Business Practice Manual
For

Generator Interconnection and Deliverability Allocation Procedures (GIDAP) BPM

Version ~~9~~10.0

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Revision History

Version	PRR#	Date	Description
10.0	943	12/22/2016	Align language in Section 6.2.5.4 regarding the modification of the point of interconnection between Phase I and Phase II studies in the Generator Interconnection and Deliverability Allocation Procedures (GIDAP) and Generator Management BPMs.
9.0	927,931		Interconnection process enhancements
8.0	911	7/28/16	2015 Interconnection process enhancements. Topics: 3,4,5,6,9,10, and 11
7.0	898, 900	6/2/16	Modified Affected System from IPE Updated Section 5 to include Interconnection Request electronic submission information, and correct study deposit amounts for Cluster, Independent Study Process, and Fast Track.
6.0	872, 874, 878	11/24/15	Added Reassessment language, Affidavit for Accelerated Phase II study, and criteria for multiple projects sharing a common site
5.0	768	9/29/2014	Added Section 6.2.6.3 (Generator Downsizing Process)
4.0	745	9/4/2014	Modified Affected System language
3.0	740	06/03/2014	Removed language added in Version 2, reverted to Version 1 language

Version	PRR#	Date	Description
2.0	705	04/07/2014	Replaced language resulting from the Affected System Stakeholder process
1.0	674	07/26/2013	1st Version Released

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

Table of Contents

GIDAP BPM

1. Introduction

In this Introduction you will find the following information:

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

What you can expect from this CAISO BPM; and

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

1.1. Purpose of CAISO Business Practice Manuals

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

1.2. Purpose of this Business Practice Manual

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

In this BPM you will find:

- A description of the application & study process for CAISO Tariff Appendix DD, which is referenced in this GIDAP BPM as the GIDAP; and

- General information on CAISO Tariff Appendix DD Generator Interconnection and Deliverability Allocation Procedures (GIDAP) processes.

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

1.3. References

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

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

Other CAISO BPMs; and

The CAISO FERC Electric Tariff.

The CAISO Website posts current versions of these documents.

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

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

1.4. Definitions

1.4.1. Master Definitions Supplement

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

1.4.2. Highlighted Definitions Applicable to this GIDAP BPM

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

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

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

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

"Confidential Information" shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise, subject to GIDAP Section 15.1 and GIDAP BPM Section 13.

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

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

“Local Delivery Network Upgrade” shall mean a transmission upgrade or addition identified by the CAISO in the GIDAP interconnection study process to relieve a Local Reliability Constraint.

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

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

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

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

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

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

2. GIDAP Applicability and Comparability

This GIDAP BPM applies to Interconnection Requests that are processed under the GIDAP. The GIDAP was accepted by FERC on July 24, 2012, with an effective date of July 25, 2012. The CAISO processes both small generator Interconnection Requests (generation up to and including 20 MW) and large generator Interconnection Requests (greater than 20 MW) under the GIDAP.

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

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

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

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

(1) no Interconnection Customer obtains any "rights" to capacity by virtue of connecting to the CAISO Controlled Grid, even though it may "up-front finance" the cost to construct the needed network upgrades to interconnect the generating facility; and

(2) "firm transmission service," a type of transmission service available in some parts of the eastern United States, does not exist with respect to the CAISO Controlled Grid.

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

(1) in terms of reliability - identifying and constructing Network Upgrades needed to preserve the safe and reliable operation of the CAISO Controlled Grid (Reliability Network Upgrades); and

(2) in terms of deliverability - enhance the transfer capacity of the CAISO Controlled Grid (through Delivery Network Upgrades) to deem the interconnecting generating facility "deliverable" in the sense that it has Full Capacity Delivery Status, a status which means that from an engineering standpoint, the output of the generating facility to the extent of its Net Qualifying Capacity can be considered deliverable to the aggregate of load on the CAISO Controlled Grid, even under peak conditions.

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

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

- No "protection" against curtailment in real-time – Full Capacity Deliverability Status does not insulate a Generating Facility from curtailments that are necessary in real-time system operations.

- No determination of Resource Adequacy deliverability – interconnection under Full Capacity Deliverability Status is a necessary but not a sufficient condition for the facility to qualify as a Resource Adequacy resource and obtain a Net Qualifying Capacity (NQC) rating. The interconnection process only addresses physical and electrical

interconnection; Resource Adequacy counting and qualification are external to the GIDAP.

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

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

3. On-Line Resources

3.1. The CAISO Queue (Public Internet Posting)

3.1.1. Data Posting Requirement[1]

The CAISO posts on the CAISO Website a listing of all Interconnection Requests by Queue Position (*i.e.*, queue number), pursuant to CAISO Tariff Section 3.6, 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), including voltage level, where the interconnection of the proposed Generating Facility will be made (Point of Interconnection);

d. The most recent projected Commercial Operation Date of the proposed Generating Facility as given by the Interconnection Customer;

e. The status of the Interconnection Request, including whether it is active or withdrawn;

[1] GIDAP Section 3.6.

f. The availability of any studies related to the Interconnection Request;

g. The date of the Interconnection Request;

h. The type of Generating Facility to be constructed, including fuel type; and

i. Requested deliverability status of the proposed Generating Facility.

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."

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

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

3.1.2. Assigning a Project Queue Number

[2] GIDAP Section 3.6 states that "[e]xcept in the case of an Affiliate, the list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes a GIA or requests that the applicable Participating TO(s) and the CAISO file an unexecuted GIA with FERC."

[3] The FERC EQRs are located at: http://www.ferc.gov/docs-filing/eqr.asp.

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

3.1.3. On-line Queue Update Schedule

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

3.2. Resource Interconnection Management System (RIMS)

3.2.1. General Description of RIMS

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

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

Some of the information contained in RIMS is confidential information, in part, because the database information contains confidential information as to Interconnection Customers. For this reason, the application is accessed through secure website portals and Interconnection Customers and Participating TOs have limited viewing access to only their projects and limited data entry access.

3.2.2. RIMS Access

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

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

http://www.caiso.com/Documents/Overview-ISOTools_AccessRequestForms.pdf

3.2.3. RIMS Updates

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

3.3. Base Case / Study Postings (Secure Website Posting)[4]

For each Interconnection Study Cycle, the CAISO, in coordination with the 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 and shall be posted at the following intervals:

- Prior to the completion of the Phase I Interconnection Study; the base case will additionally include Generating Facilities from valid Interconnection Requests from the Cluster Application Windows for the Interconnection Study Cycle;

- After the Phase I Interconnection Study; the base case will additionally include Generating Facilities from valid Interconnection Requests from the Cluster Application Window for the Interconnection Study Cycle and identified preliminary transmission upgrades or additions;

- Prior to the completion of the Phase II Interconnection Study; include all remaining Generating Facilities from the Phase I Interconnection Study for the Interconnection Study Cycle and associated transmission upgrades for the interconnection plan of service; and

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

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

[4] GIDAP Sections 2.3 and 3.6.

or its successor, an appropriate form of agreement with WECC, or its successor, as necessary.

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

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

> CEII is specific engineering, vulnerability, or detailed design information about proposed or existing critical infrastructure (physical or virtual) that:
>
> 1. Relates details about the production, generation, transmission, or distribution of energy;
> 2. Could be useful to a person planning an attack on critical infrastructure;
> 3. Is exempt from mandatory disclosure under the Freedom of Information Act; and
> 4. Gives strategic information beyond the location of the critical infrastructure.[5]
>
> 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[6]

[5] See FERC's discussion of CEII at FERC's CEII webpage, accessible at http://www.ferc.gov/legal/ceii-foia/ceii.asp

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

> **§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;

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

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

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

The CAISO will post to the CAISO Website any deviations from the study timelines under the GIDAP. The CAISO shall further post to the secure CAISO Website portions of the Phase I Interconnection Study that do not contain customer-specific information following the final Results Meeting and portions of the Phase II Interconnection Study that do not contain customer-specific information no later than publication of the final Transmission Plan under CAISO Tariff Section 24.2.5.2. The CAISO attempts to post as soon as possible after the studies are completed.

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

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

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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

4. Summary of Available Study Tracks and Application Deadlines

4.1. Cluster Study Process

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

4.1.1. Notice of Open Application Window

The GIDAP specifies that a single Cluster Application Window for Queue Cluster 5 opened on March 1, 2012 and closed on March 31, 2012, and, starting with Queue Cluster 6, a single Cluster Application Window will open on April 1 and close on April 30 of each year.[7] As compared with the Generator Interconnection Procedures (GIP) set forth in Appendix Y to the CAISO Tariff,[8] this reduces the process to one application window and adjusts the remaining window period from March to April. The revision was needed to more closely align the timeline under the GIDAP with the Transmission Planning Process timeline.

4.2. Independent Study Process (ISP)

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

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

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

4.3. Fast Track Process

[7] GIDAP Section 3.3.1.

[8] *Cf.* GIP Section 3.3.1.

