion of their processing.

The pre-GIP tariff for the Small Generator Interconnection Procedures (SGIP) is CAISO Tariff Appendix S. The CAISO refers to those projects that continue to be studied under the SGIP as the “SGIP Serial Study Group”. According to Tariff Appendix Y, Appendix 8, Section 1.2.2, the “SGIP Serial Study Group” means those Interconnection Customers with valid Interconnection Requests submitted pursuant to Appendix S of the CAISO Tariff prior to December 18, 2010 and who executed System Impact Study or Facilities Study Agreements that provide for the completion of such studies by December 18, 2010.

**The Three Processing Tracks of the GIP** - Under the GIP, Interconnection Requests are processed under one of three study tracks : (i) the Queue Cluster track, (ii) the Independent Study Process track, (iii) and 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 GIP 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 “up front finances” 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 by 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 have funded them. This is not the case.

First of all, 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 (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.

Secondly, under the GIP the Interconnection Customer payments for Network Upgrades are repaid to the customer by the Participating TO’s, from revenues that come from TAC (the CAISO Transmission Access Charge). Accordingly, while an Interconnection Customer generally up front funds the construction of 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 to interrelated transactional concepts relating to power purchase transactions. For example, Resource Adequacy (RA) deliverability and Net Qualifying Facility are not items which are the subject of an Interconnection Request or a Large Generator Interconnection Agreement (LGIA). Parties sometimes mistakenly seek to put language regarding RA qualification into draft LGIAs.

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. In the event that a power transfer onto a stressed line must be curtailed, the CAISO curtails all affected generation on a pro-rata basis.
- 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, electrical interconnection; resource adequacy counting and qualification is external to the GIP.

**Timeframes for interconnection study** - The GIP contains timeframes for the CAISO to intake and validate Interconnection Requests, conduct interconnection studies and negotiate interconnection agreements. The CAISO will use reasonable efforts to meet the time frames,

and when the CAISO anticipates that it cannot meet tariff time frames, it will inform the affected Interconnection Customers.

## 2.1. Background

As discussed above, FERC accepted the GIP Phase 1 on December 16, 2010 with an effective date of December 19, 2010 and accepted GIP Phase 2 on January 30, 2012 with an effective date of January 31, 2012. The GIP governs further generator interconnection processing for both small and large generator Interconnection Requests through the fourth Queue Cluster Application Window, which opened March 1, 2012. Large generator Interconnection Requests through the fourth Queue Cluster that were being studied under the cluster approach as of the GIP December 19, 2010 effective date are completing their processing under the GIP. Large generator Interconnection Requests that were being studied under legacy serial processes as of December 19, 2010 will complete their processing under those legacy processes.

Certain small generators requests that were in process as of December 18, 2010 will be completed under the legacy SGIP process if (i) the Interconnection Request met certain qualifying criteria for "SGIP Serial Study Group" (have executed System Impact Study or Facilities Study Agreements that provide for the completion of such studies by December 18, 2010 and (ii) the Interconnection Customer did not otherwise request that the CAISO place the Interconnection Request in the GIP cluster process. Alternatively, those small generator Interconnection Requests that were in process as of December 18, 2010 that either (i) did not qualify to remain in the SGIP Serial Study Group, or (ii) requested to be studied under the GIP cluster process, would be studied in the Queue Cluster 1 & 2 Phase II Study for its Reliability Assessment and, if requested, placed in the fourth queue cluster for its Deliverability Assessment.

Under the GIP the cluster study process timeframe was shortened from 750 Calendar Days down to 420 Calendar Days. With the approval of the GIP, Interconnection Requests submitted to the CAISO up to queue cluster five to connect a new Generating Facility or an existing Generating Facility with an increase in capacity are processed and studied under the GIP process.

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"), CPUC Rule 21, or other Local Regulatory Authority requirements of the Participating TO.

### 3. Application Deadlines

Interconnection Requests for Independent Study Process, Fast Track Process, and 10 kW Inverter processes can be submitted anytime during the year. In contrast, Interconnection Requests for Queue Cluster studies are required to be submitted during one of two 31 Calendar Day windows that are open during the year.

From the perspective of each study cycle (which straddles the calendar year), the first GIP window opened from October 15th to November 15th and the 2nd window opened from March 1st to March 31<sup>st</sup> of the following calendar year. All Interconnection Requests submitted during these two windows are be studied together in the same cluster study which began annually on approximately June 1 for the queue cluster that opened with the October-November window period of the previous calendar year. The purpose of the early October 15th to November 15th application window was to provide Interconnection Customers with an opportunity for an early scoping meeting and to receive early feedback from the CAISO and the Participating TO on their proposed projects.

### 4. Interconnection Requests

Under GIP Section 3.5.1 an Interconnection Customer wishing to connect a new Generating Facility to the CAISO Controlled Grid, or increase capacity of an existing Generating Facility connected to the CAISO Controlled Grid with an increase in total capacity, any time up to March 1, 2012 was required to submit to the CAISO a complete Interconnection Request, or for the 10 kW Inverter process the Interconnection Request was 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 GIP Appendix 1; and
- Demonstration of Site Exclusivity or a posting of a Site Exclusivity Deposit.

If any of the above items are not provided during the Cluster Application Window for a cluster study, the Interconnection Request is deemed incomplete and not accepted by the CAISO and there is no opportunity to cure these deficiencies. The CAISO follows the business practice of returning such an Interconnection Request to the Interconnection Customer without an

opportunity to cure under GIP 3.5.2.2. The argument that a “cure” is available would result in the IC’s ability to extend the window period by resorting to “self help” by simply providing a package that the IC knows is inadequate upon submission. Therefore, it is highly encouraged that Interconnection Customers submit their entire Interconnection Request packages complete in all respects in a timely manner and not wait until the last day of the open window.

Examples where an Interconnection Request will be deemed incomplete and not accepted by the CAISO:

- The Interconnection Customer attempts to tender funds for the Interconnection Study Deposits or Site Exclusivity for CAISO receipt after the close of the Cluster Application Window;
- The Interconnection Customer tenders a financial instrument during the window period which is rejected for insufficient funds when the CAISO negotiates it or the Interconnection Customer tenders deposit amounts that are lower than the actual amounts which are due; and
- The Interconnection Customer submits an incomplete application, for example the required technical data information is not completely filled out.

## 4.1. Interconnection Study Deposit

This BPM section discusses the Interconnection Study Deposit, which the Interconnection Customer must provide to the CAISO as part of its Interconnection Request package. As explained in GIP BPM Section 4 [*Interconnection Requests*] above, the Interconnection Study Deposit is the first of the three items that the Interconnection Customer must include in its package in order to have a complete Interconnection Request.

### 4.1.1 Cluster and Independent Study Deposits

With the exceptions of the Fast Track and the 10kW Inverter Processes the Interconnection Study Deposit is equal to \$50,000 plus \$1,000 per MW up to a maximum of \$250,000. The calculated amount is to be rounded up to the nearest \$1,000.

#### 4.1.2 Fast Track Study Deposit

A non-refundable processing fee of \$500 and a study deposit of \$1,000 are required by the CAISO for the Fast Track Process.

#### 4.1.3 10 kW Inverter Deposit

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

#### 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 ISO. The Interconnection Study Deposit is applied to pay for prudent costs incurred by the ISO, 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.

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 PTOs have established a 75 Calendar Day period for the PTO to provide invoices to the ISO.

Except for proposed Generating Facilities processed under the Fast Track Process set forth in GIP Section 5 and GIP BPM Section 6.3, the Interconnection Study Deposits is refundable as explained below: Note that, if the Interconnection Customer withdraws at any time later than 31 days after the Scoping Meeting, then the GIP 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, in a Scoping Meeting, for example, that signal to the Interconnection Customer that it should withdraw from the queue and wait for another study cycle. If the Interconnection Customer waits to withdraw until the Phase I 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) 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 GIP Section 3.8 and GIP BPM Section 12.0 on or before thirty (30) Calendar Days following the Scoping Meeting, the CAISO shall refund to

the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the ISO, Participating TOs, and third parties 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 days following the Results Meeting. Should an Interconnection Request made under GIP Section 3.5.1 and GIP BPM Section 4.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under GIP Section 3.8 and GIP BPM Section 12.0 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 GIP 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 Results Meeting: Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under GIP Section 3.8 or GIP BPM Section 12.0 at any time more than thirty (30) Calendar Days after the Results Meeting (or the latest date permitted under the GIP 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 doesn't 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, ISO, and Participating TO execution of the interconnection agreement (or, if an unexecuted interconnection agreement was filed with FERC, on after FERC issues an order that establishes an agreement), 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 ISO, 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. As will be explained later in this BPM, forfeited deposit funds are disposed of in the same way that the CAISO distributes monetary penalty amounts that it collects.

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 ISO'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).

#### 4.1.5 Obligation for Study Costs

As discussed in the section above, depending on the timing of withdrawal, the CAISO may retain a portion of the Study Deposit above actual study costs incurred. For an Interconnection Customer who moves its Interconnection Request forward to an executed interconnection agreement, the Study Deposit is applied against actual study costs and the customer pays the actual costs which are drawn from the Study Deposit. The Interconnection Customer pays by direct invoice any actual costs exceeding the Study Deposit, and the CAISO returns the unused Study Deposit amounts if actual costs are under the Study Deposit amount.

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) 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 Participating TO and any third parties performing work on the Interconnection Customer'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.

#### 4.1.6 Obligation for Studies

Each Interconnection Request is studied under the direction and oversight of the CAISO, although the Participating TOs perform certain parts of the study work as noted in the Roles and Responsibilities section of the GIP (Section 3.2) and the pro form contractual agreement between the CAISO and Participating TOs commonly known as the "Roles and Responsibilities Agreement." (GIP Appendix 4 [*Agreement for Allocating GIP and Study Responsibilities*]) The CAISO conducts or causes to be performed the required Interconnection Studies and any additional studies the CAISO determines to be reasonably necessary, and will direct the applicable Participating TO to perform portions of studies where the Participating TO has specific and non-transferable expertise or data and can conduct the studies more efficiently and cost effectively than the CAISO.

The CAISO will complete or cause to be completed all studies as required within the timelines provided in the GIP and this GIP BPM. For any portion of the studies that are performed at the direction of the CAISO by the Participating TOs or by a third party, the CAISO shall require that this work also be completed within timelines provided in the GIP and this GIP BPM. However, please note that the Tariff does contemplate that in certain circumstances, studies may be delayed. As stated in GIP Sections 6.8 and 7.5, the CAISO shall use Reasonable Efforts to commence and complete studies in the designated timelines.

The CAISO also coordinates with Affected System Operators under GIP Section 3.7 and GIP BPM Section 18.1. Note, however, that it is the Interconnection Customer who is primarily responsible for contracting with the Affected System for construction of those Affected System Network Upgrades which are necessary to safely and reliably connect the proposed Generating Facility to the ISO-Controlled Grid. In this regard, GIP Section 3.7 provides that:



The CAISO will include such Affected System Operators in all meetings held with the Interconnection Customer as required by this GIP. The Interconnection Customer will cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems, including signing separate study agreements with Affected System owners and paying for necessary studies. An entity which may be an Affected System shall cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems.

GIP Section 4.3 [*Scoping Meeting*] provides that

With input from the Participating TO, 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, if such is the case, the CAISO shall invite the affected Participating TO(s) and/or Affected System Operator(s), in accordance with GIP Section 3.7, to the Scoping Meeting by informing such third parties, as soon as practicable, of the time and place of the scheduled Scoping Meeting.

And GIP Section 12.4 [*Special Provisions For Affected Systems, Other Affected PTOs*] provides that

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<sup>1</sup>, as appropriately modified.

An Interconnection Customer's cluster study agreement notes that CAISO's coordination with Affected System Operators and the Western Electricity Coordinating Council (WECC) may require the CAISO to provide them with a copy of the Phase I Interconnection Study

<sup>1</sup> Note that the GIA refers generically to execution of a GIA (Generator Interconnection Agreement). There is no GIA per se—the term GIA is used as shorthand in the GIP to mean the interconnection agreement applicable at the end of the cluster study process. This is either the ISO Tariff Appendix CC (LGIA) or the ISO Tariff Appendix T (SGIA), depending on whether the facility is up to 20 MW (SGIA) or larger than 20 MW (LGIA).

and authorizes the Interconnection Customer to allow the CAISO to provide them with this information.

## 4.2. Completed Application

This GIP BPM section discusses the application form which the Interconnection Customer must complete and submit to the CAISO as part of its Interconnection Request package. As explained in GIP BPM Section 4 [*Interconnection Requests*] above, the completed application is the second of the three items that the Interconnection Request must include in its package in order to have a complete Interconnection Request.

With the exception of the 10 kW Inverter Process, the completed application will be in the form of GIP 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. The CAISO forwards 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 the GIP 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 GIP Section 6.9.2 [*Modifications*].

### 4.3. Site Exclusivity

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. Note that this Site Exclusivity Deposit is made in addition to, and separately from the Interconnection Study Deposit. As explained in GIP BPM Section 4 [*Interconnection Requests*] above, Site Exclusivity demonstration is the third of the three items that the Interconnection Customer must include in its package in order to have a complete Interconnection Request.

Interconnection Customers who apply for the queue cluster study process but do not have Site Exclusivity at the time of the open queue Cluster Application Window may make an additional in lieu of Site Exclusivity Deposit (additional to their study deposit). Note that the Independent Study Process and Fast Track Process Interconnection Requests do not have this option to submit a deposit in lieu of demonstrating site exclusivity. The Site Exclusivity deposit amount is \$100,000 for a Small Generating Facility ( $\leq 20$  MW) and \$250,000 for a Large Generating Facility ( $> 20$  MW).

#### 4.3.1 General (What is Site Exclusivity?)

Site Exclusivity is defined in the 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, 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, 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 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, 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 20 MW or larger Generating Facility. Indeed, the "plug and play" aspect of a small facility under the fast track 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>2</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/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 minimum,” “through the Commercial Operation Date” of the Generating Facility.<sup>3</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 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 and the Interconnection Customer had not 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 an in lieu Site Exclusivity Deposit or

<sup>2</sup> GIP 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...”

<sup>3</sup> GIP Section 3.5.1 (iii).

provide new documentation showing a legal right to place the Generating Facility on the site.

As explained in GIP BPM Section 4.3.2, prior to the release of this BPM, the CAISO had issued a Technical Bulletin relating to projects to be sited on BLM administered land. The Technical Bulletin described how an Interconnection Customer seeking to locate its generating facility on BLM administered land could establish Site Exclusivity under the Site Exclusivity standard of “other right to use the property” before the Interconnection Customer had obtained a final non-appealable BLM right of way for permanent siting of the generating facility on the land. The CAISO issued this technical bulletin in advance of the release of the GIP Business Practice Manual, to provide guidance to Interconnection Customers prior to the GIP BPM issuance.

This GIP BPM now incorporates and supersedes the provisions of the technical bulletin. Accordingly, the CAISO considers the technical bulletin to be withdrawn as of the effective date of the first version of the GIP BPM. Interconnection Customers intending to cite business practices of the CAISO pertaining to demonstration of Site Exclusivity on BLM land should instead refer to the CAISO business practice described in GIP BPM Section 4.3.2 below.

#### 4.3.2 Projects Sited on BLM-Administered Federal Land

Prior to the development of this BPM, the CAISO issued a Technical Bulletin (Release Date: February 2, 2009), Public Lands BLM Site Exclusivity; CAISO Practice re: Determination of Interconnection Customer Satisfaction of ‘site Exclusivity’ for projects sited on BLM Administered Public Lands, which discussed the ISO’s business practice for determining how an Interconnection Customer demonstrates Site Exclusivity under the “other right to use the property for the purposes of generating electric power” component of the Site Exclusivity definition, with respect to federal land administered by the Bureau of Land Management (BLM) Land. With release of version one this BPM on September 1, 2011, the technical bulletin was withdrawn.

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

The GIP 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 BLM by meeting the following criteria A, B, and C.

- 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. recorded in Official Records of appropriate county) a rights-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 i.e. (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; (3) because the test data is being obtained by other means than on-site testing, such as by use of 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 Criteria 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 in lieu deposit.*

- Criterion B: The Interconnection Customer is undertaking significant additional activity to prosecute the long-term permit to site the energy generation 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 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 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 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 Criteria B, the Interconnection Customer can satisfy Criteria 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 BLM, or when BLM is the lead agency, 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/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:** *Criteria 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. It is not the ISO's intention here to resolve the inconsistency, but rather direct any second-in-line Interconnection Customer that it must provide the CAISO with an in lieu deposit.*

*The duplicate (mutually-exclusive) applications potential could arise if the BLM were processing inconsistent/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)*

*BLM has informed the CAISO that, in certain situations (for example, for the California Desert area), 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 for proposed criteria (a) and (b) (i.e., Paragraph 3 (a) and (b) above). 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 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 in lieu of deposit.*

*To satisfy Criteria C, the Interconnection Customer will be required to warrant and represent to the CAISO that the customer has made inquiry to BLM, and that BLM has informed them 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 projects applicants, but BLM has informed the customer that those applications/project uses are not inconsistent with the customer's BLM application.*

#### 4.3.3 Use of Site Exclusivity Deposit

The Interconnection Customer must provide a Site Exclusivity Deposit which the CAISO holds in an interest bearing account at a bank or financial institution designated by the CAISO for return when the Interconnection Customer has demonstrated Site Exclusivity. 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 Generator Interconnection Agreement (GIA). If the Interconnection Customer does not acquire the site in sufficient acreage to locate the Generating Facility at that time, the Interconnection Customer would be in breach of the GIA or the Interconnection Request is withdrawn<sup>4</sup>.

#### 4.4. Interconnection Validation

Once an Interconnection Request is received, the CAISO will begin processing and validating the Interconnection Request. Note, however, that as discussed in GIP BPM Section 4 above, this applies only to a complete Interconnection Request package. If the package fails to include all of the items 1, 2, and 3 discussed in GIP BPM Section 4, the CAISO will return the package to the Interconnection Customer as incomplete.