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

In some cases, the proposed Generating Facility may qualify for the Fast Track Process even if the facility has not passed the screens set out in Appendices 9 and 10, but the applicable Participating TO and CAISO have reviewed the design for or tested the proposed Small Generating Facility and determined that it may interconnect consistent with Reliability Criteria and Good Utility Practice, despite not having passed the screens.

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

4.4. 10 kW Inverter Process

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

4.5. Additional Deliverability Assessment Options

4.5.1. Annual Full Capacity Deliverability Option

An eligible Generating Facility will have an option to be studied to determine whether it can be designated for Full Capacity Deliverability Status or Partial Capacity Deliverability Status based on available transmission capacity. All the transmission upgrades approved by CAISO in the Transmission Plan, as well as Network Upgrades under construction or having received regulatory approval, are included in the assessment model as available transmission. To be considered in the annual assessment, the Interconnection Customer must make such a request which complies with GIDAP Section 9.2.3 within the corresponding annual Cluster Application Window, and the deliverability determination will be made in conjunction with the Phase II Study for that study cluster.

4.5.2. Participating TO Tariff Option for Full Capacity Deliverability Status

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

4.5.3. Deliverability from Non-Participating TOs

This process applies to Generating Facilities that interconnect to the transmission facilities of a Non-Participating TO located within the CAISO Balancing Authority Area that wish to obtain Full Capacity Deliverability Status or Partial Capacity Deliverability Status under the CAISO Tariff. Such Generating Facilities will be eligible to be studied by the CAISO for Full or Partial Capacity Deliverability Status pursuant to the provisions in GIDAP BPM Section 6.6.3.

5. Interconnection Requests

5.1. Submission of Interconnection Requests

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

The option to submit hard copy Interconnection Requests is still available, but is not the preferred method.

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

5.2. Complete Interconnection Request Requirement[9]

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

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

- Interconnection Study Deposit;
- Completed application in the form of GIDAP Appendix 1; and

[9] GIDAP Section 3.5.

- 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 (or at the time of submission for the Independent Study Process or Fast Track Process), the Interconnection Request is deemed incomplete and not accepted by the CAISO. The CAISO follows the business practice of returning such an Interconnection Request to the Interconnection Customer without any opportunity to cure under GIDAP Section 3.5.2.2, which only permits the cure of minor omissions or corrections to data or information provided in the Interconnection Request, but does not contemplate allowing a potential customer to cure a failure to provide one or more of the above items.[10] 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 Cluster Application Window.

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

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

5.3. Interconnection Study Deposit

5.3.1.1. Cluster and Independent Study Deposits

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

5.3.1.2. Fast Track Study Deposit

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

[10] This is discussed further in GIDAP BPM Section 5.3.

5.3.1.3. 10 kW Inverter Study Deposit

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

5.3.1.4. Use of Interconnection Study Deposit

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

5.3.1.5. Obligation for Study Costs

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

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

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

(1) Interconnection Customers whose Generating Facilities are being studied in the applicable reassessment for purposes of utilizing the Generator Downsizing Process set forth in GIDAP Section 7.5;

(2) Interconnection Customers whose Generating Facilities' Phase II Interconnection Studies were completed in the most recent Interconnection Study Cycle prior to the applicable reassessment;

(3) Interconnection Customers whose Generating Facilities are parked pursuant to this GIDAP at the time of the applicable reassessment process; and

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

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

5.3.1.6. Study Invoicing and Refunds of any Study Deposit Balance

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

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

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

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

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

5.3.2. Completed Application (Appendix 1 of Appendix DD)

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

The Interconnection Customer must submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. A site may consist of land that is not necessarily contiguous. The Interconnection Customer must submit a deposit with each Interconnection Request even when more than one request is submitted for a single site. An Interconnection Request to evaluate one site at two different voltage levels shall be treated as two Interconnection Requests.

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

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

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

5.3.3. Site Exclusivity or Site Exclusivity Deposit

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

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

5.3.3.1. General (What is Site Exclusivity?)

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

- For private land;
  - Ownership of, a leasehold interest in, or a right to develop property upon which the Generating Facility will be located consisting of a minimum of 50% of the acreage reasonably necessary to accommodate the Generating Facility; or
  - An option to purchase or acquire a leasehold interest in property upon which the Generating Facility will be located consisting of a minimum of 50% of the acreage reasonably necessary to accommodate the Generating Facility.
- For public land, including that controlled or managed by any federal, state or local agency, a final, non-appealable permit, license, or other right to use the property for the purpose of generating electric power and in acreage reasonably necessary to accommodate the Generating Facility, with exclusive right to use public land under the management of the federal Bureau of Land Management (BLM) shall be in a form specified by the BLM; and
- For the Fast Track Process, the required demonstration of Site Exclusivity is somewhat more liberal than the required showing in the definition above. For example, a party placing a small unit on a site may only need to show that it

has a license to site the facility (which is revocable at the time). This situation may be acceptable where, for example, no upgrades were needed to site the unit, and the unit could be easily removed and relocated. For the Fast Track Process, such demonstration may include documentation reasonably demonstrating a right to locate the Generating Facility on real estate or real property improvements owned, leased, or otherwise legally held by another. For example, depending on the circumstances, the CAISO might find a "license" to locate the generating facility on another's property to be sufficient demonstration of Site Exclusivity under the Fast Track Process, even though a license is generally revocable by the licensor upon notice to the licensee. This is because, it is a common commercial practice for parties to enter into license agreements to site small personal property improvements, such as a small generating unit, a kiosk, or other rather easily removable items on the licensee's property, even when they intend a long term relationship.

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

The Site Exclusivity Deposit serves as a placeholder to demonstrate project viability in the interim period until the Interconnection Customer acquires Site Exclusivity to site and operate the Generating Facility on the land. Accordingly, it is refundable upon the Interconnection Customer's demonstration of Site Exclusivity (or returned upon withdrawal of an Interconnection Request).[11] Site Exclusivity Deposits will be deposited into an interest-bearing account. Any interest earned will be included in the Site Exclusivity deposit refund if and when valid Site Exclusivity documents are presented to and accepted by the CAISO.

[11] GIDAP Section 3.5.1.3 [*Use of Site Exclusivity Deposit*] "The Site Exclusivity Deposit shall be refundable to the Interconnection Customer at any time upon demonstration of Site Exclusivity or the Interconnection Request is withdrawn . . . or deemed withdrawn."

The time period for which the Interconnection Customer must demonstrate Site Exclusivity is, at a minimum, through the Commercial Operation Date of the Generating Facility.[12] The CAISO has at times received documents wherein the Interconnection Customer has demonstrated a legal right to use the property for construction and operation of the Generating Facility, though not for the period through the Commercial Operation Date, but under documents permitting the Interconnection Customer to renew (such as a lease term renewal or option to extend an option to purchase or lease).

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

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

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

[12] GIDAP Section 3.5.1(iii).

5.3.3.2. Projects Sited on BLM-Administered Federal Land

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

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

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

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

- Criterion A: The Interconnection Customer has secured a temporary use permit (issued by the BLM) or has demonstrated that it is conducting testing/data gathering activities without need for such BLM permit by demonstrating that:

  - Subpart 1: The Interconnection Customer has obtained and perfected (*i.e.*, by recording in Official Records of the appropriate county) a right-of-way (ROW) or lease that authorizes the Interconnection Customer/BLM Applicant to place power generation testing facilities on the property; or

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

    Type I ROW (ROW Grant for Site Specific Wind Energy Testing and Monitoring Facilities) provides authorization for placement of individual anemometers and/or meteorological towers, and that the grant pertains to a land area which is minimally necessary for construction and operation of the temporary facility. The ROW grant is permitted for a period of three years in length, subject to certain renewal rights if, by the end of the three

years, the grantee has filed a Type III ROW application, (Type III ROW Grant for Commercial Wind Energy Development Facilities, which is an application for a long term-right of way to site the facility.) and has prepared a the Plan of Development (POD).

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

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

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

Or, alternatively

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

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

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

- Criterion B: The Interconnection Customer is undertaking significant additional activity to prosecute the long-term permit to site the Generating Facility, as demonstrated by a showing of all of the following:

  - Interconnection Customer has applied for a long-term BLM ROW or lease for authorization to construct, operate, and maintain a commercial power generation facility on the project site;

  - The Interconnection Customer has submitted and the BLM has reviewed the Interconnection Customer's Plan of Development based on the latest applicable guidelines, the BLM has accepted the Interconnection Customer's application and the BLM has assigned a case number to the application; and

  - The Interconnection Customer has entered into a pro forma Cost Recovery Agreement with the BLM (*i.e.*, an agreement whereby permit applicant agrees to fund the cost of an environmental review process), and, additionally, the Interconnection Customer has advanced to the BLM the cost recovery funds that the Interconnection Customer is required to pay under the Cost Recovery Agreement.