<sup>4</sup> GIP Section 3.5.1.3

The CAISO will inform the Interconnection Customer that, because the package was incomplete, the CAISO will not evaluate the package through the “validation” process described in GIP Section 3.5.2 and there will be no opportunity for the Interconnection Customer to cure deficiencies in the Interconnection Request package. Deficiencies contemplated by GIP Section 3.5.2.2 refer to minor omissions or corrections to data or information provided but do not include the Interconnection Customer’s complete omission of technical data, demonstration of Site Exclusivity, or the Interconnection Study Deposits in the package tendered within the open Cluster Application Window. GIP Section 3.5.2.2 refers to “rounding out” incomplete information by providing supplemental/additional information. This is distinguishable from a situation where the Interconnection Customer simply does not provide one of the three items. Otherwise, an Interconnection Customer would be able to provide itself additional time beyond a Cluster Application Window simply by reliance on the cure period. This would make the closing period of a Cluster Application Window meaningless.

Under the Interconnection Request validation steps outlined in GIP Section 3.5.2.1, the CAISO will notify the Interconnection Customer within ten (10) Business Days of any deficiencies and the Interconnection Customer will be provided an opportunity to provide the additional information required to make the Interconnection Request package adequate to enter the Interconnection Study phase. Within five (5) Business Days of receipt of requested information from Interconnection Customer the CAISO shall notify the Interconnection Customer if Interconnection Request is deemed valid.

All Interconnection Requests shall be validated within twenty (20) Business Days of the close of the applicable Cluster Application Window or ten (ten) Business Days after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later. Validation will include all components of the Interconnection Request, including but not limited to technical data, Site Exclusivity, and site deposit. Any Interconnection Request not validated within twenty (20) Business Days after the close of the Cluster Application Window or ten (10) Business Days after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later, will be deemed withdrawn and the study deposit, less any administrative costs, will be refunded to the Interconnection Customer.

## 5. The CAISO Queue

GIP Section 3.6 provides that the CAISO maintains an Internet listing of interconnection requests in the CAISO’s “interconnection queue,” but complete and comprehensive detail information is not set out there. In this regard, 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 an interconnection agreement, at which time it must be filed with or reported to FERC as a service

agreement and thus becomes a public document.<sup>5</sup> Non-conforming interconnection agreements can be located on the CAISO Website by following this sequence of tabs (*Rules/Regulatory/Regulatory Filings and Orders/FERC – Filings 2011*).

The CAISO's practice is not to file each *conforming* interconnection agreement with the FERC by way of formal transmittal letter and request for acceptance of the service agreement. Rather, the CAISO reports that it entered into the interconnection agreement on the FERC Electronic Quarterly Report (commonly known as the "EQR").<sup>6</sup> The EQR consists of data that the CAISO submits to FERC covering a particular quarter. The CAISO includes as part of the EQR the CAISO service agreement number and the names of the parties for a generator interconnection agreement with which the CAISO entered into during that quarter. For a conforming pro forma, the effective date of the agreement 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 interconnection agreement referenced on the EQR by contacting the CAISO. The inquiring party should search the EQR and to reference the service agreement number and the interconnection customer to assist the CAISO in identifying the interconnection agreement.

The CAISO posts on the CAISO Website a listing of all Interconnection Requests by [project name and](#) queue position (i.e. queue number) and not by Interconnection Customer ~~or~~ [Generating Facility project name](#). 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) where the interconnection will be made of the proposed Generating Facility (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; i.e. whether it is active or withdrawn;

<sup>5</sup> In this regard, GIP Section 3.6 provides that "Except in the case of an Affiliate, the list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes a GIA or requests that the applicable Participating TO(s) and the ISO file an unexecuted GIA with FERC."

<sup>6</sup> The FERC EQR reports are located at: <http://www.ferc.gov/docs-filing/eqr.asp>.

- 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, and fuel type; and
- 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.”

## 6. Study Tracks

### 6.1. Cluster Process

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

For Interconnection Requests in a Queue Cluster, the Interconnection Studies consist of a Phase I Interconnection Study and a Phase II Interconnection Study. The Interconnection Studies will include, but not be limited to, short circuit/fault duty, steady state (thermal and voltage) and stability analyses.<sup>7</sup> Collectively, the Interconnection Studies will identify direct Interconnection Facilities and required Reliability Network Upgrades necessary to mitigate thermal overloads and voltage violations, and address short circuit, stability, and reliability issues associated with the requested Interconnection Service.<sup>8</sup> The scope and purpose of the Phase I Interconnection Study is to preliminarily identify Network Upgrades to address the impacts on the CAISO Controlled Grid of the Interconnection Requests, according to Group Study and without respect to the requested Commercial Operation Dates of the Interconnection Requests, the Participating TO’s Interconnection Facilities associated with each Interconnection Request, and to establish the maximum cost responsibility for Network Upgrades assigned to each Interconnection Customer that limits the Interconnection Customer’s

<sup>7</sup> GIP Section 2.4.3; see also Phase I study purpose and scope in Section 6.4

<sup>8</sup> See GIP Section 2.4.3; compare Section 6.4

ultimate cost responsibility.<sup>9</sup> The Phase II Interconnection Studies update Phase I analyses to account for withdrawn Interconnection Requests, identify final Reliability and Delivery Network Upgrades, assign responsibility for financing of the Network Upgrades and provide a plus or minus 20 percent cost estimate for each Interconnection Request for the final Participating TO's Interconnection Facilities.<sup>10</sup>

The Phase I and Phase II Interconnection Studies for Queue Cluster Generating Facilities will also identify Delivery Network Upgrades for all Generating Facilities, including those being processed under the Independent Study Process, to allow, potentially up to the full amount of its Qualifying Capacity, the output of a Generating Facility selecting Full Capacity Deliverability Status, potentially up to the fractional amount of its Qualifying Capacity, the elected output of a Generating Facility seeking Partial Capacity Deliverability Status, and, as applicable, the maximum allowed output of the interconnecting Generating Facility without one or more Delivery Network Upgrades in accordance with the On-Peak Deliverability Assessment set forth in GIP Section 6.5.2 and GIP BPM Section 6.1.4.3.<sup>11</sup>

All cost estimates for Interconnection Facilities and Network Upgrades contained in Interconnection Studies will be set forth in the Interconnection Study report in present dollar costs as well as time-adjusted dollar costs, adjusted to the estimated year of construction of the components being constructed.

<sup>9</sup> GIP Section 6.4

<sup>10</sup> GIP Section 7.1

<sup>11</sup> Note that, the definitions of Full Capacity and Partial Capacity Deliverability Status were revised as of July 25, 2012 under the CAISO's TPP GIP tariff amendment filing. The revised definitions update the definitions to more accurately describe deliverability status as it relates to variable renewable generation facilities. The revised definitions are as follows:

**- Full Capacity Deliverability Status** Full Capacity Deliverability Status entitles a Generating Facility to a Net Qualifying Capacity amount that could be as large as its Qualifying Capacity and may be less pursuant to the assessment of its Net Qualifying Capacity by the CAISO.

**- Partial Capacity Deliverability Status** Partial Capacity Deliverability Status entitles a Generating Facility to a Net Qualifying Capacity amount that cannot be larger than a specified fraction of its Qualifying Capacity, and may be less pursuant to the assessment of its Net Qualifying Capacity by the CAISO. An Interconnection Customer requesting Partial Capacity Deliverability Status must specify the fraction of Full Capacity Deliverability Status it is seeking in its Interconnection Request.

### 6.1.1 Generator Interconnection Study Process Agreement

Before the Interconnection Study process begins, Interconnection Customers are required to sign an interconnection study agreement wherein the Interconnection Customer agrees to pay for the reasonably incurred study costs.

The timing and details of the interconnection study agreement are as follows: Within thirty (30) Calendar Days of the close of a Cluster Application Window, the CAISO provides each Interconnection Customer (who has a valid Interconnection Request received during the Cluster Application Window) a pro forma Generator Interconnection Study Process Agreement in the form set forth in GIP Appendix 3. Within three (3) Business Days following the Scoping Meeting, the Interconnection Customer must specify for inclusion in the attachment to the Generator Interconnection Study Process Agreement the Point of Interconnection for the Phase I Interconnection Study. Within ten (10) Business Days following the ISO's receipt of such designation, the ISO, in coordination with the applicable Participating TOs, provides the Interconnection Customer a signed Generator Interconnection Study Process Agreement. The Interconnection Customer must execute and deliver to the CAISO the Generator Interconnection Study Process Agreement no later than thirty (30) Calendar Days after the Scoping Meeting.

### 6.1.2 Scoping Meeting

Within five (5) Business Days after the CAISO notifies the Interconnection Customer of an Interconnection Request that is complete, valid, and ready for study, 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 sixty (60) Calendar Days after the close of a Cluster Application Window, unless otherwise mutually agreed upon by the Parties.

As explained above in GIP BPM Section 4.1.6, 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 GIP Section 3.7 and GIP BPM Section 18.1, 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. As explained in the 2008 GIPR Tariff Amendment documentation and FERC September 26, 2008 order conditionally accepting the GIPR Tariff Amendment, the traditional feasibility study was eliminated from the CAISO cluster Interconnection Studies. Interconnection

Customers perform this feasibility function on their own, informed by base case and other information that the CAISO provides on its website for Interconnection Customer review.

The purpose of the Scoping Meeting is to discuss such items 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. 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, and (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.

The GIP instructs the Interconnection Customer to bring to the Scoping Meeting, in addition to the technical data in Attachment A to the GIP Appendix 1, any system studies previously 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 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.

### 6.1.3 Grouping Interconnection Requests

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 ISO'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 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 proposed Generating Facility from other Generating Facilities with Interconnection Requests in the two Cluster Application Windows 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 GIP. 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 group.

#### 6.1.4 Phase I Studies

##### 6.1.4.1 Scope & Purpose of Phase I Studies

- The Scope & Purpose of the Phase I Interconnection Study is to:
  - (i) evaluate the impact of all Interconnection Requests received during the applicable Cluster Application Window on the CAISO Controlled Grid,
  - (ii) preliminarily identify all Network Upgrades needed to address the impacts on the CAISO Controlled Grid of the Interconnection Requests,
  - (iii) preliminarily identify for each Interconnection Request required Interconnection Facilities,
  - (iv) assess the Point of Interconnection selected by each Interconnection Customer and potential alternatives to evaluate potential efficiencies in overall transmission upgrades costs,

(v) establish the maximum cost responsibility for Network Upgrades assigned to each Interconnection Request in accordance with GIP Section 6.5, and

(vi) provide a good faith estimate of the cost of Interconnection Facilities for each Interconnection Request.

➤ 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 Network Upgrades to the CAISO Controlled Grid that are preliminarily identified as required as a result of the Interconnection Requests in a Group Study or as a result of any Interconnection Request studied individually and Participating TO's Interconnection Facilities associated with each Interconnection Request, and an estimate of any other financial impacts (i.e., on Local Furnishing Bonds).

#### 6.1.4.2 Roles and responsibilities of Participating TO and CAISO

GIP (Appendix 4 - Attachment A) is a *pro forma* contract between the CAISO and applicable Participating TO that clarifies the roles and responsibilities of the CAISO and Participating TOs with regard to Generator Interconnection Procedures and Interconnection Study Agreements. 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 PTOs, under the direction and oversight of, and approval by, the CAISO, as set forth in the agreement. This document serves as a general overview of only the roles and responsibilities as between the CAISO and Participating TOs. Appendix 4 – Attachment A does not include the process steps, involvement or obligations of the Interconnection Customer and does not include all procedures that are necessary to comply with all provisions of an interconnection agreement, the GIP, and Generator Interconnection Study Process Agreement for Queue Clusters.

Pursuant to GIP Section 6.8 and this GIP BPM section the CAISO coordinates the Phase I Interconnection Study with applicable Participating TO(s) pursuant to GIP Section 3.2 and with any Affected System Operator whose system is affected by the Interconnection Request pursuant to GIP Section 3.7 or GIP BPM Section 18.1.

Existing studies must be used to the extent practicable when conducting the Phase I Interconnection Study. The CAISO coordinates Base Case development with the applicable Participating TOs to ensure the Base Cases are accurately developed.

The CAISO is required under GIP Section 6.8 to undertake Reasonable Efforts to begin the Phase I Interconnection Study by June 1 of each year, and to complete and issue to Interconnection Customers the Phase I Interconnection Study report within one hundred thirty-four (134) Calendar Days after the annual commencement of the Phase I Interconnection Study. Individual study or Group Studies may be completed prior to the 134 Calendar Day timeline where practicable, based on factors, including, but not limited to, the number of Interconnection Requests in the two associated Cluster Application Windows, study complexity, and reasonable availability of subcontractors (whom the CAISO may hire under GIP Section 13.2 and GIP BPM Section 19.0).

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. In general, the Interconnection Customers individual study report will have various attachments, including the Group Study report which identifies Reliability Network Upgrades and Delivery Network Upgrades that are common to the multiple Generating Facilities that were studied in the Group Study. 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 GIP Section 7.6 and GIP BPM Section 6.1.6.

If, at any time the CAISO determines that it will not meet the required time frame for completing the Phase I Interconnection Study (for example due to a large number of Interconnection Requests, study complexity, or unavailability of subcontractors on a reasonable basis to perform the study in the required time frame) then the CAISO must 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 the additional time is required.<sup>12</sup>

<sup>12</sup> GIP Section 7.5

Upon an Interconnection Customer's request, the CAISO must provide the Interconnection Customer with copies of the supporting documentation, work papers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Phase I Interconnection Study. The Interconnection Customer's receipt of this information may be subject to confidentiality arrangements consistent with GIP Section 13.1 and GIP BPM Section 16.0.

#### **6.1.4.3 Studies Included**

The Phase I Interconnection Study consists 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 (although the Off-Peak Deliverability Assessment is conducted for informational purposes only beginning with the Phase II Interconnection Study for Queue Clusters 3 and 4)., as applicable, in accordance with GIP Section 6.5.2 and GIP BPM Section 6.1.4.3

#### **The On-Peak Deliverability Assessment**

The CAISO, in coordination with the applicable Participating TO(s), perform an On-Peak Deliverability Assessment for Interconnection Customers selecting Full Capacity or Partial Capacity Deliverability Status in their Interconnection Requests. The On-Peak Deliverability Assessment determines 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 preliminary Delivery Network Upgrades identified by the On-Peak Deliverability Assessment will be used to establish the maximum cost responsibility for Delivery Network Upgrades 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 other existing resources interconnected to the CAISO Controlled Grid.

The On-Peak Deliverability Assessment will identify the Network Upgrades that are required to enable the Generating Facility of each Interconnection Customer requesting Full Capacity or Partial Capacity Deliverability Status to meet the requirements for deliverability. Deliverability requires that output potentially up to the Qualifying Capacity of the Generating Facility Capacity for Full Capacity Deliverability Status, or potentially up to the Qualifying Capacity up to the fractional portion of Generating Facility Capacity designated for Partial Capacity Deliverability, as set forth in the Interconnection Request, can be delivered to the aggregate of Load on the CAISO Controlled Grid, consistent with Reliability Criteria, under CAISO

Controlled Grid peak load and Contingency conditions, and assuming the aggregate output of existing Generating Facilities with established Net Qualifying Capacity values and other Generating Facilities in the Interconnection Study Cycle seeking Full Capacity or Partial Capacity Deliverability Status identified within the On-Peak Deliverability Assessment based on the effect of Transmission Constraints.

The On-Peak Deliverability Assessment will further perform an analysis to estimate the MW of deliverable generation capacity for the individual or Group Study if the highest cost Delivery Network Upgrade component were removed from the preliminary Delivery Network Upgrade plan, or, at the ISO's sole discretion, if any other identified Delivery Network Upgrade component(s) were removed from the preliminary Delivery Network Upgrade plan. This information is provided to allow Interconnection Customers to address at the Results Meeting potential modifications under GIP Section 6.9.2 or GIP BPM Section 9.0 or change the Interconnection Request's Full Capacity Deliverability Status for purposes of financing under GIP Section 12.3.1.

Interconnection Customers should keep in mind that the On-Peak Deliverability Assessment does not convey any right to deliver electricity to any specific customer or Delivery Point.

The cost of all Delivery Network Upgrades identified in the On-Peak Deliverability Assessment as part of a Phase I Interconnection Study will be estimated in accordance with GIP Section 6.4. The estimated costs of Delivery Network Upgrades identified in the On-Peak Deliverability Assessment is 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.

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

The CAISO, in coordination with the applicable Participating TO(s), 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 Phase I 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. Any transmission upgrades identified under this Section shall comprise those needed for the maximum megawatt electrical 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. The methodology for the Off-Peak Deliverability Assessment will be posted on the CAISO Website or included in a CAISO Business Practice Manual such as this GIP BPM. As of the date of this BPM, the methodology will be posted on the CAISO Website and will be considered for incorporation in the next iteration of this GIP BPM.

Beginning with the Phase II Interconnection Study for Queue Clusters 3 and 4, the Off Peak Deliverability Assessment is performed for information purposes only, and any Delivery Network Upgrades identified in the assessment will be conceptual in nature, and the transmission upgrades identified for under this Section will not be included in a plan of service within the applicable Interconnection Study Report.

The cost of all transmission upgrades identified in the Off-Peak Deliverability Assessment performed during the course of the Phase I Interconnection Study will be estimated in accordance with GIP Section 6.6. However because these transmission upgrades are conceptual in nature only (as of the Phase II Interconnection Study for Clusters 3 and 4), then, beginning with that study, the transmission upgrades identified in this Section shall be treated as follows:

- (i) these transmission upgrades will not be required for the proposed Generating Facility (or proposed increase in capacity) that is subject to the Interconnection Request to achieve Full or Partial Capacity Deliverability Status;
- (ii) the estimated costs for these transmission upgrades shall not be assigned to any Interconnection Customer in an Interconnection Study report, such costs shall not be considered in determining the cost responsibility or maximum cost responsibility of the Interconnection Customer for Network Upgrades under the GIP or in determining the Interconnection Financial Security than an Interconnection Customer must post under GIP Section 9 or GIP BPM Section 11;
- (iii) and the applicable Participating TO(s) shall not be responsible under the GIP for financing or constructing such transmission upgrades.

#### 6.1.4.4 Reliability Network Upgrades Description

- 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 Reliability Network Upgrades 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 Reliability Network Upgrades.

- The cost of all Reliability Network Upgrades identified in the Phase I Interconnection Study shall be estimated in accordance with GIP Section 6.6, or GIP BMP Section 6.1.4.6. The estimated costs of short circuit related Reliability Network Upgrades identified through a Group Study are 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 Reliability Network Upgrades identified through a Group Study are 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 Reliability Network Upgrades identified as a result of an Interconnection Request studied separately are assigned solely to that Interconnection Request.

#### 6.1.4.5 Interconnection Facilities Description

The Participating TO's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities are collectively known as the "Interconnection Facilities." Interconnection Facilities include all facilities and equipment situated 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 typically sole use facilities and do not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

#### 6.1.4.6 Use Of Per Unit Costs to Estimate Network Upgrade Costs

Under the direction of the CAISO, each Participating TO develops and provide to the CAISO, which the CAISO posts to its website, Per Unit Costs for facilities generally required to interconnect Generation to their respective systems.

These per unit costs 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 Reliability Network Upgrades, Delivery Network Upgrades and Participating TO's Interconnection Facilities under GIP Section 6. Deviations from a Participating TO's benchmark per unit costs will be permitted if a reasonable explanation for the deviation is provided and there is no undue discrimination.

Prior to adoption and publication of final per unit costs for use in an Interconnection Study Cycle, the CAISO posts 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 costs. A schedule for the release and review of per unit costs is set forth in GIP Appendix 5.

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

- Planning
- Generator Interconnection
- Generator interconnection application process

#### **6.1.4.7 Phase I Study Results Meetings/Potential Modifications; Generating Facility COD**

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 hold a Results Meeting to discuss the results of the Phase I Interconnection Study, including assigned cost responsibility, modifications, change in Commercial Operation Date ("COD") (see Section 8.2 of this GIP BPM for discussion of how the parties may better identify the Commercial Operation Date), and other possible changes addressed in GIP BPM Section 9.3.

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 (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 GIP BPM Section 11.1.6 or Section 6.10 of the GIP, 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.

The CAISO prepares the minutes from the meeting, and provides draft minutes to the Interconnection Customer and the other attendees to allow them an opportunity to confirm the accuracy. If 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 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 meeting in the draft minutes received for review before finalization.

Within five (5) Business Days following the Phase I Interconnection Study Results Meeting, the Interconnection Customer must submit to the CAISO the completed form that is part of the Generator Interconnection Study Process Agreement For Queue Clusters. In this document, the Interconnection Customer provides critical information regarding the customer's proposed Generating Facility for the purpose of scoping the Phase II Interconnection Study Work. The form is attached to GIP Appendix 3, the Generator Interconnection Process Agreement for Queue Clusters. The form is Appendix B to the agreement and is titled:

Appendix B  
Data Form, Pre-Phase II Interconnection Study  
Generator Interconnection Study Process Agreement for Queue Clusters

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

Through this completed form, the Interconnection Customer makes certain critical 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 within the form is to make its election to either:

- (i) confirm the desired deliverability status that the Interconnection Customer had previously designated in the completed form of GIP Appendix A to the Generator Interconnection Study Process Agreement (Assumptions Used in Conducting the Phase I Interconnection Study); or

- (ii) change the status of desired deliverability as follows:
  - (a) from Full Capacity Deliverability Status to Energy-Only Deliverability Status;
  - (b) from Full Capacity Deliverability Status to Partial Capacity Deliverability Status with a specified Partial Capacity Deliverability level in MW;
  - (c) from Partial Capacity Deliverability Status to Energy-Only Deliverability Status; or
  - (d) reduce the level of Partial Capacity Deliverability Status in MW.

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 “downgrading” (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 delivery 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.<sup>13</sup>

Once the Interconnection Customer has chosen Partial Capacity or Energy Only Deliverability Status at the onset of the Phase II Interconnection Study, the only opportunity left for any “upgrade” of deliverability status is the Annual Full Capacity Deliverability Option under GIP Section 8.3. Under this process, Partial Capacity or Energy Only Deliverability Status Generating Facilities may participate in an annual option to be included an annual CAISO study effort that evaluates existing transmission capacity to see if the facility, or any 50MW increment thereof, can be

<sup>13</sup> As part of the 2010 GIP “1” stakeholder initiative, the ISO included a one-time option for existing generating facilities and facilities in queue clusters 1 to 3 to submit an Interconnection Request to upgrade Energy Only status to Full Capacity. Interconnection Customers were given the ability to do so by placing a limited scope Interconnection Request (i.e. deliverability status change only) into Queue Cluster 4. That window has now closed and the one time-option via Interconnection Request is not available in future Interconnection Requests.

considered to have Full Capacity Deliverability Status. Interconnection Customers choosing this option must submit a modified form of Interconnection request along with a non-refundable \$10,000 study fee in the following Interconnection Study Cycle or a later study cycle. If a Generating Facility receives FCDS for all or a portion of its Generating Facility's capacity under the Annual Full Capacity Deliverability Option it retains the FCDS for the term of its GIA, subject to Resource Adequacy rules regarding Net Qualifying Capacity.

#### 6.1.4.8 Financing Of Reliability Network Upgrades

The Interconnection Customer's cost responsibility (i.e. responsibility to up-front finance) for Network Upgrades is determined through short circuit and stability analyses and power flow analyses.

When an Interconnection Request is being studied separately (i.e. not part of a Group Study), the cost responsibility (i.e. the responsibility to up front finance) for final Reliability Network Upgrades identified in the Phase II Interconnection Study is assigned solely to that Interconnection Request.

For Interconnection Requests that are part of a Group Study, cost responsibility to finance final short circuit related Reliability Network Upgrades are assigned to all Interconnection Requests in that Group Study pro rata on the basis of short circuit duty contribution of each Generating Facility.

With respect to all other final Reliability Network Upgrades besides short-circuit duty related Reliability Network Upgrades, cost responsibility is 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.

#### 6.1.4.9 Financing Of Delivery Network Upgrades

The responsibility to finance all Delivery Network Upgrades identified in the On-Peak Deliverability Assessment and Off-Peak Deliverability Assessment as part of Phase II Interconnection Study 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 each Delivery Network Upgrade as determined by the Generation distribution factor methodology set forth in the On-Peak and Off-Peak Deliverability Assessment methodologies. The financing responsibility shall be up to, but no greater than, the cost assignment for Delivery Network Upgrades for each Interconnection Request under GIP Sections 6.5.2.1 and 6.5.2.2 or GIP BPM Section 6.1.4.3.

Beginning with the Phase II Interconnection Study for Clusters 3 and 4, any transmission upgrades identified in the Off-Peak Deliverability Assessment as part of the Phase II Interconnection Study, and the estimated costs thereof, shall be conceptual in nature only, and therefore, commencing with that study, the estimated costs of transmission upgrades identified in the Off-Peak Deliverability Assessment shall not be assigned to any Interconnection Customers in an Interconnection Study report, such costs shall not be considered in determining the cost responsibility or maximum cost responsibility of the Interconnection Customer for Network Upgrades under the GIP, and the applicable Participating TO(s) shall not be responsible for financing or constructing such transmission upgrades.

## 6.1.5 Phase II Studies

### 6.1.5.1 Scope & Purpose of Phase II Studies

The ISO, 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 Studies (or previous two Phase I Interconnection Studies for Clusters 1&2, and 3&4). Beginning with Queue Cluster 5, the Phase II Interconnection Study 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,
- (ii) identify final Reliability Network Upgrades needed to physically interconnect the Generating Facilities,
- (iii) assign responsibility for financing the identified final Reliability Network Upgrades,
- (iv) identify, following coordination with the ISO's Transmission Planning Process, final Delivery Network Upgrades needed to interconnect those Generating Facilities selecting Full Capacity Deliverability Status,<sup>14</sup>
- (v) assign responsibility for financing Delivery Network Upgrades needed to interconnect those Generating Facilities selecting Full Capacity Deliverability Status,

<sup>14</sup> GIP Section 7.1 [*Scope of Phase II Interconnection Study*]. Some interconnection customers have pointed out that the fact that, they may be provided the physical ability to connect to the grid and deliver power output on an energy-only basis prior to completion of the Delivery Network Upgrades (this situation is the reason for the discussion in item (ix) about energy only interconnection on an interim-only basis pending completion of the Delivery Network Upgrades). It is the opinion of the ISO that the "interconnection" of the Generating Facility is not completed until the all the steps for Interconnection Service outlined in the LGIA are completed, which includes completion of all the Network Upgrades.

- (vi) identify for each Interconnection Request final Point of Interconnection and Participating TO's Interconnection Facilities,
- (vii) provide a +/-20% estimate for each Interconnection Request of the final Participating TO's Interconnection Facilities,
- (viii) optimize in-service timing requirements based on operational studies in order to maximize achievement of the Commercial Operation Dates of the Generating Facilities, and
- (ix) if it is determined that the Delivery Network Upgrades cannot be completed by the Interconnection Customer's identified Commercial Operation Date, provide that operating procedures necessary to allow the Generating Facility to interconnect as an energy-only resource, on an interim-only basis, will be developed and utilized until the Delivery Network Upgrades for the Generating Facility are completed and placed into service.

For these listed foregoing items, the Phase II Interconnection Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work, including the financial impacts (i.e., on Local Furnishing Bonds), if any, and schedule for effecting remedial measures that address such financial impacts, needed on the CAISO Controlled Grid to implement the conclusions of the updated Phase II Interconnection Study technical analyses in accordance with Good Utility Practice to physically and electrically connect the Interconnection Customer's Interconnection Facilities to the CAISO Controlled Grid. 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.

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 study group for each applicable study year through the prior year before all of the required Delivery Network Upgrades are in-service. 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 CAISO will post the methodology under which the CAISO will perform the operational deliverability assessment on the CAISO Website or within a Business

Practice Manual. To date, the CAISO has used posting to the Website rather than inclusion in a business practice manual.

#### 6.1.5.2 Roles and Responsibilities of PTO and ISO

GIP Appendix 4 - Attachment A, is a pro forma agreement that the CAISO enters into with each Participating TO (with respect to its service territory) that clarifies the roles and responsibilities of the Participating TO and CAISO with regard to the Interconnection Study Efforts. 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 ISO, as set forth in Appendix 4 - Attachment A. This document serves as a general overview of only the roles and responsibilities as between the CAISO and Participating TOs. Appendix 4 – Attachment A does not include the process steps, involvement or obligations of the Interconnection Customer and is not inclusive of all procedures necessary to comply with all provisions of the GIA, GIP, and Generator Interconnection Study Process Agreement for Queue Clusters.

Pursuant to GIP Section 7.5 and this GIP BPM section the CAISO shall coordinate the Phase II Interconnection Study with applicable Participating TO(s) and any Affected System Operator that whose system is affected by the Interconnection Request pursuant to GIP Section 3.7 or GIP BPM Section 18.1. 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 January 15 of each year, and to complete and issue to Interconnection Customers the Phase II Interconnection Study report within one hundred ninety-six (196) 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 the Interconnection Customer's request, the CAISO shall provide the Interconnection Customer with copies of the 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. The Interconnection Customer's receipt of this information may be subject to

confidentiality arrangements consistent with GIP Section 13.1 and GIP BPM Section 16.0.

#### **6.1.5.3 Studies Included**

The Phase II Interconnection Study consists of the same studies performed under Phase I, but with base cases adjusted to reflect withdrawal of Interconnection Requests.

#### **6.1.5.4 Network Upgrades Description**

The Phase II Interconnection Study identifies final Reliability Network Upgrades needed to physically interconnect the Generating Facility, assign responsibility for financing the identified final Reliability Network Upgrades, and identify, following coordination with the ISO's Transmission Planning Process, final Delivery Network Upgrades needed to provide Full Capacity Deliverability Status to those Generating Facilities selecting Full Capacity Deliverability Status.

#### **6.1.5.5 Interconnection Facilities Description**

The Phase II Interconnection Study identifies for each Interconnection Request a final Point of Interconnection, the Participating TO's Interconnection Facilities, and provide a +/-20% estimate for each Interconnection Request of the final Participating TO's Interconnection Facilities.

#### **6.1.5.6 Phase II Study Coordinated With the Transmission Planning Process**

The CAISO coordinates the Phase II Interconnection Studies with the CAISO's Transmission Planning Process under CAISO Tariff Section 24. This coordination includes, but is not limited to:

- (i) consistency, to the maximum extent applicable under Good Utility Practice, between the Interconnection Base Case Data used for performance of the Phase II Interconnection Studies and the Unified Planning Assumptions developed for the Transmission Planning Process, including, but not limited to, data relating to Demand data, network topology, and generation resources;
- (ii) consideration of any conceptual transmission plan(s) developed, but not rejected, in the current or former Transmission Planning Processes intended to access generation development areas as a means to satisfy the Network Upgrade requirements to interconnect Generating Facilities included in the Phase II Interconnection Study;
- (iii) performance of sensitivities within the Transmission Planning Process, including cases considering Generating Facilities included in the Phase II

Interconnection Study(ies) to the extent possible, to optimize transmission upgrades developed in the current Transmission Planning Process to achieve System Reliability, economic efficiency, and satisfy the Network Upgrade requirements to interconnect Generating Facilities included in the Phase II Interconnection Study;

(iv) consideration of future generation development potential in transmission upgrade designs pursuant to criteria developed as part of the Unified Planning Assumptions; and

(v) Consideration of phased development and option value of transmission projects to address uncertainty.

Network Upgrades, apart from detail engineering and final cost determinations, identified in any Phase II Interconnection Study or as part of the Transmission Planning Process that must receive CAISO Governing Board approval under CAISO Tariff Section 24 may be subject to CAISO Tariff Section 24.2.5.2.

Generation projects entering the Phase II Interconnection Study will also be considered in the Unified Planning Assumptions, as appropriate. Transmission projects proposed through the Phase II Interconnection Study that requires CAISO Governing Board approval will be integrated into the stakeholder process under the Transmission Planning Process.

#### **6.1.5.7 Phase II Results Meetings and Selection of Final Commercial Operation Date**

Within thirty (30) Calendar Days of issuing a final Phase II study report to the Interconnection Customer, the Participating TO, CAISO, and the Interconnection Customer will participate in a Phase II Results Meeting meet to discuss the results, including selection of the final Commercial Operation Date. Note the CAISO's current practice is to incorporate the time frame for completion of the transmission build out when determining the Commercial Operation Date.

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

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 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 6.10 of the GIP, 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.

### 6.1.6 Accelerated Phase II Studies

Under certain circumstances, the CAISO may perform an accelerated Phase II Interconnection Study for an Interconnection Request. Per GIP Section 7.6 and this GIP BPM section, the accelerated Phase II Interconnection Study shall be completed in one hundred fifty (150) Calendar Days following the Interconnection Customer's initial posting of Interconnection Financial Security.

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

- 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
- the Interconnection Customer is able to demonstrate that the general Phase II Interconnection Study timeline under GIP Section 7.5 and GIP BPM Section 6.1.5 is not sufficient to accommodate the Commercial Operation Date of the Large Generating Facility.

Accelerated Phase II studies can start as soon as the project meets the above criteria and is determined independent.

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 GIP 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.

## 6.2. Independent Study Process

An Interconnection Request submittal for the Independent Study Process (ISP) can occur any time during the year.

The 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. If an Interconnection Customer submits an Interconnection Request during a new open Cluster Application Window 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 Generating Facility's electrical independence against the projects in that latest cluster.

### 6.2.1 Criteria for Independent Study Process Eligibility

#### 6.2.1.1 Commercial Operation Date

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. The IC must show that the desired Commercial Operation Date is physically and commercially achievable, by demonstrating at least two of the following:

- (i) The Interconnection Customer has obtained, or has demonstrated the ability to obtain, all regulatory approvals and permits needed to complete construction in time to meet the Generating Facility's requested Commercial Operation Date.
- (ii) The Interconnection Customer is able to provide, or has demonstrated the ability to 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 Commercial Operation Date 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 GIP.

#### **6.2.1.2 Site Exclusivity**

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

#### **6.2.1.3 Electrical Independence**

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 GIP Section 4.2 and GIP BPM Section 6.2.2 and, in addition, must be electrically independent of any other Generating Facility that is currently being studied under an earlier-queued Independent Study Process Interconnection Request.

#### **6.2.1.4 CAISO Notice on COD and Site Exclusivity**

The CAISO will inform an Interconnection Customer whether it has satisfied the requirements set forth in GIP Sections 4.1.1 and 4.1.2 and GIP BPM Sections 6.2.1.1 and 6.2.1.2 within fifteen (15) Business Days of receiving the Interconnection Request.

#### **6.2.1.5 ISO Notice on Electrical Independence**

The CAISO will inform an Interconnection Customer whether it has satisfied the requirement that it be electrically independent of other Interconnection Requests, pursuant to GIP Section 4.2 and GIP BPM Section 6.2.2, within fifteen (15) Business Days of receiving the Interconnection Request. However, if there is insufficient information available to perform the electrical independence tests as described in Section 6.2.2.1(i) below, this notice will be delayed until such information is available.

#### **6.2.1.6 Withdrawal of an Interconnection Request which fails to qualify for the Independent Study Process Track.**

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 GIP Sections 4.1.1, 4.1.2, and 4.1.3 and GIP BPM Sections 6.2.1.1, 6.2.1.2, or 6.2.1.3) 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.

## 6.2.2 Determination of Electrical Independence

Each Interconnection Request submitted under the Independent Study Process must pass both the flow impact test and the short circuit test set forth in GIP Section 4.2 and GIP BPM Section 6.2.2 in order to qualify for the Independent Study Process. The available power flow and short circuit Base Cases that are being used for the most recent Queue Cluster will be used as the starting Base Cases for these tests.