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

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

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

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

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

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

To satisfy Criterion C, the Interconnection Customer will be required to warrant and represent to the CAISO that the customer has made inquiry to

the BLM, and that the BLM has informed the customer that either no other applicant has made application for the same land area which is the subject of the customer's long-term ROW/lease application, or that there are other project applicants, but the BLM has informed the customer that those applications/project uses are not inconsistent with the customer's BLM application.

5.3.3.3. Criteria for Multiple Projects Sharing a Common Site

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

5.3.3.4. Use of Site Exclusivity Deposit[13]

If the Interconnection Customer provides a Site Exclusivity Deposit in lieu of demonstrating proof of Site Exclusivity the CAISO holds the deposit in an interest-bearing account at a bank or financial institution designated by the CAISO until such time that the Interconnection Customer has demonstrated Site Exclusivity. Once the Interconnection Customer provides a satisfactory demonstration of proof of Site Exclusivity the ISO will return the Site Exclusivity Deposit to the Interconnection Customer with interest earned at the rate provided for in the interest bearing account. The latest point when an Interconnection Customer can utilize a deposit instead of Site Exclusivity is the milestone date for property acquisition stated in the Interconnection Customer's GIA. If the Interconnection Customer does not acquire the site in sufficient acreage to locate the Generating Facility at that time, the Interconnection Customer will be in breach of its GIA and, if the breach is not cured, the GIA will be terminated resulting in the Interconnection Request being deemed withdrawn.

5.4. Proposed Commercial Operation Date[14]

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

[13] GIDAP Section 3.5.1.3.

[14] GIDAP Section 3.5.1.4.

the new Generating Facility or increase in capacity of the existing Generating Facility, or the Upgrades needed to accommodate the Generating Facility or capacity increase will take longer than the seven-year period. The CAISO's current practice is to incorporate the time frame for completion of the transmission build-out when determining the Commercial Operation Date.

5.5. Interconnection Request Validation[15]

Once an Interconnection Request is received, the CAISO will begin processing and validating the Interconnection Request. Note, however, that as discussed in GIDAP BPM Section 5.1, the ability to cure a deficient interconnection request per Section 3.5.2.2 applies only to a complete Interconnection Request package. If the package fails to include all three of the items discussed in GIDAP BPM Section 5.1, the CAISO will return the package to the Interconnection Customer as incomplete.

In doing so, the CAISO will inform the Interconnection Customer that the CAISO will not evaluate the package through the validation process described in GIDAP Section 3.5.2 and that the Interconnection Customer must re-submit its application. The ISO interprets the "cure" language of GIDAP Section 3.5.2.2 to be limited to remedying minor omissions or corrections to data or information provided and does not include the Interconnection Customer's complete omission of technical data, demonstration of Site Exclusivity or provision of a Site Exclusivity Deposit, or the Interconnection Study Deposit in the package tendered within the open Cluster Application Window. The ability to cure an incomplete request under GIDAP Section 3.5.2.2 applies solely to the "rounding out" of 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 required 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.

Under the Interconnection Request validation steps set forth in GIDAP Section 3.5.2, the CAISO will notify the Interconnection Customer within ten (10) Business Days of any deficiencies that may be cured, 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.

[15] GIDAP Section 3.5.2.

All requested information required to deem the Interconnection Requests valid must be received within twenty (20) Business Days of the close of the applicable Cluster Application Window or ten (10) 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. If the Interconnection Customer does not submit the required information by that time the Interconnection Request will be deemed withdrawn and the Study Deposit, less any administrative costs, will be refunded to the Interconnection Customer.

5.6. Transferability of Interconnection Request[16]

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

5.7. Withdrawals[17]

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

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

[16] GIDAP Section 3.9.

[17] GIDAP Section 3.8.

dispute process is going on the request is essentially removed (*i.e*., not considered). If the resolution is in favor of the Interconnection Customer, then the Interconnection Customer will again be considered (*i.e.*, re-inserted) in the study cycle.

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

5.7.1. Effect on Study Deposit due to Withdrawal[18]

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

(a) For withdrawal up to thirty (30) days following the Scoping Meeting: Only actual costs are deducted from the Study Deposit. Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under GIDAP Section 3.8 and GIDAP BPM Section 5.5 on or before thirty (30) calendar days following the Scoping Meeting, the CAISO shall refund to the Interconnection Customer any portion of the Interconnection Customer's Interconnection Study Deposit, including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal, that exceed the costs the CAISO, Participating TOs, and third parties engaged by the CAISO or Participating TO have incurred on the Interconnection Customer's behalf.

(b) For withdrawal during the period between the 31st day after the Scoping Meeting, and 30 days following the Phase I or System Impact Study Results Meeting: Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under GIDAP Section 3.8 and GIDAP BPM Section 5.5 more than thirty (30) calendar days after the Scoping

[18] GIDAP Section 3.5.1.1.

Meeting, but on or before thirty (30) calendar days following the Results Meeting (or the latest date permitted under the GIDAP for a Results Meeting if an Interconnection Customer elects not to have a Results Meeting) for the Phase I Interconnection Study or the System Impact Study for Generating Facilities processed under the Independent Study Process, the CAISO shall refund to the Interconnection Customer the difference between:

(i) the Interconnection Customer's Interconnection Study Deposit and

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

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

If the Interconnection Customer does not withdraw, or is not deemed withdrawn, and proceeds to sign a GIA, then there is no forfeiture of an unused study deposit balance: Following Interconnection Customer, CAISO, and Participating TO execution of the GIA (or, if an unexecuted GIA was filed with FERC, on after FERC issues an order accepting the GIA), the CAISO refunds the unused balance of the Interconnection Study Deposit to the Interconnection Customer. The CAISO will also include any interest earned at the rate provided for in the interest-bearing account from the date of deposit (for any funds returned after withdrawal, the interest runs from the date of deposit to the date of withdrawal). The returned portion is the sum that exceeds the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf. As indicated above, depending on the timing of a withdrawal, the CAISO may also retain an additional amount of money over and above the costs incurred.

Under all circumstances, an Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request during an Interconnection Study Cycle is obligated to pay to the CAISO all costs in excess of the Interconnection Study Deposit that have been prudently incurred or irrevocably have been committed to be incurred

with respect to that Interconnection Request prior to withdrawal. The CAISO will reimburse the applicable Participating TO(s) or third parties, as applicable, for all work performed on behalf of the withdrawn Interconnection Request at the CAISO's direction. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.

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

6. Study Tracks and Details

6.1. General (Applies across all Study Tracks)

6.1.1. Detailed description of Network Upgrades

6.1.1.1. Reliability Network Upgrades (RNU)[19]

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

Reliability Network Upgrades shall only be deemed necessary for system operating limits, occurring under any system condition, which system operating limits cannot be adequately mitigated through Congestion Management, Operating Procedures, or Special Protection Systems based on the characteristics of the Generating Facilities included in the Interconnection Studies, limitations on market models, systems, or information, or other factors specifically identified in the Interconnection Studies.

Reliability Network Upgrades also include, consistent with WECC practice, the facilities necessary to mitigate any adverse impact the Generating Facility's interconnection may have on a WECC path's approved rating.

6.1.1.2. Local Delivery Network Upgrades (LDNU)[20]

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

[19] CAISO Tariff Appendix A, definition of Reliability Network Upgrades.

[20] CAISO Tariff Appendix A, definition of Local Delivery Network Upgrade.

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

6.1.1.3. Area Delivery Network Upgrades (ADNU)[21]

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

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

6.1.1.4. ADNU vs. LDNU

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

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

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

- Number of the contributing generators
- Total MW of the contributing generators
- Electrical location of the contributing generators
- Potential mitigation cost
- Renewable energy zones where the contributing generators are located
- 33% Renewable Base Portfolio MW in the renewable energy zones

The following Area Deliverability Constraints have been identified in previous studies:

- SCE South of Vincent transfer limit (north-to-south)

[21] CAISO Tariff Appendix A, definitions of Area Delivery Network Upgrade and Area Deliverability Constraint.

- Path 26 line flow limits (north-to-south)
- SCE South of Kramer transfer limit
- SCE Lugo AA bank capacity
- Victorville – Lugo (Path 61) path flow limit
- SCE Eldorado area 500kV line flow limits
- SCE Lugo to Pisgah 230kV line flow limits
- SCE Valley to Serrano 500kV line flow limits
- SCE Valley to Devers 500kV line flow limits
- SCE Devers to Verde 500kV line flow limits
- SDGE N. Gila – Imperial Valley 500kV line flow limit
- North of SONGS (Path43) path flow limit (south-to-north)
- PG&E Midway – Gates – Los Banos 500kV line flow limits
- PG&E Los Banos – Telsa 500kV line flow limit
- PG&E Los Banos – Tracy 500kV line flow limit
- PG&E Gates AA bank capacity

The general guideline is that a constraint is an ADC if one of the following is met:

- A transmission system operating limit that constrains all or most of the same generation already constrained by a previously identified Area Deliverability Constraint listed above
- There are more than 20 generators contributing to the constraint and the total MW amount of the new generators among the contributing buses in the renewable base portfolio.
- If there are less than 20 generators contributing to the constraint but the total renewable MS of the contributing generators exceeds the base portfolio MW; and the mitigation would cost more than $100M.
- The contributing generators are not in a renewable zone; and the mitigation would cost more than $100M.