### 6.2.2.1 Flow Impact Test

An Interconnection Request shall have satisfied the requirements of this Section if it satisfies, alternatively, either the set of requirements set forth in Section 'A' (also set forth in GIP Section 4.2.1.1) or the set of requirements set forth in Section 'B' (also set forth in GIP Section 4.2.1.2) as follows:

- A. The CAISO, in coordination with 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 Network Upgrades identified or reasonably expected to be needed by Generating Facilities currently being studied in a Queue Cluster, or as a result of Network Upgrades identified or reasonably expected to be needed 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 Network Upgrades, and the CAISO cannot reasonably anticipate whether such transmission facilities will require 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.

- (ii) The incremental power flow on the transmission facility identified in GIP Section 4.2.1(i) and GIP BPM Section 6.2.2.1(i) 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, per GIP Section 4.2.1 (i) and GIP BPM Section 6.2.2.1(i), 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 as well as the individual flow test described in GIP Section 4.2.1 (ii) or GIP BPM Section 6.2.2.1(ii), in no particular order.

- B. 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 capacity and the incremental increase in capacity does not exceed, in the aggregate, 100 MW.
- The behind-the-meter capacity expansion shall not take place until after the original Generating Facility has achieved Commercial Operation and all Reliability Network Upgrades for the original Generating Facility have been placed in service. An Interconnection Request for a behind-the-meter capacity expansion may be submitted prior to the Commercial Operation Date of the original Generating Facility.
- The expanded capacity for the Generating Facility has been placed under a separate breaker (the expansion breaker) such that the expansion can be metered separately at all times. With the consent of the CAISO and the applicable Participating TOs, the Interconnection Customer may make the Generating Facilities that will be tied to the expansion breaker a mixture of original and expanded facilities such that the total installed capacity behind the expansion breaker is equal to or greater than the planned amount of the behind-the-meter capacity expansion.
- Unless specifically requested by the CAISO, the total output of the Generating Facility does not exceed its originally studied capacity at any time. The CAISO will have the authority to trip the expansion breaker if the total output of the Generating Facility exceeds the originally studied capacity amount.
- The processing of the Interconnection Request for behind-the-meter expansion under the Independent Study Process shall not result in any increase in the rated Generation Facility electrical output (MW capacity) beyond the rating which pre-existed the Interconnection Request. Further, the processed interconnection request shall not operate as a basis under the CAISO Tariff to increase the Net Qualifying Capacity of the Generating Facility beyond the rating which pr-existed the Interconnection Request.

(ii) Business criteria.

- The Deliverability Status (Full Capacity, Partial Capacity Deliverability, or Energy-Only) of the capacity expansion is the same as the Deliverability Status specified for the formally studied Generating Facility.
- The Generator Interconnection Agreement is amended to reflect the revised operational features of the Generating Facility capacity expansion.
- The Interconnection Customer may at any time request that the CAISO convert the Interconnection Request for behind-the-meter expansion to an Independent Study Process Interconnection Request to evaluate an incremental increase in electrical output (MW generating 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 GIP BPM Section 6 and GIP Section 4 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 GIP Independent Study Process to formally add that capacity to its original MW capacity.

#### 6.2.2.2 Short Circuit Test

If the short circuit contribution from the Generating Facility (existing or proposed) being tested at the transmission facility identified in GIP Section 4.2.1(i) or GIP BPM Section 6.2.2.1(i) is less than 100 amperes, the Generating Facility shall pass the short circuit test.

### 6.2.3 Independent Study Process Track Scoping Meeting

if the Generating Facility associated with its Interconnection Request has satisfied the independence test set forth in GIP Section 4.2 and GIP BPM Section 6.2.2, then, within five (5) Business Days after having notified the Interconnection Customer that the project has qualified, , 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 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, if such is the case, the CAISO shall invite the affected Participating TO(s) and/or Affected System Operator(s), in accordance with GIP Section 3.7 and GIP BPM Section 18.1, to

the Scoping Meeting by informing such third parties, as soon as practicable, of the time and place of the scheduled Scoping Meeting.

The purpose of the Scoping Meeting shall be to discuss the Interconnection Request and review existing studies relevant to the Interconnection Request. The applicable Participating TO(s) and the CAISO will bring to the meeting, as reasonably necessary to accomplish its purpose, 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.

The Interconnection Customer will bring to the Scoping Meeting, in addition to the technical data in Attachment A to GIP Appendix 1, any system studies previously performed. 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. 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, 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 a Independent Study Process Study Agreement (in the form set forth in GIP Appendix 6), which shall contain an outline of the scope of the system impact and facilities studies 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.

## 6.2.4 Interconnection System Impact Study

### 6.2.4.1 Scope

Instead of the Phase I and Phase II Interconnection Studies conducted under the cluster process track, an Interconnection Request under the Independent Study Process Track is studied through the more traditional system impact and/or facilities studies.

The System Impact 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.

### 6.2.4.2 Interconnection System Impact Study Details

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The System Impact 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, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the Interconnection.

#### **6.2.4.3 Interconnection Facilities and Reliability Network Upgrades**

The System Impact Study shall provide a list of Interconnection Facilities and Reliability Network Upgrades that are required as a result of the Interconnection Request along with a non-binding good faith estimate of cost responsibility and the amount of construction time required. The good faith estimate will be based on the Per Unit Costs as described in GIP Section 6.6 and GIP BPM Section 6.1.4.6.

#### **6.2.4.4 Interconnection System Impact Study agreement and Timeline for Completion**

In order to fund the System Impact Study, the Interconnection Customer must sign and return an Independent Study Process Agreement. The IC shall execute the agreement(s) and deliver the agreement(s) back to the CAISO within sixty (60) Calendar Days from the date the CAISO sends the agreement. If Interconnection Customer fails to do so, then the Interconnection Request will be deemed withdrawn. The CAISO will complete the System Impact Study and transmit the results to the Interconnection Customer within ninety (90) Calendar Days after the Interconnection Customer's execution of the Independent Study Process Agreement.

#### **6.2.4.5 Results Meeting**

If requested by the Interconnection Customer, a Results Meeting shall be held among the CAISO, the applicable Participating TO(s), and the Interconnection Customer to discuss the results of the System Impact Study report, including assigned cost responsibility. 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 report is provided to the Interconnection Customer.

#### **6.2.4.6 Initial Posting Based On Governing SIS or FAS Report**

Within thirty days after being provided its System Impact Study (SIS) report, the Interconnection Customer shall make its initial posting of Interconnection Financial Security required under GIP Section 9.2. The posting amount shall be based on the cost estimates for the Network Upgrades and Participating TO's Interconnection Facilities set forth in the report. If the System Impact Study is waived (and the Interconnection Customer thus relies upon a Facilities Study (FAS)), then such

posting will be based upon the cost responsibility set forth in the Facilities Study report.

## 6.2.5 Interconnection Facilities Study

### 6.2.5.1 Scope

The 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 System Impact Study, including, if applicable, the cost of remedial measures that address the financial impacts, if any, on Local Furnishing Bonds. The Facilities Study shall also identify:

- (i) the electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment;
- (ii) the nature and estimated cost of the Participating TO's Interconnection Facilities and upgrades necessary to accomplish the Interconnection; and
- (iii) an estimate of the time required to complete the construction and installation of such facilities or for effecting remedial measures that address the financial impacts, if any, on Local Furnishing Bonds.

### 6.2.5.2 Waiver of Facilities Study

The potential to waive a Facilities Study (often abbreviated as "FAS") only exists if a System Impact Study was done and a report issued. The Facilities Study may be waived if the System Impact Study does not identify any Interconnection Facilities and Reliability Network Upgrades.

### 6.2.5.3 Timeline

The Facilities Study will be completed within ninety (90) Calendar Days after the Interconnection Customer posts its initial Interconnection Financial Security in accordance with GIP Section 9.2 and GIP BPM Section 11.1.3 where Network Upgrades are identified. In cases where no Network Upgrades are identified and the required facilities are limited to Interconnection Facilities only, the Facilities Study will be completed within sixty (60) Calendar Days after the Interconnection Customer posts Interconnection Financial Security for the Participating TO's Interconnection Facilities in accordance with GIP Section 9.2 and GIP BPM Section 11.1.3.

### 6.2.5.4 Independent Study Process Track Results Meeting

If requested by the Interconnection Customer within ten (10) Business Days of the date of the Facilities Study report, a Results Meeting shall be held among the CAISO, the applicable Participating TO(s), and the Interconnection Customer to discuss the results of the Facilities Study report, including assigned cost responsibility. The CAISO shall prepare minutes from the meeting. Any such Results Meeting will be held within twenty (20) Business Days of the date the Facilities Study report is provided to the Interconnection Customer.

#### **6.2.5.5 Basis for the 2nd and 3<sup>rd</sup> Financial Postings**

For Interconnection Requests under the Independent Study Process, the second posting and third postings of Interconnection Financial Security described in GIP Section 9.3 and GIP BPM Sections 11.1.4 and 11.1.5 will be based on the cost responsibility for Network Upgrades and the Participating TO's Interconnection Facilities set forth in the Facilities Study.

### **6.2.6 Deliverability Assessment**

For Independent Study Process Interconnection Requests that requests Partial or Full Capacity Deliverability Status, the CAISO will perform the Deliverability Assessment as part of the next scheduled Phase I and Phase II Interconnection Studies for Queue Clusters. If the Deliverability Assessment identifies any Delivery Network Upgrades 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 GIP Section 6 and r GIP BPM or Sections 6.1.4 and 6.1.5. 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 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.

### **6.2.7 Extensions of Commercial Operation Date for the Independent Study Process Track**

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. Fast Track Process

- a. **Applicability to a proposed Generating Facility.** This process track is applicable to proposed Generating Facilities that are no larger than 5 MW and are requesting Energy Only Deliverability Status and that meet criteria set forth in GIP Appendices 9 and 10;
- b. **Applicability to an existing Generating Facility.** If the Interconnection of an existing Generating Facility meets the qualifications for Interconnection under CAISO Tariff Section 25.1(d) or (e) but, at the same time, the Interconnection Customer also seeks to repower or reconfigure the existing Generating Facility in a manner that increases the gross generating capacity by not more than 5 MW, then the Interconnection Customer may request that the Fast Track Process be applied with respect to the repowering or reconfiguration of the existing Generating Facility that results in the incremental increase in MW. The delivery status of the existing Generating Facility will remain unchanged for the new Generating Facility. The incremental increase in capacity using in Fast Track Process will be Energy Only in accordance with the Fast Track process.
- c. The Interconnection Customer can submit an Interconnection Request to use the Fast Track Process at any time during the year; the Interconnection Customer is not required to wait for the opening of a queue cluster window.
- d. 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 GIP Appendix 1;
  - (ii) a non-refundable processing fee of \$500 and a study deposit of \$1,000; and
  - (iii) a 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 GIP tariff sections 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.

- e. Within fifteen (15) Business 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 this GIP BPM below, shall notify the Interconnection Customer of the results, and shall include with the notification copies of the analysis and data underlying the Participating TO's determinations under the screens.

The proposed Generating Facility must pass the following screens to be eligible for Interconnection under this Fast Track Process:

- (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, 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 GIP Section 5.3.1.2, and this GIP BPM Section 6.3 (d.) (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.
- (iii) For interconnection of a proposed Generating Facility to the load side of spot network protectors, the proposed Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5 percent of a spot network's maximum load or 50 kW. For purposes of GIP Section 5.3.1.3 and this GIP BPM Section 6.3 (d.) (iii), a spot network shall be considered as a type of distribution system found in modern commercial buildings for the purpose of providing high reliability of service to a single retail customer.
- (iv) The proposed Generating Facility, in aggregation with other generation 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.
- (v) The proposed Generating Facility, in aggregate with other generation 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 proposed for a circuit that already exceeds 87.5 percent of the short circuit interrupting capability.

- (vi) The Generating Facility, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Generating Facility proposes to interconnect shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four transmission busses from the Point of Interconnection).
- f. If the proposed interconnection passes screens; and
  - If the proposed Interconnection passes the screens and no Upgrades are reasonably anticipated, 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.
  - If the proposed Interconnection fails the screens and Upgrades are reasonably anticipated, 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.
  - If the proposed interconnection passes the screens and Upgrades are reasonably anticipated, the CAISO and Participating TO shall provide the Interconnection Customer with the opportunity to attend a customer options meeting as described in GIP Section 5.4 and may be eligible for a Supplemental Review as described in GIP Section 5.5.
- g. Interconnection fails screens and upgrades are anticipated.
  - The Interconnection Request will be deemed withdrawn, without prejudice to the Interconnection Customer resubmitting it's Interconnection Request for processing in either a Queue Cluster or under the Independent Study Process.

#### 6.4. 10 kW Inverter Process

- a. The Interconnection Customer completes the Interconnection Request ("Application") and submits it to the Participating TO. See the GIP - Appendix 7 for the application form;
- b. The Participating TO will acknowledge receipt of the Interconnection Customer's receipt of the Application within three Business Days of receiving the Interconnection Customer's request;

- c. The Participating TO will evaluate the Application for completeness and notify the Interconnection Customer within ten Business Days of receipt that the Application is or is not complete and, if not, advises what material is missing;
- d. The Participating TO will verify that the Small Generating Facility can be interconnected safely and reliably using the screens contained in the Fast Track Process in the Generator Interconnection Procedures (GIP). The Participating TO shall complete this process within fifteen (15) Business Days. Unless the CAISO determines and demonstrates that the Small Generating Facility cannot be interconnected safely and reliably, the CAISO will approve the Application and return it to the Interconnection Customer. Note to Interconnection Customer: Please check with the Participating TO before submitting the Application if disconnection equipment is required;
- e. 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;
- f. 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. 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;
- g. Contact Information – The Interconnection Customer must provide the contact information for the legal applicant (i.e., the Interconnection Customer). If another entity is responsible for interfacing with the Participating TO, that contact information must be provided on the Application;
- h. 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
- i. 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.

## 7. Study / Base Case Postings

Per GIP Section 2.3 for each Interconnection Study Cycle, the CAISO, in coordination with applicable Participating TO, shall post to 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 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
- 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 GIP Section 13.1 and GIP BPM Section 16.0. 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 GIP Section 13 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>15</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>16</sup>

<sup>15</sup> See FERC's discussion of CEII at FERC's CEII webpage, accessible at

<http://www.ferc.gov/legal/ceii-foia/ceii.asp>

<sup>16</sup> FERC Regulations, at Section 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:

**§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)

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

#### Additional Study Reports

If the CAISO makes any additional study reports available it will do so in accordance with the disclosure requirements in Section 16 of this BPM.

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. Note the CAISO works to post as soon after the studies are completed as possible.

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

## 8. Commercial Operation Date

### 8.1. Proposed Commercial Operation Date

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 will take longer than the seven year period. Note the CAISO's current practice is to incorporate the time frame for completion of the transmission build-out when determining the Commercial Operation Date.

## 8.2. Phase I Results Meeting Commercial Operation Date

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 beyond the date that the Interconnection Customer placed in its Interconnection Request package.

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 ISO, 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 under the Dispute Resolution process set out in GIP Section 13.5 and GIP BPM Section 17.0. As stated in GIP Section 6.9.1, the Interconnection Customer must notify the CAISO within five (5) Business Days following the Phase I Results Meeting that it is initiating dispute procedures under GIP Section 13.5 (and/or GIP BPM Section 17.0).

## 8.3. Extended Commercial Operation Date

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 Upgrades.

## 9. Modifications

### 9.1. Timing and Scope of Modifications

At the Phase I interconnection Study Results Meeting, the Interconnection Customer should be prepared to discuss any desired modifications. GIP Section 6.9.2.1 provides a window period between the Interconnection Customer's receipt of the Phase I Interconnection Study Report and no later than five (5) Business Days after the Phase I Results Meeting, for the Interconnection Customer to submit requests for modifications to its Interconnection Request (i.e. modifications from the information the Interconnection Customer had provided in the Interconnection Request packet that was used for the Phase I Interconnection Study).

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."

When all three parties—the CAISO, Participating TO, and Interconnection Customer-- agree that a modification under consideration will have benefits, and, as a corollary, no adverse impact on another Interconnection Customer, then a modification request is not time-barred: At any time during the course of the Interconnection Studies, the Interconnection Customer, the applicable Participating TO(s), or the CAISO may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request<sup>17</sup>. 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.

### 9.2. Types of Modification

GIP Section 6.9.2.2 provides a "safe harbor" for certain modifications made during the proper window period of 5 business days following the Phase I results meeting, and states that such requests are permitted (as they are non-material): these changes are (a) a decrease in the MW capacity of the proposed Generating Facility; (b) modifying the technical parameters associated with the Generating Facility technology or Generating Facility step-up transformer impedance characteristics; and (c) modifying the interconnection configuration, while not changing the Point of Interconnection;

<sup>17</sup> Tariff Appendix Y, Section 6.9.2.1

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 GIP Section 6.9.2 and GIP BPM 9.0, 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 CAISO will not withhold consent to timely requests for modifications which are not material modifications. As stated in GIP BPM Section 9.1 above, a Material Modification the CAISO Tariff Appendix A defines 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 also be considered material if they adversely impact the timeline of the queue cluster's Interconnection Study Cycle or 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).

GIP Section 6.9.2.2 provides that the Interconnection Customer shall remain eligible for the Phase II Interconnection Study if the modifications are in accordance with GIP Section 6.9.2 and GIP BPM Section 9.0—in other words, if the request is not 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 to 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.

### 9.3. Examples of Allowed Modifications

The following are examples of modifications that are allowed at various points in the interconnection study process and include the impact the change would have on various CAISO Tariff issues.

#### 9.3.1 Changes in Electrical Output (MW) of the Proposed Project

The GIP has provides for certain timeframes during which reductions in the electrical output of the proposed project are allowed.

- After submitting an Interconnection Request an Interconnection Customer may decrease its electrical output of its proposed project through the period ending

five business days after the project's Scoping Meeting. Reductions in electrical output will not trigger a reduction in the study deposit amount and the study deposit will remain the same as was required with the original Interconnection Request.

- Within five (5) Business Days following the Phase I Interconnection Study Results Meeting, the Interconnection Customer is required to submit to the CAISO the completed form of GIP (Appendix 3 - Appendix B) and may decrease the electrical output of its proposed project in that document.
  - After receiving from the Interconnection Customer any modification elections involving decreases in electrical output (MW) of the Generating Facility, 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 and/or Reliability 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 GIP BPM Section 11.1.3 and GIP Section 9.2, 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. 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 and GIP Section 6.9.4 shall affect either (i) the timing for the initial Interconnection Financial Security posting or (ii) the maximum value for the Interconnection Customer's total cost responsibility for Network Upgrades established by the Phase I Interconnection Study report.
  - Note that some Interconnection Customers availing themselves of this option have asked that the estimated lower initial posting amount also serve as a maximum cost responsibility cap. This is not possible, because the lower number is based on the best judgment of the CAISO and applicable Participating TO, but is not supported by an Interconnection Study analysis.

### 9.3.2 Changes from Full or Partial Capacity to Partial Capacity or Energy Only

- After submitting an Interconnection Request an Interconnection Customer may change the proposed project's designation from Full or Partial Capacity Deliverability Status to Partial Capacity or Energy-Only Deliverability Status through the period ending five business days after the project's Scoping Meeting.
- As described in GIP BPM Section 6.1.4.7, within five (5) Business Days following the Phase I Interconnection Study Results Meeting, the Interconnection Customer is required to submit to the CAISO the completed form of GIP (Appendix 3 - Appendix B) and may change the proposed project's designation from Full or Partial Capacity Deliverability Status to Partial Capacity or Energy-Only Deliverability Status in that document.
  - For Projects that elect Energy Only, 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 cost cap. The reason the cost cap is to remain 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 in GIP BPM Section 6.1.4.7 and GIP Section 6.9.3, 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 GIP BPM Section 11.1.3 and GIP Section 9.2, 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. 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 and GIP Section 6.9.4 shall affect either (i) the timing for the initial Interconnection Financial Security posting or (ii) the maximum value for the Interconnection Customer's total cost responsibility for Network Upgrades established by the Phase I Interconnection Study report.

### 9.3.3 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 five days following the Phase I 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 Generating Facility does not change status from Energy-Only or Partial Capacity Deliverability Status to Full Capacity 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.

## 10. Financial Postings – Phase I Study Costs Form Basis



## of Financial Security (Clarification of postings and cost caps for Network Upgrades and Interconnection Facilities)

Under the GIP cluster study process track, the maximum cost responsibility assigned to the Interconnection Customer for Network Upgrades is the lower of the cost estimates determined through the Phase I Interconnection Studies or the cost estimates determined through the Phase II Interconnection Studies.

Until such time as the Phase II Interconnection Study report is issued to the Interconnection Customer, the costs assigned to Interconnection Customers for Network Upgrades under GIP BPM Section 6.1.4 and GIP Section 6 establish the maximum value for the Interconnection Financial Security required from each Interconnection Customer under GIP ~~BPPBM~~ Section 11 and GIP Section 9 for such Network Upgrades, as well as the maximum value for each Interconnection Customer's total cost responsibility for Network Upgrades.

As set forth in this section and Section 9.5 of the GIP, after issuance of the Phase II Interconnection Study the maximum value for the Financial Security required and maximum cost responsibility for Network Upgrades for each Interconnection Customer is based on the lesser of the costs for total of Network Upgrades assigned to the Interconnection Customer in the final Phase I Interconnection Study report or the total for such Network Upgrades in the final Phase II Interconnection Study report, and is subject to subsequent adjust to Section 7.4 of Appendix DD of the CAISO Tariff. It is important to note that one does not look across a Phase I and a Phase II interconnection study report to take, for example the lowest Reliability Network Upgrade cost figure from one report and the lowest Delivery Network Upgrade from the other. Rather one looks at the total of Reliability and Delivery Network costs set out in each report, and the lowest total figure governs.

For Interconnection Customers in the Independent Study Process, the maximum value for the Interconnection Customer's Financial Security and the maximum cost responsibility for Network Upgrades shall be established by the lesser of the costs for Network Upgrades assigned to the Interconnection Customer in the final System Impact Study report or final Facilities Study report.

In contrast to the cost estimation for Network Upgrades, which results in a "cost cap" for the Interconnection Customer's maximum cost responsibility, GIP cost estimation for Interconnection Facilities yields estimates with no cost responsibility cap. Accordingly, the costs for the PTO 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.

An Interconnection Customer's maximum cost responsibility for Network Upgrades shall be subject to further adjustment based on the results of the annual reassessment process, as set forth in Section 7.4 of Appendix DD to the CAISO Tariff.

## 11. Interconnection Financial Security

### 11.1. General

#### 11.1.1 Interconnection Financial Security Standardized Forms

An Interconnection Customer is required to provide Interconnection Financial Security in order to securitize its obligations under the GIP 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). The obligation to provide security also performs a second function of assuring continued viability of the Interconnection Customer with respect to its Interconnection Request. In FERC's orders accepting the CAISO's Cluster LGIP amendment in September 2008 and November 2009, FERC noted that this policy justification was just and reasonable and appropriate. In the CAISO's 2008 Generator Interconnection Process Reform ("GIPR") Amendment filing the CAISO referred to this policy element as "increased generator commitment" to the interconnection process.

Accordingly, it does not follow that, if the Interconnection Customer is relieved of the obligation to up-front finance Network Upgrades and/or Participating TO's Interconnection Facilities, that the Interconnection Customer is, ipso facto, also relieved of the obligation to post financial security instruments. Accordingly, in 2010, when the CAISO wished to implement a policy decision to waive financial security instrument postings for projects in the LGIP transition cluster (in order to promote California's 33% RPS requirement and California state policy to maximize securing ARRA federal stimulus cash grants), the CAISO sought a waiver from FERC of the CAISO interconnection process requirement that Interconnection Customers so post.

The Interconnection Financial Security is provided "in favor of" (i.e. for the benefit of) the Participating TO. It is the Participating TO that bears the obligation under the GIP to construct the Network Upgrades (and, in general the Participating TO's Interconnection Facilities). The type of Interconnection Financial Security which the Interconnection Customer must provide (in one type or in combination) is contained in GIP Section 9.1. Section 9.1 outlines six (6) acceptable types of Interconnection Financial Security. Each Participating TO circulates standardized forms of the financial security instruments types, which the Participating TO has found to be reasonably acceptable for its use. The CAISO reviews these forms of instruments consistent with its obligation to find them "reasonably acceptable" and posts them on the CAISO Website. While the CAISO does

review the forms, the forms of financial security instrument are developed by the applicable Participating TO and are the property of the applicable Participating TO. Interconnection Customer questions regarding the forms and how to complete them should be directed to the applicable Participating TO. Pertinent Participating TO representative contact information provided to the CAISO by Participating TO will be posted on the CAISO Website.

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

The CAISO requires the use of standardized forms of Interconnection Financial Security to the greatest extent possible. If at any time the guarantor of the Interconnection Financial Security fails to maintain the credit rating required by GIP Section 9.1 and this GIP BPM Section 11.1.1, the Interconnection Customer shall provide to the applicable Participating TO(s) replacement Interconnection Financial Security meeting the requirements of GIP Section 9.1 and GIP BPM Section 11.1.1 within five (5) Business Days of the change in credit rating.

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 GIP Section 9.1 and this GIP BPM Section 11.1.1 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.

The applicable Participating TO must accept any combination of the Financial Security Instruments, if the instruments meet the requirements noted above.

The pertinent CAISO Website webpage where the financial instrument forms are posted includes the descriptor "Participating Transmission Owner Financial Security Instruments".

For access to the posted financial instrument forms please go to the CAISO Website and select the following sequence of tabs:

- Planning
- Generator Interconnection
- Generator interconnection application process

#### 11.1.2 [NOT USED]

#### 11.1.3 Initial Posting of Interconnection Financial Security

The GIP anticipates that not all Interconnection Customers whose Interconnection Requests are part of the Phase I Interconnection Study effort will elect to proceed with the Phase II (for the Queue Cluster study track) or the Facility Study process (for the Independent Study Process track). Interconnection Customers make their election to proceed to the next study step (the Phase II Interconnection Study effort or the Facilities Study step) by making their initial Financial Security instrument posting.

Interconnection Customers that are also Participating TO(s) are not required to post Interconnection Financial Security to themselves. Notwithstanding this exemption, Interconnection Customers that are also Participating TO(s) (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 Section 7.6 of Appendix DD to the CAISO tariff and GIP Section 9.4.

**Time for Posting:** Per GIP Section 9.2 or GIP BPM Section 11.1.3, the time for posting financial security is as follows:

For the Queue Cluster process track: on or before ninety (90) Calendar Days after the issuance of the final Phase I Interconnection Study Report.

If the CAISO revises a final Phase I Interconnection Study report pursuant to GIP BPM Section 11.1.6. or GIP Section 6.10, the initial postings set forth in this GIP BPM Section 11.1.3 or GIP Section 9.2 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.

For the Independent Study Process track: on or before sixty (60) Calendar Days after the CAISO issues the results of the Interconnection System Impact Study.

If the CAISO revises a final System Impact Study report pursuant to GIP PBM Section 11.1.6. and GIP Section 6.10, the initial postings set forth in this GIP BPM Section 11.1.3 and GIP Section 9.2 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.

**Two Postings and Posting Amounts:** The Interconnection Customers must post, and provide notice to the CAISO and Participating TO that it has posted, two (2) separate Interconnection Financial Security instruments in favor of the applicable Participating TO in the amounts noted below:

- One Posting for the Network Upgrades—in the amount of the lesser of
  - 15% of the total Network Upgrades assigned cost responsibility as identified in the Phase I Interconnection Study or Interconnection System Impact Study,
  - \$20,000/MW of electrical output of the Generating Facility or the amount of MW increase in the generating capacity of each Generating Facility listed in the Interconnection Request, or
  - \$7.5 million,
- ✓ but in no event less than \$500,000 for Large Generating Facilities or \$50,000 for Small Generating Facilities.

Provided, however, that if the total estimated amount of the Network Upgrade is less than \$500,000 for Large Generating Facilities or \$50,000 for Small Generation Facilities, the Interconnection Customer posts the estimated amount.

- One Posting for the Participating TO's Interconnection Facilities in the amount of the lesser of
  - 15% of the total Interconnection Facilities costs as identified in the Phase I Interconnection Study or Interconnection System Impact Study,
  - \$20,000/MW of electrical output of the Generating Facility or the amount of MW increase in the generating capacity of each Generating Facility listed in the Interconnection Request, or
  - \$7.5 million,
  - ✓ but in no event less than \$500,000 for Large Generating Facilities or \$50,000 for Small Generating Facilities.

Provided, however, that if the total estimated amount of the Interconnection Facilities is less than \$500,000 for Large Generating Facilities or \$50,000 for Small Generation Facilities, the Interconnection Customer posts the estimated amount.

Note that two separate Interconnection Financial Security instruments are necessary for the following reasons:

- To allow separate accounting and tracking; and
- Because each posting is for a very different purpose and each can only be drawn on for the applicable purpose; i.e. Network upgrades or Interconnection Facilities

The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by GIP Section 9.2 and GIP BPM 11.1.3 shall result in the Interconnection Request being deemed withdrawn and subject to GIP Section 3.8 and GIP BPM Section 12.0. In such cases of failure to timely post, the CAISO provides the Interconnection Customer with a notice of Withdrawal and the Interconnection Customer has five (5) Business days to cure the deficiency by making the posting.

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.

#### 11.1.4 Posting timeframes are triggered from issuance of an Interconnection Study report. ~~Second Posting of Interconnection Financial Security~~

**Time for Posting** The Interconnection Customer must make the second Interconnection Financial Security posting:

For the Queue Cluster Study track: on or before one hundred eighty (180) Calendar Days after issuance of the final Phase II Interconnection Study Report

However, if the CAISO revises a final Phase II Interconnection Study report pursuant to GIP BPM Section 11.1.6 and GIP Section 6.10, the postings set forth in this GIP BPM Section 11.1.4 and GIP Section 9.3 will be due from the Interconnection Customer 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.

For the Independent Study Process track: on or before one hundred twenty (120) Calendar Days after the CAISO issues the results of the Facilities Study.

If the CAISO revises the final Facilities Study report pursuant to GIP BPM Section 11.1.6 and GIP Section 6.10, the postings set forth in this GIP BPM Section 11.1.4 and GIP Section 9.3 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

**Two Postings and Posting Amounts** The Interconnection Customer shall post, with notice to the CAISO, two (2) separate Interconnection Financial Security instruments in favor of the applicable Participating TO in the amounts noted below:

- For Network Upgrades, the lesser of \$1 million for Small Generating Facility or \$15 million for Large Generating Facility or 30% of the total cost responsibility assigned to the Interconnection Customer, as identified in the:
  - Cluster Process: Phase I or Phase II, whichever is lower

- Independent Study Process: System Impact or Facility Study, whichever is lower
- ✓ but in no event less than \$100,000 for Small Generating Facility or \$500,000 for Large Generating Facility;
- ✓ if the costs of the estimated Network Upgrades are less than the minimum posting amounts set forth above, the posting amount required will be equal to the estimated Network Upgrade amount.
- For Participating TO Interconnection Facilities, the lesser of \$1 million for Small Generating Facility or \$15 million for Large Generating Facility or 30% of the total cost responsibility as identified in the:
  - Cluster Process: Phase I or Phase II, whichever is lower
  - Independent Study Process: System Impact or Facility Study, whichever is lower
- ✓ but in no event less than \$100,000 for Small Generating Facility or \$500,000 for Large Generating Facility;
- ✓ if the costs of the estimated Interconnection Facilities are less than the minimum posting amounts set forth above, the posting amount required will be equal to the estimated Interconnection Facilities amount.

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.

An interconnection customer will be relieved of the obligation to make a second posting of interconnection financial security for network upgrades that the Participating TO unequivocally commits to fund up-front on behalf of the interconnection customer as described in GIP BPM 11.1.7 and GIP 9.3.3. The interconnection customer will remain obligated to make the second posting of interconnection financial security for that portion of its assigned network upgrades that the Participating TO does not unequivocally commit to up-front fund.



If the start of Construction Activities for Network Upgrades or Participating TO Interconnection Facilities is earlier, then the time for the third posting also advances.

An Interconnection Customer's failure to timely make the second posting shall constitute or be grounds for termination of the executed interconnection agreement (LGIA or the SGIA, as applicable) or, if the interconnection agreement is not yet executed, deeming the Interconnection Request to be withdrawn.

### 11.1.5 Third Posting of Interconnection Financial Security

**Time for Posting.** The Interconnection Customer's third posting is due on or before the start of Construction Activities for Network Upgrades or Participating TO Interconnection Facilities on behalf of the Interconnection Customer, whichever is earlier.

**Two Postings; Posting Amounts** The Interconnection Customer shall increase the amount of the two (2) separate Interconnection Financial Security Instruments to the level of 100% of its cost responsibility as determined by the governing Interconnection Study (generally the lower of Phase I or Phase II):

- 100% of the total cost responsibility assigned to the Interconnection Customer for Network Upgrades in either the Phase I, Phase II, System Impact, or Facility Study, whichever is lower; and
- 100% of the total cost responsibility assigned to the Interconnection Customer for Participating TO Interconnection Facilities identified in the Phase II or Facility Study.

If an Interconnection Customer's Network Upgrades and/or Interconnection Facilities are separated into two or more specific components and/or can be separated 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 discrete 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 discrete milestone dates, which cannot be open ended events not tied to a specific date, 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.

An Interconnection Customer will be relieved of the obligation to make a third posting of interconnection financial security for network upgrades that the Participating TO unequivocally commits to fund up-front on behalf of the interconnection customer as described in GIP BPM 11.1.7 and GIP 9.3.3. The interconnection customer will remain

obligated to make the third posting of interconnection financial security for that portion of its assigned network upgrades that the Participating TO does not unequivocally commit to up-front fund.

An Interconnection Customer's failure to timely make the third posting shall constitute or be grounds for termination of the executed interconnection agreement (LGIA or the SGIA, as applicable) or, if the interconnection agreement is not yet executed, deeming the Interconnection Request to be withdrawn.

### 11.1.6 Revisions and Addenda to Final Study Reports

#### 11.1.6.1 Substantial Error or Omission; Revised Study Report

Should the CAISO discover, through written comments submitted by an Interconnection Customer or otherwise, that a final Phase I or Phase II Interconnection Study Report (which can mean a final Phase I or Phase II Interconnection Study Report for cluster studies or a final System Impact or Facilities report for the Independent Study Process) contains a substantial error or omission, the CAISO will cause a revised 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 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.

#### 11.1.6.2 Other Errors or Omissions; Addendum

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 Section 11 of the GIP.

#### **11.1.6.3 Only Substantial Errors or Omissions Adjust Posting Dates**

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. 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 GIP BPM Section 11 and GIP Section 9. In addition to issuing a revised final report, the CAISO will promptly notify the Interconnection Customer of any revised posting amount and extended due date occasioned by a substantial error or omission.

An Interconnection Customer's dispute of a CAISO determination that an error or omission in a final Study report does not constitute substantial error shall not operate to change the amount of Interconnection Financial Security that the Interconnection Customer must post or to postpone the applicable deadline for the Interconnection Customer to post Interconnection Financial Security. In case of such a dispute, the Interconnection Customer shall post the amount of Interconnection Financial Security in accordance with GIP BPM Section 11 and GIP Section 9, subject to refund in the event that the Interconnection Customer prevails in the dispute.

#### **11.1.7 Offsets for Network Upgrades Which Participating TOs Elect to Up-Front Fund**

Pursuant to GIP Section 9.3.3, as a prerequisite for the Participating TO up-front funding commitment to relieve the interconnection customer of its posting requirements for the related network upgrades, the up-front funding commitment must be conditional upon the Interconnection Customer's meeting milestones for development and construction of the Generating Facility.

The milestones will include such events as the securing of Site Exclusivity, posting of Interconnection Financial Security to cover that portion of the Network Upgrades that the Participating TO is not funding, and security for the Participating TO's Interconnection Facilities, securing of necessary permits, licenses, and/or property rights required for the construction, selection of applicable engineering, procurement and construction contractors, securing of necessary financing, and such other commercially reasonable milestones as the Participating TO, CAISO and Interconnection Customer agree to in the interconnection agreement.