The constraint is an LDC if it is not an ADC.

6.1.2. Detailed Description of Interconnection Facilities

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

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

6.1.3. Use of Per-Unit Costs to Estimate Network Upgrade Costs[22]

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

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

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

Prior to adoption and publication of final per- unit costs for use in an Interconnection Study Cycle, the CAISO will post to the CAISO Website draft per-unit costs, including non-confidential information regarding the bases therefore, hold a stakeholder meeting to address the draft per-unit costs, and permit stakeholders to provide comments on the draft per-unit costs. A schedule for the release and review of per-unit costs is set forth in GIDAP Appendix 5.

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

- Planning
- Generator Interconnection
- Generator interconnection application process

[22] GIDAP Section 6.4.

6.1.4. Coordination with Affected Systems[23]

6.1.4.1. Electric System Listing

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

6.1.4.2. Affected System Notification and Declaration

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

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

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

[23] GIDAP Sections 3.7.

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. 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. [24]

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

[24] 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.

II Study Results Meetings for each project they have identified that may impact their electric systems. The CAISO will list the Identified Affected Systems in the Phase II Interconnection Study Reports.

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

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

6.1.4.3. Study Process and Affected System Contact Documentation

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 though its quarterly/monthly report via the following web address: QueueManagement@caiso.com and raising any concerns so that they can be resolved, to avoid any delay in synchronization of the Generating Facility.

If the Interconnection Customer has been unsuccessful in resolving Identified Affected System issues at the time of the above demonstration, the documentation must provide sufficient details about all contacts and other attempts to work with the Identified Affected System and address system impacts. The CAISO will not allow generation projects to be energized on the CAISO controlled grid until Identified Affected System issues are resolved. If impacts cannot be mitigated within the CAISO controlled grid, the CAISO will advise the Interconnection Customer and the Identified Affected System operator that the interconnection cannot proceed. If an Interconnection Customer makes a unilateral decision that an affected system agreement is not necessary and does not reasonably attempt to address the issue with the Identified Affected System operator, the CAISO will advise the Interconnection Customer that the interconnection will not be allowed to move forward with synchronization and commercial operation unless the issue is resolved.

However, if the Interconnection Customer's reasonable coordination efforts with the Identified Affected System operator do not result in the Identified Affected System operator moving forward on a timely basis, and the CAISO determines that possible impacts on the Identified Affected System can be mitigated within the CAISO Controlled Grid, the CAISO will advise the Identified Affected System operator and the Interconnection Customer that the interconnection can proceed without affirmative agreement by the Identified Affected System. If the Interconnection Customer and Identified Affected System disagree about the methodology used to determine the need for mitigation, upon request, the CAISO will confer with the parties in an attempt to resolve the differences.

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

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

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

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

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

6.1.5. CAISO Controlled Grid as an Affected System

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

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

In addition, Interconnection Customers in the neighboring system, once apprised of possible impacts on the CAISO or the interconnecting Participating TO, should take reasonable steps to contact the CAISO and affected Participating TO(s) and enter into a study agreement with the Participating TO to identify reliability system impacts. During the study process, the CAISO and Participating TO will seek to work with the neighboring system and coordinate study schedules with the neighboring

systems, if practicable, to which the generation project seeks to interconnect to evaluate cost effective and efficient mitigation solutions for reliability impacts on the CAISO Controlled Grid. The CAISO will review and concur with impact studies prepared by the Participating TO. If requested by the generation project owner or the neighboring system operator, the CAISO will review impact studies prepared by the neighboring system operator.

6.1.5.2. Reimbursement for Reliability Mitigation Solutions on CAISO Controlled Grid

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

6.1.5.3. Facilities Construction Agreement

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

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

6.2. Queue Cluster Study Process[25]

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

[25] GIDAP Sections 2.4.3 and 6.

Inverter Process (GIDAP Appendix 7), the Interconnection Request will be studied under the Queue Cluster Study Process track (GIDAP Sections 6 and 7).

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

6.2.1. Generator Interconnection Study Process Agreement[26]

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 will provide each Interconnection Customer (which 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 GIDAP 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 CAISO's receipt of such designation, the CAISO, 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.

6.2.2. Scoping Meeting[27]

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

[26] GIDAP Section 6.1.1.

[27] GIDAP Section 6.1.2.

than sixty (60) calendar days after the close of a Cluster Application Window, unless otherwise mutually agreed upon by the Parties.

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

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

The purpose of the Scoping Meeting is to discuss items such as reasonable Commercial Operation Dates and alternative interconnection options, to exchange information including any transmission data that would reasonably be expected to impact such interconnection options, to analyze such information and to determine the potential feasible Points of Interconnection and eliminate alternatives given resources and available information. The applicable Participating TO(s) and the CAISO will bring to the meeting, as reasonably necessary to accomplish its purpose, the following: (a) such already available technical data, including, but not limited to, (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues, (b) general information regarding the number, location, and capacity of other Interconnection Requests in the Interconnection Study Cycle that may potentially form a Group Study with the Interconnection Customers Interconnection Request, and (c) the PTO Interconnection Handbook.

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

6.2.3. Grouping Interconnection Requests[28]

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

Short circuit upgrades and looped substations generally comprise the majority of 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 Cluster Application Window for a particular year.

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

[28] GIDAP Section 6.1.3.

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

6.2.4. Phase I Interconnection Studies

6.2.4.1. Scope and Purpose of Phase I Interconnection Studies[29]

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

(i) evaluate the impact of all Interconnection Requests received during the Cluster Application Window for a particular year on the CAISO Controlled Grid;

(ii) preliminarily identify all LDNU and RNU needed to address the impacts on the CAISO Controlled Grid of the Interconnection Requests;

(iii) preliminarily identify the required Interconnection Facilities for each Interconnection Request;

(iv) assess the Point of Interconnection selected by each Interconnection Customer and potential alternatives to evaluate potential efficiencies in overall transmission upgrades costs;

(v) establish the maximum cost responsibility for LDNUs and RNUs assigned to each Interconnection Request, until the issuance of the Phase II Interconnection Study report;

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

(vii) provide a good faith cost estimate of ADNUs for each Generating Facility in a Queue Cluster Group Study.

The Phase I Interconnection Study will consist of a short circuit analysis, a stability analysis to the extent the CAISO and applicable Participating TO(s) reasonably expect transient or voltage stability concerns, a power flow analysis, including off-peak analysis, and an On-Peak Deliverability Assessment (and Off-Peak

[29] GIDAP Section 6.2.

Deliverability Assessment which will be for informational purposes only) for the purpose of identifying LDNUs and estimating the cost of ADNUs, as applicable.

The Phase I Interconnection Study will state for each Group Study or Interconnection Request studied individually:

(i) the assumptions upon which it is based;

(ii) the results of the analyses; and

(iii) the requirements or potential impediments to providing the requested Interconnection Service to all Interconnection Requests in a Group Study or to the Interconnection Request studied individually.

The Phase I Interconnection Study will provide, without regard to the requested Commercial Operation Dates of the Interconnection Requests, a list of RNUs and LDNUs to the CAISO Controlled Grid that are preliminarily identified as required as a result of the Interconnection Requests in a Group Study or as a result of any Interconnection Request studied individually and Participating TO's Interconnection Facilities associated with each Interconnection Request, the estimated costs of ADNUs, if applicable and an estimate of any other financial impacts (*i.e.*, on Local Furnishing Bonds).

6.2.4.2. Roles and Responsibilities of Participating TO and CAISO

The GIDAP sets forth a pro forma contract between the CAISO and the applicable Participating TOs that clarifies the roles and responsibilities of the CAISO and Participating TOs with regard to Generator Interconnection Procedures and Interconnection Study Agreements.[30] This agreement is commonly referred to as the "Roles and Responsibilities Agreement." The CAISO will assign responsibility for performance of portions of the Interconnection Studies to the relevant Participating TOs, under the direction and oversight of, and approval by, the CAISO, as set forth in the agreement. The agreement serves as a general overview of the roles and responsibilities as between the CAISO and Participating TOs, but does not include the process steps, involvement or obligations of the Interconnection Customer, or all procedures that are necessary to comply with all provisions of a GIA, the GIDAP, and Generator Interconnection Study Process Agreement for Queue Clusters.

[30] GIDAP Appendix 4, at Attachment A.

6.2.4.3. Deliverability Assessment[31]

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

The On-Peak Deliverability Assessment

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

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

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

Local Deliverability Constraints tend to have the following attributes:

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

Area Deliverability Constraints tend to have the following attributes:

- Generators whose deliverability is constrained by Area Deliverability Constraints (*i.e.*, generators inside the 5% DFAX circle) are spread over at least one and possibly more grid study areas or resource areas identified in a resource portfolio used in the Transmission Planning Process.

[31] GIDAP Sections 6.3.2.1 and 6.3.2.2.

- In the first round of the Phase I Deliverability Assessment, relieving Area Deliverability Constraints may trigger high cost upgrades, driven by excessively large MW amounts of new generation electrically located behind the Area Deliverability Constraint.

- In some potential situations, the CAISO may classify a constraint as an Area Deliverability Constraint if it constrains the deliverability of generators electrically close to each other and is triggered by an exceptionally large volume of generation. This could occur, for example, when there is an exceptionally large volume of interconnection requests in a relatively smaller local sub-area within one of the resource development areas identified in the Transmission Planning Process portfolios and relieving the constraint requires expensive upgrades. This potential situation was raised as a concern by some stakeholders, and the CAISO determined that in such cases, if they occur, the appropriate remedy would be to reclassify the constraint as an area deliverability constraint based on the recognition that it would serve a substantial volume of generation projects within the study area.

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

In the second round of the Deliverability Assessment, facilities necessary to provide the incremental deliverability between the level of TP Deliverability and an additional amount are identified. In a Phase I Study, the additional amount represents a subset of the generator interconnection projects whose requested deliverability is supported by additional ADNU. In a Phase II Study, the additional amount represents the generator interconnection projects selecting Option (B).

Off-Peak Deliverability Assessment

The CAISO, in coordination with the applicable Participating TO(s), shall perform an Off-Peak Deliverability Assessment to identify transmission upgrades in addition to those Delivery Network Upgrades identified in the On-Peak Deliverability Assessment, if any, for a Group Study or individual Interconnection Study that includes one or more Location Constrained Resource Interconnection Generators (LCRIG), where the fuel source or source of energy for the LCRIG substantially occurs during off-peak conditions. The Off-Peak Deliverability Assessment is performed for informational purposes only. The methodology for the Off-Peak Deliverability Assessment is published on the CAISO Website at http://www.caiso.com/Documents/Off-PeakDeliverabilityAssessmentMethodology.pdf.

6.2.4.4. Phase I Interconnection Study Procedures[32]

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

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

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

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

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

[32] GIDAP Section 6.6.

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

(i) Identification of and Cost Allocation for Reliability Network Upgrades (RNUs)[33]

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

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

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

Local Delivery Network Upgrades (LDNUs)[34]

The On-Peak Deliverability Assessment will be used to establish the maximum cost responsibility for LDNUs for each Interconnection Customer selecting Full Capacity or Partial Capacity Deliverability Status. Deliverability

[33] GIDAP Section 6.3.1.

[34] GIDAP Section 6.3.2.1.1.

of a new Generating Facility will be assessed on the same basis as all existing resources interconnected to the CAISO Controlled Grid.

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

Area Delivery Network Upgrades (ADNUs)[35]

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

Off Peak Deliverability Assessment for Information Only

The transmission upgrades identified in the Off-Peak Deliverability Assessment shall comprise those needed for the full 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 CAISO performs the Off-Peak Deliverability Assessment for Interconnection Customer informational purposes only, and any such upgrades identified in the Off-Peak Deliverability Assessment as part of the Phase I Interconnection Study

[35] GIDAP Section 6.3.2.1.2.

shall be estimated in accordance with GIDAP Section 6.4. The estimated costs of such upgrades identified in the assessment will be referred to as "off peak Deliverability transmission upgrades,' the description of such upgrades in any report will be conceptual in nature, and such transmission upgrades will not be included in a plan of service within the applicable Interconnection Study report.

The costs of transmission upgrades identified in the Off-Peak Deliverability Assessment performed during the course of the Phase I Interconnection Study are estimated in accordance with Section 6.4 and GIDAP BPM Section 6.1.3. However, because these transmission upgrades shall be conceptual in nature only these upgrades 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 the subject to the Interconnection Request to achieve Full Capacity 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, and such costs shall not be considered in determining the cost responsibility or maximum cost responsibility of the Interconnection Customer for Network Upgrades or in determining the Interconnection Financial Security that an Interconnection Customer must post under GIDAP Section 11 and GIDAP BPM Section 8; and

(iii) the applicable Participating TO(s) shall not be responsible for financing or constructing such transmission upgrades.

(iii) Identification of and Cost Allocation for Participating TO's Interconnection Facilities

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

6.2.4.5. Phase I Cost Responsibility[36]

[36] GIDAP Sections 7.3 and 10.1.

Under the GIDAP 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 the RNUs and LDNUs in the Phase I Interconnection Study report shall establish the maximum value for:

(i) each Interconnection Customer's cost responsibility; and

(ii) the initial posting of Interconnection Financial Security required from each Interconnection Customer under GIDAP Section 11.2 and GIDAP BPM Section 8.3 for such Network Upgrades.

The Interconnection Customer's maximum cost responsibility for RNUs and LDNUs shall be subject to further adjustment based on the results of the annual reassessment process, as set forth in GIDAP BPM Section 6.2.6.2.

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

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

In contrast to the cost estimation for RNUs and LDNUs, which results in a "cost cap" for the Interconnection Customer's maximum cost responsibility, GIDAP cost estimation for Interconnection Facilities yields estimates with no cost responsibility

cap. Accordingly, the costs for the Participating TO's Interconnection Facilities estimated in the Phase I and Phase II Interconnection Studies are estimates only that establish the basis for Interconnection Financial Security posting amounts. Interconnection Customers' cost responsibility for Interconnection Facilities extends to the actual costs for such facilities.

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

6.2.4.6. Contents of Phase I Interconnection Study Report

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

- Generator interconnection data
- Study scopes and assumptions
- Deliverability assessment
- Power flow analysis
- Reactive power deficiency analysis
- Transient stability evaluation
- Short circuit duty analysis
- Preliminary protection requirement
- Interconnection plan of service requirements
- Network upgrade requirements
- Identify Potentially Affected Systems
- Substation and transmission work scope and estimate
- Upgrades scopes, cost estimates and construction schedule estimates

6.2.5. Phase I Interconnection Study Results Meetings[37]

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

6.2.5.1. Interconnection Customer Comments on Phase I Interconnection Study Report[38]

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 GIDAP Section 6.8 and GIDAP BPM Section 8.6, whether it is necessary to follow the final Phase I Interconnection Study report with a revised study report or an addendum. The CAISO will issue any such revised report or addendum to the Interconnection Customer no later than fifteen (15) Business Days following the Results Meeting.

6.2.5.2. Meeting Minutes[39]

The CAISO will prepare the minutes from the meetings and will provide the Interconnection Customer and the other attendees an opportunity to confirm the

[37] GIDAP Section 6.7.

[38] GIDAP Section 6.7.

[39] GIDAP Section 6.7.

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

6.2.5.3. Commercial Operation Date Validation[40]

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

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

[40] GIDAP Section 6.7.1.

6.2.5.4. Modifications Prior to Phase II Studies[41]

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

Modifications permitted under this GIDAP BPM Section 6.2.5.4 shall include specifically: (a) a decrease in the electrical output (MW) of the proposed project; (b) modifying the technical parameters associated with the Generating Facility technology or the Generating Facility step-up transformer impedance characteristics; (c) modifying the interconnection configuration; (d) modifying the In-Service Date, Initial Synchronization Date, Trial Operation Date, and/or Commercial Operation Date that meets the criteria set forth in GIDAP BPM Section 5.2 and is acceptable to the applicable Participating TO(s) and the CAISO, such acceptance not to be unreasonably withheld; (e) change in Point of Interconnection as set forth in the GIDAP BPM Section 7.1; and (f) change in Deliverability Status from Full Capacity Deliverability Status to Energy Only Deliverability Status or Partial Capacity Deliverability Status, or from Partial Capacity Deliverability Status to a lower fraction of Partial Capacity Deliverability Status.

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

[41] GIDAP Section 6.7.2.2.

~~Customer desires to change their project's Point of Interconnection between Phase I and Phase II and a cost assessment is not able to be made until the completion of the Phase II study, then the Interconnection Customer must agree to forego their maximum cost responsibility set forth in the Phase I study. If a Point of Interconnection change made between Phase I and Phase II results in a cost increase, the project's maximum cost responsibility will be set forth in the Phase II study. If the POI Change results in a decrease or no change in costs, the maximum cost responsibility will be set in accordance with GIDAP Section 10.1.~~

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

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

6.2.6. Activities in Preparation for Phase II Studies

6.2.6.1. Phase II Data Form[42]

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

(i) **Confirm Deliverability Status and Provide Other Data[43]**

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

a) confirm the desired Deliverability Status that the Interconnection Customer had previously designated in the completed form of Appendix A to the Generator Interconnection Study Process Agreement (Assumptions Used in Conducting the Phase I Interconnection Study); or

[42] GIDAP Section 7.