Covering the contingency that up-front funding ceases. Under GIP Section 9.3.3, if the Participating TO withdraws its contractual commitment to up-front fund the network

upgrades, the Interconnection Customer is required to post Interconnection Financial Security to cover those Network Upgrades. The customer is required to do so within 30 days of the Participating TO's notice that the up-front funding is being withdrawn.

Covering the contingency that the second posting deadline arrives before execution of the interconnection agreement. GIP Section 9.3.3 states that, if the Interconnection Customer's obligation to make the second posting of Interconnection Financial Security arises before the interconnection agreement is executed, then the customer will be provided an additional 30 days to post any Interconnection Financial Security related to Participating TO up-front funded Network Upgrades. The Interconnection Customer must continue to engage in good faith efforts to complete the negotiation of the agreement during that period. If the agreement is not executed within the additional 30-day period, then the customer will then be required to post the remaining Interconnection Financial Security, subject to refund.

Covering the timing of any abandoned plant approval award upon which up-front funding is conditioned. GIP Section 9.3.3 also covers the situation where the Participating TO has made an up-front Network Upgrade funding commitment that is conditioned on a request for abandoned plant approval and the request is pending before the Commission. In such situation, the obligation to post the Interconnection Financial Security (for Network Upgrades related to the Participating TO up-front funding commitment) will be suspended during the pendency of the request.

Anticipating Commission denial of the request for award. If the Commission issues an order denying the request for abandoned plant approval, the obligation to post the Interconnection Financial Security for Network Upgrades will immediately be reinstated, and the Interconnection Customer will be required to post the Interconnection Financial Security within 45 days of the issuance of the order, unless the parties to the interconnection agreement renegotiate that agreement within the 45-day period to provide for alternative timeframes or methods for funding the posting.

GIP Section 9.3.3 includes a provision stating that such a renegotiated interconnection agreement will be deemed to be conforming to a Commission-approved standard form of interconnection agreement if the agreement extends the time period for posting the Interconnection Financial Security to a date no later than 75 days after the Commission order denying abandoned plant approval was issued or provides for continued Participating TO up-front funding of the Network Upgrades.

If the parties to the interconnection agreement are unable to renegotiate and execute the interconnection agreement within the 45-day period, the Interconnection Customer must

post the interconnection financial security before the close of the time period (i.e., by the 45th day).

### 11.1.8 Financial Security Posting Notification Guidelines

- “Multi-Participating TOs”—in some situations, 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 that portion the Network Upgrades identified in the interconnection studies which are attached to the Participating TO’s system. The first question arising in this situation is how to handle financial security posting requirements for Network Upgrades that extend to the two systems. As to the initial posting and the second 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.
- The third interconnection financial security instrument postings shall be made to each impacted Participating TO in proportion to the costs of the upgrades that each Participating TO is responsible for constructing.
- The CAISO shall provide notification of required posting amounts to each Interconnection Customer thirty (30) Calendar Days after the Phase I and Phase II study results meetings. Each Participating TO shall provide required posting amounts for each Interconnection Customer it has studied to the CAISO engineer assigned to each individual project for their review. The CAISO Interconnection Specialists will send to each Interconnection Customer notification of their required posting amount.
- 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.
- The CAISO Interconnection Specialists shall send one reminder email to each Interconnection Request 30 days prior to their financial security posting due date.
- Each Participating TO shall notify the CAISO of any monies they have received associated with an Engineering & Procurement (E&P) Agreement between the Participating TO and the Interconnection Customer within three (3) Business Days of receipt of such funds.

- 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.

#### **11.1.9 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 GIP. 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.

## Roles and Responsibilities

## Financial Security

Item	Action	Responsible Party	BD to Complete Task	Cumulative Calendar Days <sup>18</sup>
1	Phase I and Phase II study Results Meeting	CAISO/Participating TO	0	0
2	Participating TO provides project posting amounts in nominal dollars to ISO, including any Engineering & Procurement Agreement deposits received	Participating TO	15	19
3	CAISO reviews posting information and follows up with Participating TO if questions	CAISO	5	26
4	CAISO Interconnection Specialist sends Interconnection Customer 's posting requirements to Interconnection Customer	CAISO	2	30
5	CAISO Interconnection Specialist sends reminder email to each Interconnection Customer 30 Calendar Days prior to that Interconnection Customer's posting due date	CAISO	1	Ph-I - 60
				Ph-II - 150
6	Interconnection Customers required to submit Interconnection Financial Security postings with applicable Participating TO	Interconnection Customer	1	Ph-I – 90
				Ph-II - 180

<sup>18</sup> In calculating the number of Calendar Day for task completion under the listing above, holidays will not be counted, and will therefore increase the overall timeline.

### 11.1.10 Effect of Interconnection Request Withdrawal on Interconnection Financial Security

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.

**Generally** GIP Section 9.4 outlines the effect of an Interconnection Customer’s withdrawal (or deemed withdrawal) from the queue and/or termination of an executed interconnection agreement.

**As to Network Upgrades** In most cases, this results in the retention of all the financial security postings for the Network Upgrades, because all amounts are retained up to the total cost responsibility of the Interconnection Customer for the Network Upgrades.

**As to Participating TO’s Interconnection Facilities** The Interconnection Customer is responsible for amounts necessary to pay for costs incurred or irrevocably committed by the Participating TO for the Participating TO Interconnection Facilities for which the Participating TO has not been reimbursed. The remainder of any security is refundable to the Interconnection Customer.

~~**Partial Recovery Under Limited Conditions** Under certain limited circumstances prior to start of construction, the Interconnection Financial Security posting for Network Upgrades is subject to partial refund. There are four conditions where partial recovery is permitted, with the rationale that the situations generally considered to have occurred for reasons beyond the control of the Interconnection Customer. The four conditions are:~~

~~- 1) failure to secure a power purchase agreement after a good faith effort to do so;
- 2) failure to secure a necessary governmental permit to construct/operate the facility;
- 3) An increase in the cost of Participating TO’s Interconnection Facilities of more than 30% or \$300,000, whichever is greater from Phase I to Phase II (unless related to an IC request to modify the interconnection configuration);~~

~~[Note that for this condition to be triggered, the minimum dollar cost increase for these facilities must be \$300,000. If the dollar cost increase (the differential)~~



~~between Phase I and Phase II is greater than 30% but that increased dollar amount less than \$300,000, then the condition is not triggered];~~

~~or~~

- ~~4) A material change in Interconnection Customer's Interconnection Facilities created by CAISO change in the Point of Interconnection;~~

~~If one of the four conditions for partial recovery is triggered then the Interconnection Customer may receive a portion of its Network Upgrade Interconnection Financial Security. 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 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;~~

**Withdrawal in the early post Phase II timeframe.** If the withdrawal/termination occurs

- up until one hundred eighty (180) Calendar Days from issuance of the Final Phase II Interconnection Study report for Interconnection Customers in a Queue Cluster; or
- on or before one hundred twenty (120) Calendar Days after the CAISO issues the results of the Facilities Study for Interconnection Customers in the Independent Study,

then the reimbursement is:

- If Interconnection Financial Security has not yet been drawn upon--Any posted amount less 50% of the value of the posted Interconnection Financial Security for the Network Upgrades (with a maximum of \$10,000 per approved MW value of the Generating Facility at the time of the withdrawal); and
- If Interconnection Financial Security has been drawn down—the lesser of
  - i. the remaining balance or
  - ii. any posted amount less 50% of the value of the posted Interconnection Financial Security for the Network Upgrades (with a maximum of \$10,000 per approved MW value of the Generating Facility at the time of the withdrawal)

**Withdrawal/Termination in the later post Phase II timeframe.** If the withdrawal /termination occurs in time period between:

- one hundred eighty-one (181) Calendar Days after Final Phase II Study Report for Interconnection Customers in a Queue Cluster and start of construction; or
- one hundred twenty-one (121) Calendar Days after the CAISO issues the results of the Facilities Study for Interconnection Customers in the Independent Study and start of construction:

then the reimbursement is

- If Interconnection Financial Security has not yet been drawn upon--any posted amount less 50% of the value of the posted Interconnection Financial Security for the Network Upgrades (with a maximum of \$20,000 per MW of the requested and approved value of the Generating Facility Capacity at the time of the withdrawal); and
- If Interconnection Financial Security has been drawn down to finance Pre-Construction Activities for Network Upgrades—the lesser of
  - i. the remaining balance or
  - ii. the posted amount less 50% of the value of the posted Interconnection Financial Security for the Network Upgrades (with a maximum of \$20,000 per MW of the requested and approved value of the Generating Facility Capacity at the time of the withdrawal).

#### **11.1.11 Special Treatment Based on Failure to Obtain Necessary Permit or Authorization from Governmental Authority.**

If after having made the third posting requirement at the start of construction activities, the Interconnection Customer withdraws the Interconnection Request ~~or terminates the interconnection agreement for failure to secure a necessary permit (i.e. in accordance with GIP Section 9.4.1(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 Interconnection Customer's amount of refundable security shall be calculated as though the Interconnection Customer had withdrawn/terminated in the early post Phase II timeframe regardless of whether it withdrew/terminated in the later post Phase II time frame (except that the customer shall not be reimbursed for its share of any actual costs incurred (or irrevocably committed) by the Participating TO for

Construction Activities).<sup>19</sup> As a practical matter, this permits partial return of the security postings and provides that the unreturned or “forfeited” amount will be retained as if the Interconnection Customer had withdrawn on or before the 180<sup>th</sup> day after receiving its Phase II Interconnection Study report.

#### **11.1.12 Notification to CAISO and Accounting by Applicable Participating TO(s)**

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 GIP Section 9.4 and GIP BPM 11.1.6 all non-refundable portions of the Interconnection Financial Security remitted to the CAISO in accordance with GIP Section 9.4 and GIP BPM 11.1.6 shall be treated in accordance with CAISO Tariff Section 37.9.4.

### **11.2. Repayment**

#### **11.2.1 Repayment of Amounts Advanced for Network Upgrades and Refund of Interconnection Financial Security**

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 in accordance with its cost responsibility assigned under GIP Sections 7.3 and 7.4. Such 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.

Any phased or non-phased repayment pursuant to this GIP BPM Section 11.2.1 and GIP Section 12.3.2.3 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

<sup>19</sup> GIP Section 9.4.2.4

a repayment of such payment. The Interconnection Customer may assign such repayment rights to any person.

Instead of direct payments, the Interconnection Customer may elect to receive Merchant Transmission Congestion Revenue Rights (CRRs) in accordance with the CAISO Tariff Section 36.11 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, which shall be the Commercial Operation Date of the Generating Facility, in accordance with the GIA.

### 11.2.2 Repayment of Amounts Advanced Regarding Phased Generating Facilities

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 contribution to the cost of Network Upgrades for that completed phase in accordance with the Interconnection Customer's cost responsibility assigned for the phase under GIP Sections 7.3 and 7.4 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 cost responsibility 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 that have been placed into service associated with the completed Generating Facility 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 electrical output (MW 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 GIP Section 12.3.2.2. 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 Section 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. Repayment should begin after both the transmission upgrades are in service and the Generating Facility achieves its Commercial Operation Date. Accordingly, repayment begins when the Generating Facility phase achieves its Commercial Operation Date and the sequence of network upgrades associated with that phase as specified in the LGIA that goes in service.

## 12. Withdrawals

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 GIP Section 3.5.2 and GIP BPM Section 4.4, if the Interconnection Customer fails to adhere to all requirements of the GIP, except as provided in GIP Section 13.5 (Disputes) or GIP BPM Section 17.0, the CAISO shall deem the Interconnection Request to be withdrawn. 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. similar to "re-inserted") in the study cycle.

In the event of such withdrawal, the CAISO, subject to the provisions of GIP Sections 13.1 and 3.5.1.1, shall provide, at the Interconnection Customer's request, all information that the CAISO developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

## 13. Additional Deliverability Assessment Options

### 13.1. One-Time Full Capacity Deliverability Option

The Cluster Application Window for this option closed on March 31, 2011 and this option is no longer available. (See GIP Section 8.1)

## 13.2. Annual Full Capacity Deliverability Option

### 13.2.1 Eligible Facilities

A Generating Facility previously studied as Energy-Only Deliverability Status under the CAISO Tariff, or a Small Generating Facility studied under the provisions of Appendix S of the CAISO Tariff will have an annual option to be studied to determine whether it can be designated for Full Capacity Deliverability Status using available transmission capacity. An Interconnection Customer may not submit a request in a Queue Cluster Window and a request under the Annual Deliverability process in the same window. The CAISO will also accept applications with respect to a Generating Facility that was previously studied as Partial Capacity Deliverability Status. An Interconnection Customer must make such a request within a Cluster Application Window. Generating Facilities applying for the Annual Full Capacity Deliverability Option in Cluster Application Window six and beyond are governed by the GIDAP (CAISO Tariff Appendix DD). Requests submitted during the Cluster 6, Queue Cluster Application Window are governed by GIDAP Section 9.2 [*Annual Full Capacity Deliverability Option*]. Under GIDAP, the Cluster Application Window has been adjusted so that it is now April 1 to April 30 of each calendar year. Studies for Generating Facilities applying for the Annual Full Capacity Deliverability Option will be performed following the completion of the Phase II study process for the Application Window the project applied in, and following the Full Capacity Deliverability allocation process for applications received in Application Windows for Cluster six and later. If a Generating Facility receives Full Capacity Deliverability Status for all or a portion of its Generating Facility's capacity under the Annual Full Capacity Deliverability Option it retains the FCDS for the term of its GIA, subject to Resource Adequacy rules regarding Net Qualifying Capacity.

### 13.2.2 Study Timeline (through Queue Cluster 4)

The study timeline applies up to the fourth Queue Cluster. As stated in Section 13.2.2 above, the annual option is thereafter governed by GIDAP Section 9.2 and the timelines set out in GIDAP Section 9.2 and other applicable sections of the GIDAP. Any Interconnection Customer selecting this option will be studied immediately following the Phase II Interconnection Studies associated with the Queue Cluster during which the Interconnection Customer submits its request, typically January through August annually.

### 13.2.3 Interconnection Request and Study Fee

Interconnection Customers that wish to participate in this annual process must submit an Interconnection Request as set forth in Appendix 1 to the GIP along with a non-refundable \$10,000 study fee.

### 13.2.4 Annual Full Capacity Deliverability Studies

After allocating transmission system capability, including capability associated with both existing capability and capability relating to approved transmission upgrades, to Interconnection Customers in the Queue Cluster who originally requested Full or Partial Capacity Deliverability Status in the Phase II Interconnection Study, the CAISO will perform additional studies using the deliverability study procedures set forth in GIP Section 6.5.2 and GIP BPM Section 6.1.4.3 to determine the availability of any remaining transmission system capability for those Interconnection Customers requesting Full Capacity Deliverability Status as part of the annual process described in GIP Section 8.2 and GIP BPM Section 13.

#### 13.2.4.1 Priority Parameters

In determining available transmission capability, priority will be given to Interconnection Customers whose Generating Facilities have the lowest transfer distribution factors, calculated according to the deliverability study procedures set forth in GIP Section 6.5.2 and GIP BPM Section 6.1.4.3.

#### 13.2.4.2 Full Capacity Deliverability Status

If there is sufficient available transmission capability for the Interconnection Customer to achieve Full Capacity Deliverability Status, then the Interconnection Customer's Generating Facility will be considered to have such status. In such case FCDS for all of its Generating Facility's capacity under the Annual Full Capacity Deliverability Option is retained for the term of its GIA, subject to Resource Adequacy rules regarding Net Qualifying Capacity.

#### 13.2.4.3 Partial Capacity Deliverability Status

If the assessment of available transmission capability conducted under GIP BPM Section 13.2.4 indicates that there is some transmission capacity available for use by the Interconnection Customer, but less than is necessary to achieve Full Capacity Deliverability Status for the Interconnection Customer's Generating Facility, then the Interconnection Customer's Generating Facility will be considered to be partially deliverable, and the amount of transmission capability associated with that Interconnection Customer's Generating Facility will be equal to the determination of available transmission capability for the Generating Facility rounded down to the nearest 50 MW increment. In such case Partial Capacity Deliverability Status of its Generating Facility's capacity under the Annual Full Capacity Deliverability Option is retained for the term of its GIA, subject to Resource Adequacy rules regarding Net Qualifying Capacity.



### 13.3. Deliverability for Generators Interconnection to Non-Participating TO Facilities inside the CAISO Balancing Authority Area

The paradigm of the GIP is generator interconnection *directly* to the CAISO Controlled Grid. However, in the GIP Phase 2 stakeholder process which took place in 2011, the CAISO and stakeholders recognized a slightly different situation: one in which a generating facility sponsor wishes to:

- (i) interconnect generation to the transmission facilities of a non-Participating Transmission Owner entity which is located *inside the CAISO Balancing Authority Area*; and
- (ii) also desires to obtain *Full Capacity Deliverability Status* for the purpose of providing Resource Adequacy capacity to a CAISO load serving entity.

To accommodate this situation, the GIP Phase 2 amendment, accepted January 30, 2012 added a new Section 8.4 to the GIP, to provide the CAISO with authority similar to that which the CAISO already has to study projects for Full Capacity Deliverability Status to the CAISO's system when those projects interconnect *under a Participating Transmission Owner's tariff* (such as a wholesale distribution access tariff) that provides the option for Full Capacity Deliverability Status.

Including this provision in the CAISO Tariff provides benefits to the entire market because it gives generation developers greater flexibility in choosing their points of interconnection in the CAISO's Balancing Authority Area, which makes those Generating Facilities more economically viable and ultimately leads to the deployment of a greater amount of capacity to serve load on the CAISO system and fulfill state Renewable Portfolio Standards policy goals.