[43] GIDAP Section 7.1.

b) change the desired Deliverability Status in one of the following ways:

(i) from Full Capacity Deliverability Status to Energy-Only Deliverability Status;

(ii) from Full Capacity Deliverability Status to Partial Capacity Deliverability Status with a specified fraction of Full Capacity Deliverability Status;

(iii) from Partial Capacity Deliverability Status to Energy-Only Deliverability Status; or

(iv) reduce Partial Capacity Deliverability Status to a lower fraction of Full Capacity Deliverability Status.

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

Another significant point that the Interconnection Customer must bear in mind in deciding either to confirm a Full or Partial Capacity Deliverability Status or to "downgrade" (for example, from Full to Partial Capacity or to Energy-Only Deliverability Status) is that, once the choice is made, there is no later, further opportunity for the Interconnection Customer to "upgrade" the deliverability status of the Generating Facility, say from Partial Capacity or Energy-Only Deliverability Status to Full Capacity Delivery Status. The purpose of an Interconnection Request and Interconnection Study is to interconnect the facility to the CAISO Controlled Grid. A new facility (or increase increment of an increased facility) is only interconnected to the grid once, and so the Interconnection Request mechanism is not available thereafter to change delivery status.[44]

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 GIDAP Section 9.2 and GIDAP BPM Section 6.6.1. Under this process, Generating Facilities with Partial Capacity or Energy-

[44] As part of the 2010 GIP Phase 1 stakeholder initiative, the CAISO 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 Deliverability Status to Full Capacity Deliverability Status. Interconnection Customers were given the ability to do so by placing an Interconnection Request of limited scope (*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.

Only Deliverability Status may choose an annual option to be included an annual CAISO study effort that evaluates existing transmission capacity to see if the facility, or any 50 MW increment thereof, can be 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 Full Capacity Deliverability Status for all or a portion of its capacity under the Annual Full Capacity Deliverability Option, it retains the Full Capacity Deliverability Status for the term of its GIA, subject to Resource Adequacy rules regarding Net Qualifying Capacity.

(ii) **Confirm MW Capacity**

GIDAP Appendix B requires the Interconnection Customer to confirm the requested MW capacity of the generator.

(iii) **Confirm Need for Ratepayer-Funded/Self Fund Deliverability (Option A or B)**[45]

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

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

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

Option (B), which means that the Interconnection Customer requests Full Capacity Deliverability Status or Partial Capacity Deliverability Status and will assume cost responsibility for all Delivery Network Upgrades (both ADNUs and LDNUs, to the extent applicable) without cash repayment under GIDAP

[45] GIDAP Section 7.2.

Section 14.3.2 and GIDAP BPM Section 12 to the extent that sufficient TP Deliverability is not allocated to the Generating Facility to provide its requested Deliverability Status. If the Interconnection Customer selects Option (B), then the Interconnection Customer shall be required to make an initial posting of Interconnection Financial Security under GIDAP Section 11.2 and GIDAP BPM Section 8.3 for the cost responsibility assigned to it in the Phase I Interconnection Study for Interconnection Facilities, RNUs, LDNUs and ADNUs. To qualify to receive any allocation of TP Deliverability, Interconnection Customers selecting Option (B) must still meet the minimum criteria identified in GIDAP Section 8.9.2.

6.2.6.2. Reassessment of Study Assumptions for the Phase II Studies[46]

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

(a) Interconnection Request withdrawals occurring after the completion of the Phase II Interconnection Studies for the immediately preceding Queue Cluster;

(b) Generator Downsizing Requests submitted in the most recent Generator Downsizing Request Window that meet the requirements set forth in GIDAP Section 7.5, and Generating Facilities that are to have their generating capacities reduced pursuant to GIDAP Sections 8.9.4, 8.9.5, and 8.9.6

(c) the performance of earlier queued Interconnection Customers with executed GIAs with respect to required milestones and other obligations,

(d) compliance of earlier queued Interconnection Customers that were allocated TP Deliverability under the GIDAP with the retention criteria;

(e) the results of the TP Deliverability allocation from the prior Interconnection Study cycle; and,

[46] GIDAP Section 7.4.

(f) transmission additions and upgrades approved in the most recent Transmission Planning Process cycle.

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

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

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

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

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

(b) If an Interconnection Customer's maximum cost responsibility for Network Upgrades is adjusted downward pursuant to (a) above, and a subsequent reassessment identifies a change on the CAISO's system that occurs after

the completion of the Interconnection Customer's Interconnection Studies and requires additional or expanded Network Upgrades, resulting in an increase in the Interconnection Customer's estimated cost responsibility for Network Upgrades above the maximum cost responsibility as adjusted based on the results of a prior reassessment, then the Interconnection Customer's maximum cost responsibility for Network Upgrades will be the estimated cost responsibility determined in the subsequent reassessment, so long as this amount does not exceed the maximum cost responsibility originally established by the Interconnection Customer's Interconnection Studies. In such cases, where the estimated cost responsibility determined in the subsequent reassessment exceeds the maximum cost responsibility as adjusted based on the results of a prior reassessment, the Interconnection Customer's maximum cost responsibility for Network Upgrades shall be the maximum cost responsibility established by its Interconnection Studies. The Interconnection Customer's maximum cost responsibility may never exceed the maximum cost responsibility determined by the lower of the Phase 1 and Phase 2 Interconnection Studies.

The reassessment is performed in conjunction with TP Deliverability allocation as described in GIDAP BPM Section 6.2.9.3.

Example 1:

Project ABC

Phase 1 Network Upgrades maximum cost responsibility: $20,000,000
Phase 2 Network Upgrades maximum cost responsibility: $10,000,000
Original Network Upgrades maximum cost responsibility: $10,000,000

Reassessment #1: $8,000,000 Network Upgrades estimated cost responsibility
Pursuant to (a) above, the Network Upgrades maximum cost responsibility has been reduced by at least 20 percent and $1 million.
Network Upgrades maximum cost responsibility: $8,000,000

Reassessment #2: $11,000,000 Network Upgrades estimated cost responsibility
Pursuant to (b) above, the Network Upgrades maximum cost responsibility is the original Network Upgrades maximum cost responsibility established by the Phase 2 Interconnection Study.
Network Upgrades maximum cost responsibility: $10,000,000

Example 2:

Project XYZ

Phase 1 Network Upgrades Maximum Cost Responsibility: $50,000,000
Phase 2 Network Upgrades Maximum Cost Responsibility: $30,000,000
Original Network Upgrades maximum cost responsibility: $30,000,000

Reassessment #1: $40,000,000 Network Upgrades estimated cost responsibility
Pursuant to (b) above, the Network Upgrades maximum cost responsibility is the original Network Upgrades maximum cost responsibility established by the Phase 2 Interconnection Study.
Network Upgrades maximum cost responsibility: $30,000,000

Phase 2 Revised Report #1 Network Upgrades maximum cost responsibility: $20,000,000
Network Upgrades maximum cost responsibility is established as the lower of the Phase 1 and Phase 2 Interconnection Study.
Original Network Upgrades maximum cost responsibility is adjusted: $20,000,000

Reassessment #2: $19,000,000 Network Upgrades estimated cost responsibility
Pursuant to (a) above, the Network Upgrades estimated cost responsibility has *not been* reduced by at least 20 percent and $1 million.
Network Upgrades maximum cost responsibility: $20,000,000

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

6.2.6.3. Generator Downsizing Process[47]

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

[47] GIDAP Section 7.5.

Qualified Generating Facilities

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

(i) Commercial Operation Status[48]

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

(a) Currently in the CAISO queue and has not yet achieved the last Commercial Operation Date in its Generator Interconnection Agreement.

(b) Has achieved the last Commercial Operation Date in its Generator Interconnection Agreement with a total megawatt capacity amount that is lower than the amount specified in its Generator Interconnection Agreement by no more that the greater the de minimis threshold set forth in Section 6.2.6.3 (iii)(c).

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

If the project MW capacity size specified in the GIA is:	**Then the reduced capacity criterion is:**
Greater than 200 MW	5 percent *(above 200, 5% > 10 MW)*
Between 40 MW and 200 MW	10 MW *(between 40 and 200, 5% <= 10 MW)*
Less than 40 MW	25 percent *(<40, 10 MW is more than 25%)*

The table below shows examples that further illustrate these criteria:

Total MW Capacity in GIA	Actual MW Capacity	Downsizing Request Required	Reason
100	95	No	Shortfall MW not greater than 5% or 10 MW of GIA MW capacity
100	90	No	Actual MW within 10 MW of GIA MW capacity

[48] GIDAP Section 7.5.3.1.

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

(ii) Good Standing Requirements[49]

The Interconnection Customer must meet the following requirements:

(a) Interconnection Customer must be in compliance with all applicable requirements of the CAISO Tariff under which the Interconnection Request is being processed, including timely submittal of all Interconnection Financial Security postings that have come due.