GIP Section 8.4 sets forth a process for 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 under the CAISO Tariff. Under GIP Section 8.4, the CAISO will study these Generating Facilities for Full Capacity Deliverability Status under the following provisions:

- (a) The Generating Facility must submit an Interconnection Request to the CAISO to have the CAISO study the project for Full Capacity Deliverability Status. The 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, but will not be considered an Interconnection Customer under the CAISO Tariff.

- (b) The Non-Participating TO that serves as the interconnection provider to the Generating Facility must treat the CAISO as an Affected System in its 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 customers 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 Capacity Deliverability Status under the CAISO Tariff.
- (d) If the Generating Facility is eligible for study for Full 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, as set forth in the GIP, the Generating Facility will be allocated its share of any applicable Delivery Network Upgrades.
- (e) The CAISO, Interconnection Customer and Participating TO will 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 each such Interconnection Customer under the non-Participating TO's tariff.
- (f) The Non-PTO interconnection customer will receive repayment of funds posted for the construction of the Delivery Network Upgrades on the CAISO Controlled Grid in the same manner as CAISO Interconnection Customers as specified in CAISO GIP Section 12.3.2.

#### 13.4. PTO Tariff Option for Full Capacity Deliverability Status

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

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Upgrades relating to any deliverability status conferred to such customers under the Participating TO's tariff.

## 14. Engineering and Procurement Agreement

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 GIP. 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.

## 15. Generator Interconnection Agreement

### 15.1. General

The draft GIA shall be in the form of the FERC-approved form of GIA set forth in CAISO Tariff Appendix T or Appendix CC, as applicable.

## 15.2. GIA Timeline

GIP Section 11.2 and GIP BPM Section 15.2 provide no more than ninety (120) calendar days after CAISO issues a final Phase II Interconnection Study report or a Facility Study report (or System Impact Study report if the Facilities Study is waived) for negotiation of the GIA, unless otherwise agreed by the Parties. The sections provide for the following timeline:

- a. The Participating TO, together with the CAISO, issues draft GIA, with draft appendices, to Interconnection Customer for review and comment within thirty (30) Calendar Days after CAISO issues the final Phase II Interconnection Study report or the Facilities Study report (or System Impact Study report if the Facilities Study is waived) to the Interconnection Customer (this is known under the GIP as “tendering” of the GIA);
- b. Within thirty (30) Calendar Days after the Interconnection Customer receives the draft GIA, the Interconnection Customer must review it and provide to the applicable Participating TO and CAISO either the Interconnection Customer’s comments or a notification that it has no comments to draft GIA Appendices. (Note that because the GIA itself is a pro forma, alteration of the GIA terms renders the document non-conforming; in general, only unique circumstances warrant alteration of the pro forma terms and such departure must be justified and equal or superior to the pro forma terms) ;
- c. Notwithstanding formal tender and response, parties begin negotiation of appendices to the GIA at any time after the CAISO issues the Interconnection Customer with the final Phase II Interconnection Study report, or the Facilities Study report (or System Impact Study report if the Facilities Study is waived)(GIP Section 11.2 or this GIP BPM section);
- d. Within one hundred twenty (120) Calendar Days of tendering the GIA, the parties should complete negotiating any disputed provisions of the appendices to the draft GIA, unless otherwise agreed by the parties;
- e. If, within one hundred twenty (120) Calendar Days (or the parties’ agreed upon further time for completion) after issuance of the final Phase II Interconnection Study report, or the Interconnection Facilities Study report (or Interconnection System Impact Study report if the Facilities Study is waived), the Interconnection Customer has not executed and returned the GIA; requested filing of an unexecuted GIA; or initiated Dispute Resolution under GIP Section 13.5 and GIP BPM Section 17.0, the Interconnection Customer shall be deemed to have withdrawn its Interconnection Request;

- f. Within fifteen (15) Business Days after completion of the negotiation process - The Participating TO and CAISO shall provide to the Interconnection Customer a final GIA for execution;
- g. 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;
- h. Upon CAISO confirmation that the Interconnection Customer has satisfied the requirements listed above, the CAISO proceeds further with the execution process; and;
- i. If applicable, not later than ten (10) Business Days after receiving either the executed originals of the tendered GIA or the request to file an unexecuted GIA, the applicable Participating TO(s) and CAISO shall file the GIA with FERC.

### 15.3. Commencement of Interconnection Activities

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

### 15.4. Interconnection Customer to Meet Participating TO Handbook Requirements

The Interconnection Customer's Interconnection Facilities shall be designed, constructed, operated and maintained in accordance with the applicable Participating TO's Interconnection Handbook<sup>20</sup>. If the Participating TO's Interconnection Handbook is in conflict with the GIA the GIA governs.<sup>21</sup>

<sup>20</sup> GIP Section 11.5

<sup>21</sup> See Definition of Interconnection Handbook in the LGIA (CAISO Tariff App CC, Article 1, Definitions).

## 16. Confidentiality

Confidential Information includes, without limitation, all information relating to a Party's technology, research and development, business affairs, and pricing.

Confidential Information must be 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 Section 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.

The confidentiality provisions of GIP Section 13.1 and this GIP BPM Section 16.0 are limited to information provided pursuant to GIP Section 13.1 and this GIP BPM Section 16.0.

### 16.1. Scope

Confidential Information does 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; (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 GIP Section 13.1.6 and GIP BPM Section 16.6, 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 GIP. 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.

### 16.2. Release of Confidential Information

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 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 GIP Section 13.1 and GIP BPM Section 16.0 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 GIP Section 13.1 and GIP BPM Section 16.6.

### 16.3. Rights

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.

### 16.4. No Warranties

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.

### 16.5. Standard of Care

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.

### 16.6. Order of Disclosure

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 the GIP. 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.

## 16.7. Remedies

Monetary damages are inadequate to compensate a Party for another Party's breach of its obligations under GIP Section 13.1 and GIP BPM Section 16.0. 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 GIP Section 13.1 and GIP BPM Section 16.0, 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 GIP Section 13.1 and GIP BPM Section 16.0 but shall be in addition to all other 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 GIP Section 13.1 and GIP BPM Section 16.0.

## 16.8. Disclosure to FERC, its Staff, or a State

Notwithstanding anything in GIP Section 13.1 and GIP BPM Section 16.0 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 pursuant to the GIP, 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.

## 16.9. Disclosure to Others

Subject to the exception in GIP Section 13.1.8 and GIP BPM Section 16.8, 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 GIP or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to an RTO or CAISO or to a subregional, 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 Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

## 16.10. Disclosure of Information Already In Public Domain

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).

## 16.11. Disbursement of Interconnection Customer Confidential Information

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.

# 17. Disputes

## 17.1. Disputes

If an Interconnection Customer disputes withdrawal of its Interconnection Request under GIP Section 3.8 or GIP BPM Section 12.0, the CAISO will forward any information regarding the disputed withdrawal received under GIP Section 3.8 and GIP BPM Section 12.0 within one (1) Business Day to the GIP Executive Dispute Committee, consisting of the Vice President responsible for administration of GIP, the CAISO Vice President responsible for customer affairs, and an additional Vice President. The GIP Executive Dispute Committee shall have five (5) Business Days to determine whether or not to restore the Interconnection Request. If the GIP 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.

All disputes, other than those arising from GIP Section 3.8 and GIP BPM Section 12.0, arising out of or in connection with the GIP 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 GIP not subject to the CAISO ADR Procedures shall be resolved as follows:

## 17.2. Submission

In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with the GIA, the GIP, 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 the GIP.

## 17.3. External Arbitration Procedures

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 GIP Section 13.5 and GIP BPM Section 17.0, the terms of GIP Section 13.5 and GIP BPM Section 17.0 shall prevail over the Arbitration Rules.

## 17.4. Arbitration Decisions

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 the GIP and shall have no power to modify or change any provision of the GIA and the GIP in any manner.

The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award maybe 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.

## 17.5. Costs

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.

## 18. Coordination with Affected Systems

### 18.1. 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.

### 18.2. 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 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 GIP 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.

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 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 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 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 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>22</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

<sup>22</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.

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 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.

### 18.3. Study Process and Affected System Contact Documentation

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.

## 19. CAISO Controlled Grid as an Affected System

### 19.1. 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.



## 19.2. 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.

## 19.3. 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.

## 20. Delegation of Responsibility

The CAISO and the Participating TOs may use the services of subcontractors as deemed appropriate to perform their obligations under the GIP. 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 GIP. 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.

## 21. Local Furnishing Bonds

### 21.1. Participating TOs That Own Facilities Financed by Local Furnishing Bonds

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 the GIP, the Participating TO, and the CAISO shall not be required to provide Interconnection Service to the Interconnection Customer pursuant to the GIP 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.

### 21.2. Alternative Procedures for Requesting Interconnection Service

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 (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 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 the GIP and the GIA.

## 22. Change In CAISO Operational Control

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.

If control is passed from another Participating TO to the CAISO during the study stage, and the other Participating TO agreed, the CAISO would likely accept the remaining deposits and study work in progress. However, since the other Participating TO may not have done a cluster study, the Interconnection Customer may have to pay for a the CAISO to perform a portion of the work that overlaps with some of the work earlier performed by the other Participating TO if not all of prior Participating TO study work is usable under the cluster study process or if additional or supplemental work is necessary to “round out” the requirements for Interconnection Studies under CAISO Tariff Sections 6 and/or 7..

## 23. Participating TO’s Interconnection Facilities and Network Upgrades

### 23.1. Schedule

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.

### 23.2. Construction Sequencing

#### 23.2.1 General

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.

### 23.2.2 Construction of Network Upgrades that are or were an Obligation of an Entity other than the Interconnection Customer

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 under the GIP, whenever either:

- (i) 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, but 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 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, but 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).

The obligation under GIP Section 12.2.2 and GIP BPM Section 22.2.2 arises only after the ISO, 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.

If an Interconnection Customer withdraws following the Phase II Interconnection Study and some portion of the Network Upgrades are no longer needed and can be backed out of the method of service, then the Participating TO and the CAISO will reevaluate the Network Upgrade requirements.

In this evaluation, it may still be necessary to include those Network Upgrades which are needed for subsequent clusters (subsequent to the queue cluster in which the withdrawing customer is situated). In such a situation, the components of the Network Upgrades which are still needed would have been part of the base case on which the subsequent queue cluster was built—in other words, the “needed upgrades” are still needed because they were assumed to exist in the study in which the Network

Upgrades were identified for in the subsequent cluster (i.e. the cluster subsequent to the withdrawing customer's queue cluster). To the extent that the "still needed" Network Upgrades assigned to the withdrawing customer are not covered by that customer's financial security, the cost of the "still needed" upgrades are "picked up" by the Participating TO.<sup>23</sup>

Further, to the extent the timing of such Network Upgrades was not accounted for in determining a reasonable Commercial Operation Date among the ISO, 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 under GIP Section 12.2.2 and GIP BPM Section 22.2.2 shall be in addition to the Interconnection Customer's cost responsibility assigned under GIP Section 6.5 and GIP BPM Sections 6.1.4.3 and 6.1.4.4.

### 23.2.3 Advancing Construction of Network Upgrades that are Part of the ISO's Transmission Plan

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 In-Service Date and (ii) would otherwise not be completed, pursuant to an approved CAISO Transmission Plan covering the Participating TO 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 GIP and the GIA, for any expediting costs paid.

<sup>23</sup> There is a caveat to this rule that "the Participating TO picks up the delta:" To the extent that a transmission asset no longer needed by a de-scoping of the cluster in which the withdrawing customer is situated, but now can be said to be "triggered" by the subsequent cluster and the expense of that transmission asset is still within the "cost cap" of the subsequent queue cluster, the transmission asset and its cost can be "assigned" to the subsequent cluster. (see GIP Sections 12.3.1 (b) and (c) and GIP BPM Section 23.1, below.)

## 23.3. Network Upgrades

### 23.3.1 Initial Funding

Unless the applicable Participating TO(s) elects to fund the full capital for identified Reliability and Delivery Network Upgrades, they 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 a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s) under GIP Section 7.3 and GIP BPM Section 6.1.4.8 or under GIP Section 7.4 and BPM Sections 6.1.4.9.

Where the applicable Participating TO(s) does not elect to fund the full capital for specific Reliability and Delivery Network Upgrades, the applicable Participating TO(s) shall be responsible for funding any capital costs for the Reliability and Delivery Network Upgrades that exceed the total cost responsibility assigned to the Interconnection Customer(s) under GIP Section 7.3 and GIP BPM Section 6.1.4.8 or under GIP Section 7.4 and BPM Sections 6.1.4.9.

- (a) Where the funding responsibility for any Reliability Network Upgrade or Delivery Network Upgrade has been assigned to a single Interconnection Customer in accordance with the GIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Reliability Network Upgrade or Delivery Network Upgrade, the applicable Participating TO(s) shall invoice the Interconnection Customer under LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, up to a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s) under GIP Section 7.3 and GIP BPM Section 6.1.4.8 or under GIP Section 7.4 and BPM Sections 6.1.4.9 for the Reliability Network Upgrade or Delivery Network Upgrade, respectively.<sup>24</sup>
- (b) Where the funding responsibility for a Reliability Network Upgrade has been assigned to more than one Interconnection Customer in accordance with the GIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Reliability Network Upgrade, 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 Reliability Network Upgrade based on the ratio of the maximum megawatt electrical output of each new Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed the Generating Facility's Interconnection Request to the aggregate maximum megawatt electrical output of all such new Generating Facilities and increases in the

<sup>24</sup> GIP Section 12.3.1 (a)

generating capacity of existing Generating Facilities assigned responsibility for such Reliability Network Upgrade. Each Interconnection Customer may be invoiced up to a maximum amount no greater than that established by the cost responsibility assigned to that Interconnection Customer under GIP Section 7.3 and GIP BPM Section 6.1.4.8.<sup>25</sup>

- (c) Where the funding responsibility for a Delivery Network Upgrade has been assigned to more than one Interconnection Customer in accordance with the GIP, and the applicable Participating TO(s) has elected not to fund the full capital of the Delivery Network Upgrade, 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 Delivery Network Upgrade based on the percentage flow impact of each assigned Generating Facility on each Delivery Network Upgrade as determined by the Generation distribution factor methodology used in the On-Peak and Off-Peak Deliverability Assessments performed in the Phase II Interconnection Study. Each Interconnection Customer may be invoiced up to a maximum amount no greater than that established by the cost responsibility assigned to that Interconnection Customer under GIP Section 7.4 and GIP BPM Section 6.1.4.9.<sup>26</sup>

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 Upgrades.

### 23.3.2 Repayment of Amounts Advanced for Network Upgrades and Refund of Interconnection Financial Security

See GIP BPM Section 11.2.1.

<sup>25</sup> GIP Section 12.3.1 (b)

<sup>26</sup> GIP Section 12.3.1 (c)

**TABLE 1**  
**Listing of GIP Appendices**

<b>Appendix Number</b>	<b>Description</b>	<b>Further Description</b>	<b>GIP BPM Reference Sections</b>	<b>GIP Reference Section</b>
1	<b>Interconnection Request</b>	Attachment A Generating Facility Data	4.2, 6.1.2, 6.2.3, 6.3 (c.)(i), 13.2.3, Attachment 1	3.1, 3.5.1 (ii), 4.3, 5.1 (i), 6.2, 8.2.3, Appendix 1, Attachment A to Appendix 1
2	<b>Generator Interconnection Procedures (GIP)</b>  <b>Relating to the Transition Cluster</b>			2.1, Appendix 2, Appendix 4-Attachment A
3	<b>Generator Interconnection Study Process Agreement for Queue Clusters</b>	Appendix A Assumptions in Phase I Interconnection Study  Appendix B Data Form, Pre-Phase II Interconnection Study	6.1.1, 6.1.1.7, Attachment 1	6.1, Appendix 3



4	<b>Agreement for Allocating GIP and Study Responsibilities</b>	Attachment A Interconnection Study Responsibility Allocation  Attachment B Contacts for Notices	6.1.4.2, 6.1.5.2	3.2, Appendix 4
5	<b>Schedule for Release and Review of Per Unit Costs</b>		6.1.4.6	6.6, Appendix 5
6	<b>Generator Interconnection Study Process Agreement for Independent Study Process</b>	Appendix A Assumptions in System Impact Study  Appendix B Data Form,	6.2.3	4.3, Appendix 6

		Pre-Facilities Study		
7	<b>Application, Procedures &amp; Terms for 10 kW Inverter Process</b>		4.2, 6.4 (a.)	6.0, 7.0, Appendix 7
8	<b>Transition of Existing SGIP Interconnection Requests to the GIP</b>			Appendix 8
9	<b>Certification Codes and Standards</b>			Appendix 9
10	<b>Certification of Small Generator Equipment Packages</b>			Appendix 10

## Attachment 1

### Generator Interconnection Procedures (GIP)

#### Cluster Process Timeline

##### LEGEND:

xxxx -- GIP (Appendix Y) Section Reference

**IC** -- Interconnection Customer Role and Responsibility

**CAISO** -- California Independent System Operator Role and Responsibility

**PTO** -- Participating TO Role and Responsibility

**xxxx** -- Affected System Operator Role and Responsibility

**xxxx** -- Withdrawal or termination activity

#### Timing for Interconnection Request

- **IC** submits Interconnection Request with all required materials during one of the following two Cluster Application Windows (3.3.1.);
- the first Cluster Application Window opens October 15th and closes on November 15<sup>th</sup>; and
- the second Cluster Application Window opens March 1st and closes on March 31st (3.3.1.).

*Note: This Generator Interconnection Procedures (GIP) relates only to Cluster Studies. Fast Track, 10 kW Inverter, and the Independent Study Processes have different timelines.*

#### Initiating an Interconnection Request (3.5.1)

- **IC** submits Interconnection Request (IR) application in form of GIP Appendix 1;

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- **IC** submits Interconnection Study Deposit equal to \$50,000 plus \$1,000 per MW subject to a maximum of \$250,000.
- **IC** demonstrates Site Exclusivity or posts a Site Exclusivity Deposit of \$100,000 for Small Generating Facility, or \$250,000 for a Large Generating Facility.