(b) Interconnection Request cannot be withdrawn or deemed withdrawn by the CAISO. A Generating Facility that is deemed withdrawn with a cure period that has not expired by the close of the applicable Generator Downsizing Request Window may apply, but cure must be made prior to the expiration of the cure period. Failure to cure during the cure period will result in the withdrawal of the Generating Downsizing Request from the annual Generator Downsizing Process.

(c) Interconnection Customer must be in compliance with the terms of its Generator Interconnection Agreement, including Interconnection Customer milestones. An Interconnection Customer that has received a notice of breach may apply if the cure period has not expired by the close of the applicable Generator Downsizing Request Window. Failure to cure during the cure period will result in the withdrawal of the Generating Downsizing Request from the annual Generator Downsizing Process. However, a Generating Facility failing to meet the Commercial Operation status criterion under category (i)(b) is eligible to participate in the annual Generator Downsizing Process.

(iii) Other Opportunities to Reduce Generating Facility Size[50]

[49] GIDAP Section 7.5.3.2.

[50] GIDAP Sections 7.5.1 and 7.5.2.

Apart from the Generator Downsizing Process, Interconnection Customers may also reduce the generating capacities of their Generating Facilities in the following circumstances:

(a) Generating Facilities that have not yet entered into the Phase II study process that can have their generating capacities reduced pursuant to GIDAP Section 6.7.2.

(b) Generating Facilities with partial termination clauses in their Generator Interconnection Agreements.

(c) Commercially operational Generating Facilities within the de minimis threshold of no more than the greater of five percent (5%) of their MW capacities or 10 MW but not more than 25% of the Generating Facilities MW capacities.

(d) Generating Facilities whose generating capacity is reduced pursuant to GIDAP Sections 8.9.4, 8.9.5, and 8.9.6. (BPM Sections 6.2.9.6, 6.2.9.7, and 6.2.9.8).

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

(iv) Initiating the Generator Downsizing Request[51]

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

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

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

[51] GIDAP Section 7.5.5.1.

Interconnection Customer may re-submit a complete package if the Generator Downsizing Request Window is still open.

(v) Validating the Generator Downsizing Request[52]

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

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

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

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

(vi) Withdrawal of Generator Downsizing Request[53]

A Generator Downsizing Request may only be withdrawn by the Interconnection Customer during the applicable Generator Downsizing Request Window. The

[52] GIDAP Section 7.5.5.2.

[53] GIDAP Section 7.5.6.

Generator Downsizing Deposit, less costs incurred during the validation process, will be refunded to those withdrawing during this timeframe.

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

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

(viii) Use of Generator Downsizing Deposits[54]

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

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

(ix) Obligations of Downsizing Generators for Actual Costs[55]

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

[54] GIDAP Sections 3.5.1.2 and 7.5.7.

[55] GIDAP Sections 7.5.8 and 7.5.9.

(x) Invoicing and Payment of Downsizing Costs[56]

The applicable Participating TO(s) will submit an invoice to the CAISO for completed work in support of the Generator Downsizing Process within 75 calendar days. The Interconnection Customer will receive invoices from the CAISO that list study expenses incurred and corresponding amounts due, including the costs invoiced by the Participating TO(s). The amounts due will be offset against the Interconnection Customer's Generator Downsizing Deposit. If the amounts due exceed the amount on deposit, the invoice will direct the Interconnection Customer to pay the amount required in excess of the deposit within thirty (30) calendar days. If the amounts due are less than the amount on deposit, the unused balance plus applicable interest from the interest-bearing account where funds are deposited will be refunded to the Interconnection Customer.

(xi) Cost Allocation for Network Upgrades[57]

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

(xii) Reflecting Plan of Service Changes to Generator Interconnection Agreements[58]

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

[56] GIDAP Section 7.5.10.

[57] GIDAP Section 7.5.11.

[58] GIDAP Section 7.5.12.

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

(xiii) Interaction with Executed Generator Interconnection Agreements[59]

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

6.2.7. Phase II Studies

6.2.7.1. Scope & Purpose of Phase II Studies[60]

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

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

(ii) identify final RNUs needed to physically and reliably interconnect the Generating Facilities and provide final cost estimates;

(iii) identify final LDNUs needed to interconnect those Generating Facilities selecting Full Capacity or Partial Capacity Deliverability Status and provide final cost estimates,

[59] GIDAP Section 7.5.13.3.

[60] GIDAP Section 8.1.1.

(iv) identify final ADNUs for Interconnection Customers selecting Option (B), as provided below and provide revised cost estimates;

(v) identify, for each Interconnection Request, the Participating TO's Interconnection Facilities for the final Point of Interconnection and provide a +/-20% cost estimate; and

(vi) coordinate in-service timing requirements based on operational studies in order to facilitate achievement of the Commercial Operation Dates of the Generating Facilities.

The Phase II Interconnection Study report shall set forth the applicable cost estimates for RNUs, LDNUs, ADNUs and Participating TOs Interconnection Facilities that shall be the basis for the second and third Interconnection Financial Security Postings under GIDAP Section 11.3 and GIDAP BPM Section 8.4. In circumstances where the cost estimations applicable to the total of RNUs and LDNUs are based upon the Phase I Interconnection Study (because the cost estimation for the subtotal of RNUs and LDNUs were lower and so establish maximum cost responsibility under GIDAP Section 10.1 and GIDAP BPM Section 6.2.4.4), the Phase II Interconnection Study report shall recite this fact.

6.2.7.2. Roles and Responsibilities of Participating TO and CAISO

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

6.2.7.3. Phase II Interconnection Study Procedures[61]

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

The CAISO shall use Reasonable Efforts to commence the Phase II Interconnection Study by May 1 of each year, and to complete and issue to Interconnection

[61] GIDAP Section 8.5.

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

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

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

(i) **Reliability Network Upgrades and Local Delivery Network Upgrades**[62]

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

(ii) **Area Delivery Network Upgrades**[63]

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

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

[62] GIDAP Section 8.2.1.

[63] GIDAP Section 8.2.2.

Base Case will include all Option (A) and earlier queued Generating Facilities in the electrical area.

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

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

(iii) **Operational Deliverability Assessment**[64]

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

The operational Deliverability Assessment follows the On-Peak Deliverability Assessment methodology set forth on the CAISO Website at http://www.caiso.com/Documents/On-PeakDeliverabilityAssessmentMethodology.pdf. The key components of the operational Deliverability Assessments are discussed below.

Generation Interconnection Project Commercial Operation Date

[64] GIDAP Section 8.1.4.

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

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

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

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

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

Study Years

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

Modeling Requirements

For each study year, the operational Deliverability Assessment will model the generation projects with the most recent available(?) CODs, as described above, in or before the study year and Network Upgrade components that are projected to be in service in or before the study year. In case a generation project will be implemented in phases as defined in the executed GIA, the phasing of the project will be modeled.

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

Method for Allocating Partial Capacity Deliverability

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

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

The optimization allocation is formulated as:

$$Min \sum_{i=1}^{N} \frac{1}{\overline{D_i}} (\overline{D_i} - D_i)^2$$

$$s.t. \quad \sum_{i=1}^{N} D_i \cdot SF_{il} \le C_l, \quad l = 1, \cdots, L$$

$$0 \le D_i \le \overline{D_i}, \quad i = 1, \cdots, N$$

where

N: number of generators
D_i: Deliverable MW of generator i
$\overline{D_i}$: Upper limit of NQC[65] of generator i
L: number of deliverability constraints
C_l: available capacity on the deliverability constraint l
SF_{il}: shift factor of generator i output on deliverability constraint l

(iv) **Interim Energy-Only Interconnection Until DNUs Completed[66]**

If it is determined that the Delivery Network Upgrades cannot be completed by the Interconnection Customer's identified Commercial Operation Date, the Interconnection Study will include interim mitigation measures necessary to allow the Generating Facility to interconnect as an energy-only resource until the Delivery Network Upgrades for the Generating Facility are completed and placed

[65] For intermittent generation, a range of output levels between the 20% and 50% production exceedance during summer peak load hours are studied.

[66] GIDAP Section 8.1.2.

into service, unless interim partial capacity deliverability measures are developed pursuant to GIDAP Section 8.1.4 and GIDAP BPM Section 6.2.7.3(iii).

6.2.7.4. Phase II Cost Estimates and Responsibilities

Cost Estimate Details[67]

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

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

Cost Responsibility for Reliability Network Upgrades[68]

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

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

[67] GIDAP Section 8.1.3.

[68] GIDAP Section 8.3.

(ii) The cost responsibility for all other final Reliability Network Upgrades shall be assigned to all Interconnection Requests in that Group Study pro rata on the basis of the maximum megawatt electrical output of each proposed new Generating Facility or the amount of megawatt increase in the generating capacity of each existing Generating Facility as listed by the Interconnection Customer in its Interconnection Request.

Cost Responsibility for Local Delivery Network Upgrades[69]

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

Cost Responsibility for Area Delivery Network Upgrades[70]

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

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

Cost Responsibility for Participating TO's Interconnection Facilities

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

[69] GIDAP Section 8.4.