**Note:** the proposed Commercial Operation Date (COD) listed in the Interconnection Request for a new generator or for an increase in capacity with an existing generator cannot exceed seven (7) years from the date the Interconnection Request is received by the **CAISO** unless the Interconnection Customer (**IC**) demonstrates, and **Participating Transmission Owner (PTO)** and **CAISO** agree with, the reasons for a later date (3.5.1.4.).

### Validating the Interconnection Request (3.5.2.):

- **Within one (1) Business Day** of Interconnection Request receipt (internal rule), **CAISO** Grid Assets scans all documents to create an electronic file, and forwards such documents to **CAISO** internal clients;
- **Within five (5) Business Days** of Interconnection Request receipt, **CAISO** forwards copy of the IR to the applicable **PTO** and **Affected System Operators** (3.1);

**Note:** **CAISO** notifies the potentially, impacted **Affected System Operators** of the Interconnection Request and includes them in all meetings related to the Interconnection Request (3.7).

- **Within ten (10) Business Days** of Interconnection Request receipt **CAISO** notifies **IC** whether or not the Interconnection Request is deemed complete, valid, and ready to be studied (3.5.2.1.)
- **No later than within twenty (20) Business Days** after the close of the applicable Cluster Application Window or **ten (10) Business Days** after the **CAISO** first provided notice that the IR was not valid, whichever is later, the **IC** must respond and correct IR deficiencies (3.5.2.2.). *If the **IC** fails to cure the deficiency, the Interconnection Request is not included in the Interconnection Study Cycle; and*
- **Within thirty (30) Calendar Days** of the close of a Cluster Application Window, **CAISO** provides the **IC** with a valid Interconnection Request a *pro forma* Generator Interconnection Study Process Agreement (Appendix 3) (6.1).

### Withdrawn Interconnection Requests (3.8)

- An **IC** can withdraw its Interconnection Request at any time by written notice to the **CAISO**, and **CAISO** notifies the applicable **PTO** and **Affected System Operators** **within three (3) Business Days of receipt of such written notice**;
- If the **IC** fails to adhere to all requirements of GIP except as provided in Section 13.5 (Dispute), the **CAISO** shall deem the IR to be withdrawn and provides written notice to the **IC within five (5) Business Days** of the deemed withdrawal and includes the reasons for the deemed withdrawal; and
- Withdrawal shall result in the removal of the Interconnection Request from the Interconnection Study Cycle, if the **IC** disputes withdrawal and removal from the Interconnection Study Cycle and elects to pursue Dispute Resolution, the Interconnection Request will not be considered in any ongoing Interconnection Study Cycle during the Dispute Resolution process.

### Scoping Meeting (6.2):

- **Within five (5) Business Days** after the **CAISO** notifies the **IC** the Interconnection Request is complete, valid, and ready for study, CAISO schedules a Scoping Meeting. *All scoping meetings occur within **sixty (60) Calendar Days** after the close of a Cluster Application Window unless otherwise mutually agreed upon by the Parties (6.2)*;

**Note:** *subsequent to the Scoping Meeting, the **CAISO** provides the meeting minutes to all attendees to confirm accuracy thereof.*

- **Within three (3) Business Days** following the Scoping Meeting, **IC** specifies for inclusion in the attachment to the Generator Interconnection Study Process Agreement the POI (point of interconnection) for Phase I Interconnection Study (6.1);
- **Within ten (10) Business Days** following the **CAISO's** receipt of POI confirmation, **CAISO**, in coordination with the **PTO** and in control of the signatory process, provides the **IC** a signed Generator Interconnection Study Process Agreement (6.1); and
- **Within thirty (30) Calendar Days** after the Scoping Meeting, the **IC** executes and delivers to the **CAISO** the Generator Interconnection Study Process Agreement (6.1).

# Refund of Interconnection Study Deposit for Withdrawn Interconnection Requests (3.5.1.1.)

- If an Interconnection Request is withdrawn by the IC or deemed withdrawn by CAISO under GIP Section 3.8:
  - On or before thirty (30) Calendar Days (a) following the Scoping Meeting, CAISO refunds the Interconnection Study Deposit, including interest, that exceeds the costs incurred by CAISO, PTOs, and third parties on behalf of the IC; and
  - 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 for the Results Meeting if the IC elected not to have the Results Meeting, the CAISO refunds to the IC the difference between (i) the IC's Interconnection Study Deposit and (ii) the greater of the costs the CAISO & PTOs incurred on the IC's behalf or 1/2 of the original Interconnection Study Deposit up to a maximum of \$100,000 (3.5.1.1(b)).

## Phase I Interconnection Study (6.8):

- CAISO shall use Reasonable Efforts to start the first Cluster Application Window Phase I Interconnection Study(ies) by June 1<sup>st</sup> of each year, and complete, and issue to IC the Phase I Interconnection Study report within one-hundred thirty-four (134) Calendar Days of when Phase I Interconnection Study starts. If CAISO cannot meet this date, it will then provide an explanation and new estimated time of arrival of the study report to the IC (6.8).

## Phase I Interconnection Study Results Meeting (6.9):

- Within thirty (30) Calendar Days of issuing the Phase I Interconnection Study report to the IC and the applicable PTOs (if applicable) the CAISO and IC hold a Results Meeting to discuss the results of the Phase I Interconnection Study report (6.9);
 

*Note: subsequent to the Study Results Meeting, the CAISO provides the meeting minutes to all attendees for confirming its accuracy.*
- Within five (5) Business Days following the Phase I Interconnection Study Results Meeting, IC may submit to the CAISO in writing any modifications to the information provided in the IR (6.9.2.2.); and

- **Within one (1) Business Day** following **CAISO** receipt of modifications from the **IC**, **CAISO** forwards the **IC's** modifications to the applicable **PTO** (6.9.2.2.).

## Withdrawn Interconnection Requests

- If an Interconnection Request is withdrawn by the **IC** or deemed withdrawn by **CAISO** under GIP 3.8:
- **More than thirty (30) Calendar Days** following the Scoping Meeting, but **on or before thirty (30) Calendar Days** following the Results Meeting, **CAISO** refunds the **IC's** Interconnection Study Deposit, minus the costs incurred by **CAISO**, **PTOs**, and third parties, or one-half the original deposit up to a maximum of \$100,000 including interest (3.5.1.1.).
- **More than thirty (30) Calendar Days** following the Results Meeting, the **IC's** Interconnection Study Deposit is non-refundable (3.5.1.1.).

## Initial Posting of Interconnection Financial Security (9.2.):

- **IC** posts the initial Interconnection Financial Security **on or before ninety (90) Calendar Days** after the **CAISO** issues the final Phase I Interconnection Study report in an amount equal to:
  - **For Small Generating Facility**, the lesser of fifteen percent (15%) of the total cost responsibility assigned to the **IC** for Network Upgrades or \$20,000 per MW electrical output of a Small Generating Facility or MW increase in generating capacity of an existing Generating Facility, but in no event less than \$50,000; or
  - **For Large Generating Facility**, the lesser of (i) fifteen percent (15%) of the total cost responsibility assigned to the **IC** for Network Upgrades, or (ii) \$20,000 per MW of electrical output of a Large Generating Facility or MW increase in generating capacity of an existing Generating Facility, or (iii) \$7,500,000, but in no event less than \$500,000 (9.2.3.).
- **IC** posts the initial Interconnection Financial Security **on or before ninety (90) Calendar Days** after the **CAISO** issues the final Phase I Interconnection Study report in an amount equal to:
  - **For Small Generating Facility**, the lesser of fifteen percent (15%) of the total cost responsibility assigned to the **IC** for Participating TO's Interconnection Facilities or \$20,000 per MW electrical output of a Small Generating Facility or

MW increase in generating capacity of an existing Generating Facility, but in no event less than \$50,000; or

- **For Large Generating Facility**, the lesser of (i) fifteen percent (15%) of the total cost responsibility assigned to the **IC** for PTOs Interconnection Facilities, or (ii) \$20,000 per MW of electrical output of a Large Generating Facility or MW increase in generating capacity of an existing Generating Facility, or (iii) \$7,500,000, but in no event less than \$500,000 (9.2.4.).

### Withdrawn Interconnection Requests (9.2.5.)

- On or before ninety (90) Calendar Days after the **CAISO** issues the final Phase I Interconnection Study report, if **IC** fails to post the initial Interconnection Financial Security instrument, the Interconnection Request is deemed withdrawn.

### Phase II Interconnection Study (7.0):

- **Within five (5) Business Days** following the Phase I Interconnection Study Results Meeting, the **IC** submits to the **CAISO** the completed form of Appendix B to the Generator Interconnection Study Process Agreement to either (i) confirm the desired deliverability status or (ii) change the deliverability status from Full Capacity Deliverability Status to Energy-Only Deliverability Status (7.1.);
- **On January 15<sup>th</sup>**, subject to using Reasonable Efforts, **CAISO** shall commence Phase II Interconnection Study, and **CAISO** completes and issues Interconnection Study report to the **ICs** within **one hundred ninety-six (196) Calendar Days** following start of Phase II Interconnection Study (7.5.). *If **CAISO** cannot meet this date, then **CAISO** will then provide an explanation and new estimated time of arrival of the study report to the **IC**.*
- **Within thirty (30) Calendar Days** of issuing final Phase II Interconnection Study report to the **IC**, **CAISO**, the applicable **PTO**, and the **IC** meet to discuss the results, including selection of the final Commercial Operation Date (7.7.).

### Accelerated Phase II Interconnection Study Process (7.6):

- Phase II Interconnection Study shall be completed **within one hundred fifty (150) Calendar Days** following the posting of the initial Interconnection Financial Security posting if the IC meets the following criteria



- the IR was not grouped with other IRs during the Phase I Interconnection Study or was identified as interconnecting to a point of available transmission in the Phase I Interconnection Study; and
- the **IC** demonstrates the general Phase II Interconnection Study timeline is not sufficient to accommodate the COD for the Large Generating Facility.

## GIA Negotiation (11.2.)

- **Within one hundred twenty (120) Calendar Days** of issuing final Phase II Interconnection Study report to the **IC**, if **IC** requests termination of negotiations but fails to request either the filing of the unexecuted Generator Interconnection Agreement (GIA) or initiate Dispute Resolution procedures, the **IC** is deemed to have withdrawn its Interconnection Request unless otherwise agreed upon by the Parties.

## One-Time Full Capacity Deliverability Option

- In the Cluster Application Window of **March 1<sup>st</sup> to the 31<sup>st</sup>, 2011**, a Large Generating Facility previously studied as Energy-Only Deliverability Status, or a Small Generating Facility previously studied under Appendix S of the CAISO Tariff have a one-time option to be studied for Full Capacity Deliverability Status (8.1.1. & 8.1.2.).

## Second Posting of Interconnection Financial Security

- On or before one hundred eighty (180) Calendar Days after issuance of the final Phase II Interconnection Study report for the **IC** in a Queue Cluster, the **IC** provides Interconnection Financial Security for the second posting:
  - For Network Upgrades the **IC** for Small Generating Facility shall post Interconnection Financial Security instrument in the amount equaling the lesser of (i) \$1,000,000, or (ii) thirty percent (30%) of the total cost responsibility assigned in Phase I or Phase II Interconnection Study(ies), whichever is lower. *In no event the total amount posted be less than \$100,000 (9.3.1.2.);*
  - For Network Upgrades the **IC** for Large Generating Facility shall post Interconnection Financial Security instrument in the amount equaling the lesser of (i) \$15,000,000, or (ii) thirty percent (30%) of the total cost responsibility assigned in Phase I or Phase II Interconnection Study(ies), whichever is lower. *In no event the total be less than \$500,000 (9.3.1.2.);* and
  - For Participating TO's Interconnection Facilities the **IC** for Small Generating Facility shall post Interconnection Financial Security instrument in the amount equaling the

lesser of (i) \$1,000,000, or (ii) thirty percent (30%) of the total cost responsibility assigned in Phase I or Phase II Interconnection Study(ies), whichever is lower. *In no event the total amount posted be less than \$100,000 (9.3.1.2.);*

For **PTO** Interconnection Facilities the **IC** for Large Generating Facility shall post Interconnection Financial Security instrument in the amount equaling the lesser of (i) \$15,000,000, or (ii) thirty percent (30%) of the total cost responsibility assigned in Phase I or Phase II Interconnection Study(ies), whichever is lower. *In no event the total be less than \$500,000 (9.3.1.2.);*

### Termination of GIA (9.3.1.5.)

- **Within one hundred eighty (180) days** after issuance of the final Phase II Interconnection Study report to the **IC**, if **IC** fails to post the second Interconnection Financial Security, this failure constitutes grounds for termination of the GIA pursuant to LGIA Article 2.3.

### Third Posting of Interconnection Financial Security

- **On or before the start of Construction Activities for Network Upgrades** or Participating TO's Interconnection Facilities, whichever is earlier, **IC** modifies two separate Interconnection Financial Security instruments so it equals one hundred percent (100%) of the total cost responsibility assigned to the **IC** for Participating TO's Interconnection Facilities assigned in final Phase II Interconnection Study and one hundred percent (100%) of total cost responsibility assigned to the **IC** for Network Upgrades assigned in final Phase I or Phase II Interconnection Studies, whichever is lower (9.3.2.).

### Termination of GIA (9.3.2)

- **On or before the start of Construction Activities for Network Upgrades** or Participating TO's Interconnection Facilities, whichever is earlier, if **IC** fails to modify two separate Interconnection Financial Security instruments so it equals one hundred percent (100%) of the total cost responsibility assigned to the **IC** for the Interconnection Facilities assigned in final Phase II Interconnection Study and one hundred percent (100%) of total cost responsibility assigned to the **IC** for Network Upgrades assigned in final Phase I or Phase II Interconnection Study(ies), whichever is lower, this failure is grounds for termination of the GIA pursuant to LGIA Article 2.3 (9.3.2.).

## Generator Interconnection Agreement (GIA) (11)

- **Within thirty (30) Calendar Days** after **CAISO** issues the final Phase II Interconnection Study report to the **IC**, the applicable **PTO** and the **CAISO** tenders a draft GIA in the form of the FERC-approved form of GIA and appendices or attachments as applicable. Within thirty (30) Calendar Days, the **IC** provides written comments, or notification of no comments, to the draft appendices or attachments as applicable to the **PTO** and **CAISO** (11.1).
- **Within one hundred twenty (120) Calendar Days** of issuing the final Phase II Study to the **IC**, the **IC**, applicable **PTO**, and **CAISO** will negotiate any disputed provisions of draft appendices of the GIA (11.2.)

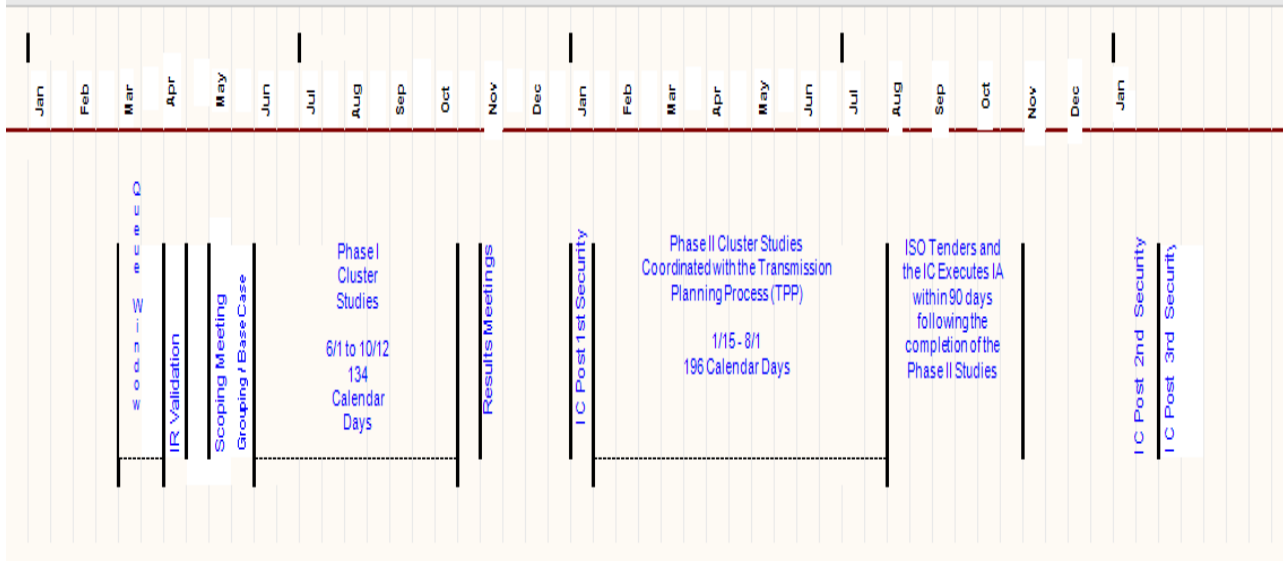
**Note:** If the GIA negotiations are deadlocked, **IC** may request termination at any time and request submission of the unexecuted GIA with FERC or initiate Dispute Resolution.

### Withdrawn Interconnection Requests (11.2)

- If the **IC** requests termination of the GIA negotiations but **within ninety (90) Calendar Days** after issuance of the final Phase II Interconnection Study report:
  - ❖ Fails to request either the filing of the unexecuted GIA or initiate Dispute Resolution, the Interconnection Request is deemed withdrawn, unless otherwise agreed by the Parties; or
  - ❖ Has not executed and returned the GIA, the Interconnection Request is deemed withdrawn, unless otherwise agreed by the Parties.
- **Within fifteen (15) Business Days** after completion of the negotiation process, **PTO** & **CAISO** provide the **IC** with the final GIA (11.2.).
- **Within ten (10) Business Days** after receiving GIA, GIA is signed by all three parties and considered executed (11.3.).
- **Upon execution** of the GIA by the **IC**, **CAISO**, and **PTO**, or approval of the unexecuted GIA, **CAISO** refunds the **IC** any portion of the Interconnection Study Deposit including interest, that exceeds the costs which the **CAISO**, **PTOs**, and third parties have incurred on behalf of the **IC** [3.5.1.1., (d)].

## ATTACHMENT 2

### Generator Interconnection Procedures (Cluster Timeline)



7/8/11 CAISO