[70] GIDAP Section 8.4.1.

6.2.7.5. Accelerated Phase II Studies[71]

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

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

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

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

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

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

The affidavit must include the following information:

1. The project name and queue number of the Generating Facility being attested to.

[71] GIDAP Section 8.6.

2. An attestation that the Interconnection Study timeline under GIDAP cannot accommodate the Commercial Operation Date of the Generating Facility.

3. The project's status. The Interconnection Customer must have obtained or demonstrated the ability to obtain the necessary regulatory approvals and permits allowing the Generating Facility to complete construction in time to meet the Commercial Operation Date.

4. The project's financing status. The Interconnection Customer must provide evidence of financing necessary to make the Interconnection Financial Security postings required in GIDAP Sections 11.2 and 11.3.

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

6.2.7.6. Contents of Phase II Interconnection Study Report

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

- Generator interconnection data
- Study scopes and assumptions
- Deliverability assessment
- Power flow analysis
- Reactive power deficiency analysis
- Transient stability evaluation
- Short circuit duty analysis
- Operational studies
- Preliminary protection requirement
- Interconnection plan of service requirements
- Participating TO's and Interconnection Customer's Interconnection Facilities

- Network upgrade requirements
- Identify Potentially Affected Systems
- Substation and transmission work scope and estimate
- Upgrades, cost estimates and construction duration estimates

6.2.8. Phase II Interconnection Study Results Meetings[72]

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

6.2.8.1. Interconnection Customer Comments on Phase II Interconnection Study Report

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

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

6.2.8.2. Meeting Minutes

[72] GIDAP Section 8.7.

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

6.2.8.3. Establish Final Commercial Operation Date

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

6.2.9. Allocation Process for TP Deliverability[73]

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

Allocation of TP Deliverability shall not provide any Interconnection Customer or Generating Facility with any right to a specific MW of capacity on the CAISO Controlled Grid or any other rights (such as title, ownership, rights to lease, transfer or encumber). Rather, an allocation of TP Deliverability will be reflected in the Generating Facility's Deliverability Status for purposes of determining its Net Qualifying Capacity on an annual basis in accordance with CAISO Tariff Section 40.4.6.1 and Section 5.1 of the BPM for Reliability Requirements.

6.2.9.1. Market Notice of Timeline, Submission of Affidavits and Commencement of Allocation Activities[74]

The CAISO will issue a Market Notice to inform interested parties as to the timeline for commencement of allocation activities, for Interconnection Customer submittal of

[73] GIDAP Section 8.9.

[74] GIDAP Section 8.9.

affidavits attesting to each proposed Generating Facility's eligibility status and retention information, and for anticipated release of allocation results to Interconnection Customers. There are two major components of the allocation process, which are described in detail in GIDAP BPM Sections 6.2.9.2 and 6.2.9.4, respectively.

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

1. Affidavit for Queue Cluster 4 and earlier queued projects.
2. Affidavit for Queue Cluster 5 and later clusters previously allocated TP Deliverability.
3. Affidavit for Queue Cluster 5 and later Queue Clusters seeking allocation of TP Deliverability, including projects that have exercised the parking option.

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

(i) Affidavit for Cluster 4 and Earlier Queued Projects

The first component of the GIDAP allocation procedures, as described in GIDAP BPM Section 6.2.9.2(a), requires that the CAISO identify MW quantities of TP Deliverability to be reserved for proposed Generating Facilities in Queue Cluster 4 and earlier that are expected to achieve Commercial Operation.

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

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

However, the content of these affidavits, if submitted, will not be used to determine the retention of TP Deliverability for any Cluster 4 and earlier-queued projects, i.e., they would receive the level of deliverability requested once they

reach Commercial Operation and the required Network Upgrades are completed even if they do not meet the criteria of reserving TP Deliverability.

The affidavit must include:

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

(ii) Affidavit for Queue Cluster 5 and Later Queue Clusters previously allocated TP Deliverability

All Interconnection Customers for Generating Facilities that have been allocated TP Deliverability under GIDAP Section 8.9.1 are required to annually provide an affidavit that demonstrates that the Generating Facility meets the criteria to retain its TP Deliverability.

The affidavit must contain current information that demonstrates the following:

(1) The Generating Facility remains in good standing with respect to the criteria on which the allocation of TP Deliverability was based.

(2) If the Generating Facility was allocated TP Deliverability based on achievement of only criterion (d) set forth in GIDAP Section 8.9.2(2), then the Interconnection Customer must, by the start of the next allocation cycle, demonstrate achievement of criteria (a), (b) or (c) set forth in GIDAP Section 8.9.2(2).

(3) The Interconnection Customer must have executed a GIA and must remain in good standing with regard to its GIA, such that neither the Participating TO nor the CAISO has provided the Interconnection Customer with a Notice of Breach of the GIA that has not been cured and the Interconnection Customer has not commenced curative actions.

(4) The Interconnection Customer must maintain the original Commercial Operation Date set forth in the GIA without request for extension unless such extension is required for reasons beyond the control of the Interconnection Customer and such extension results in no Material Modification or delay in the construction schedule for Network Upgrades common to multiple Generating Facilities; or unless the extension is occasioned by a material delay in the Participating TO's construction of any Network Upgrades or Participating TO's Interconnection Facilities.

(iii) Affidavit for Queue Cluster 5 and later Queue Clusters seeking allocation of TP Deliverability, including projects that have exercised the parking option

This affidavit is applicable to Generating Facilities that fall into one of two categories. The first category includes Generating Facilities that have just completed the GIDAP Phase II Interconnection Study process and are seeking an allocation of TP Deliverability for the first time. The second category includes Generating Facilities that have completed the GIDAP Phase II Interconnection Study process in a previous Interconnection Study Cycle, have exercised the parking option and are seeking an allocation of TP Deliverability in the current Queue Cluster's allocation process.

The CAISO shall allocate available TP Deliverability to Option (A) and Option (B) Generating Facilities according to the Interconnection Customer's demonstration of having met the criteria listed below for all or a portion of the full MW generating capacity of the Generating Facility as specified in the Interconnection Request. Where a criterion is met by a portion of the full MW generating capacity of the Generating Facility, the eligibility score associated with that criterion shall apply to the portion that meets the criterion. Therefore, the affidavit must relate to the same proposed Generating Facility as described in Appendix A to the Interconnection Request specified and, for each criterion attested to, must specify the MW quantity of generating capacity that meets that criterion. At a minimum, the Generating Facility must meet criteria (1)(d) and either (2)(a) or (2)(d) below to be eligible for TP Deliverability allocation.

The affidavit must include the following current information:

(1) Permitting status. An Interconnection Customer's Generating Facility must meet at least one of the following:
    a. The Interconnection Customer has received its final governmental permit or authorization allowing the Generating Facility to commence construction.
    b. The Interconnection Customer has received a draft Environmental Report such as a draft Environmental Impact Report, draft Environmental Impact Statement, Environmental Assessment, mitigated Negative Declaration, or CEC Preliminary Staff Assessment (or equivalent environmental permitting document) indicating likely approval of the requested permit through findings of the permitting authority, such as, no environmental impacts found that cannot be mitigated to insignificance, or in the case of a NEPA document, the project has been identified as the preferred alternative. If Federal of State Endangered Species Act permits are required, draft Environmental Reports for such permits must also have been received and contain similar indications.
    c. The Interconnection Customer has applied for the necessary governmental permits or authorizations and the authority has deemed such documentation as data adequate for the authority to initiate its review process.
    d. The Interconnection Customer has applied for the necessary governmental permit or authorization for the construction.

(2) Project financing status. An Interconnection Customer's Generating Facility must meet at least one of the following criteria:

a. The Generating Facility will be balance-sheet financed or has otherwise received a commitment of project financing, and the Interconnection Customer represents to the CAISO that either it has a regulator-approved power purchase agreement or that the Interconnection Customer is proceeding to Commercial Operation without a power purchase agreement. Note that the score received by affidavit to retain TP Deliverability allocation in Section 6.2.9.1.ii of this BPM must be maintained at an equal or higher level in each individual item scored relative to affidavit provided under second component in Section 6.2.9.4 of this BPM.
b. The Interconnection Customer has an executed and regulator-approved power purchase agreement.
c. The Interconnection Customer has an executed power purchase agreement but such agreement has not yet received regulatory approval.
d. The Interconnection Customer does not have an executed power purchase agreement but the Interconnection Customer is included on an active short list or other commercially recognized method of preferential ranking of power providers by a prospective purchaser Load Serving Entity.

(3) Land acquisition

a. The Interconnection Customer demonstrates a present legal right to begin construction of the Generating Facility on one hundred percent (100%) of the real property footprint necessary for the entire Generating facility.
b. The Interconnection Customer demonstrates Site Exclusivity.

6.2.9.2. Reassessment Study and TP Deliverability Allocation Study

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