#### Appendix DD

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

#### **Table of Contents**

1	<b>OBJECTIVES</b>	<b>APPI</b>	ICARII	ITY
	COSECTIVES	$\Delta I I L$		

- 1.1 Objectives and Applicability
- **2 SCOPE AND APPLICATION**
- 2.1 Application of Generator Interconnection Procedures
- 2.2 Comparability
- 2.3 Interconnection Base Case Data
- 2.4 Interconnection Service and Studies
  - 2.4.1 No Applicability to Transmission Service
  - 2.4.2 The Product
  - 2.4.3 The Interconnection Studies
    - 2.4.3.1 The Phase 1 Interconnection Studies
    - 2.4.3.2 The Reassessment Prior to Phase II Interconnection Studies
    - 2.4.3.3 The Phase II Interconnection Studies
    - 2.4.3.4 Update Following TP Deliverability Allocation Process

#### **3 INTERCONNECTION REQUESTS**

- 3.1 General
- 3.2 Roles and Responsibilities
- 3.3 Timing for Submitting Interconnection Requests
  - 3.3.1 Timing for Submitting Interconnection Requests for a Queue Cluster
  - 3.3.2 Timing for Submitting Interconnection Requests for Independent Study Process and Fast Track Process
- **3.4 [NOT USED]**
- 3.5 Processing of Interconnection Requests
  - 3.5.1 Initiating an Interconnection Request
    - 3.5.1.1 Use of Interconnection Study Deposit
    - 3.5.1.2 Obligation for Study Costs
    - 3.5.1.3 Use of Site Exclusivity Deposit
    - 3.5.1.4 Proposed Commercial Operation Date
  - 3.5.2 Validation of Interconnection Request
    - 3.5.2.1 Acknowledgment of Interconnection Request
    - 3.5.2.2 Deficiencies in Interconnection Request
- 3.6 Internet Posting
- 3.7 Coordination with Affected Systems
- 3.8 Withdrawal
- 3.9 Transferability of Interconnection Request
- **4 INDEPENDENT STUDY PROCESS**

### 4.1 Criteria for Independent Study Process Eligibility 4.1.1 4.1.2 4.1.3 4.1.4 4.1.5 4.1.6 4.2 Determination of Electrical Independence 4.2.1 Flow Impact Test 4.2.1.1 Requirement Set Number One General Independent Study Requests: 4.2.1.2 Requirement Set Number Two: for Requests for Independent Study of Behindthe-Meter Expansion 4.2.2 Short Circuit Test 4.3 Scoping Meeting 4.4 System Impact Study 4.4.1 4.4.2 4.4.3 4.4.4 4.4.5 4.4.6 4.5 Facilities Study 4.5.1 4.5.2 4.5.3 4.5.4 4.5.5 4.6 Deliverability Assessment **4.7 Extensions of Commercial Operation Date 5 FAST TRACK PROCESS** 5.1 Applicability and Initiation of Fast Track Process Request 5.2 Initial Review 5.3 Screens 5.3.1 5.3.1.1 5.3.1.2 5.3.1.3

	5.3.1.4			
	5.3.1.5			
	5.3.1.6			
5.4 Cus	tomer Options Meeting			
	5.4.1			
	5.4.2			
	5.4.3			
5.5 Sup	plemental Review			
	5.5.1			
	5.5.1.1			
	5.5.1.2			
	5.5.1.3			
,	5.5.2			
6 INITIA	L ACTIVITIES AND PHASE I OF THE INTERCONNECTION STUDY PROCESS FOR QUEUE			
CLUSTE	ERS			
6.1 Initia	al Activities Following the Close of the Cluster Application Window			
	6.1.1 Generator Interconnection Study Process Agreement			
	6.1.2 Scoping Meeting			
	6.1.3 Grouping Interconnection Requests			
•	pe and Purpose of Phase I Interconnection Study			
	tification and Cost for Network Upgrades			
	6.3.1 Reliability Network Upgrades (RNUs)			
	6.3.2 Delivery Network Upgrades			
	6.3.2.1 The On-Peak Deliverability Assessment			
	6.3.2.1.1 Local Delivery Network Upgrades			
	6.3.2.1.2 Area Delivery Network Upgrades			
	6.3.2.1.3 [Intentionally Omitted]			
	6.3.2.2 Off-Peak Deliverability Assessment			
	of Per Unit Costs to Estimate Network Upgrade and PTO Interconnection Facilities Costs			
_	entionally Omitted]			
	se I Interconnection Study Procedures			
	se I Interconnection Study Results Meeting			
	6.7.1 Commercial Operation Date			
	6.7.2 Modifications			
	6.7.2.1			
	6.7.2.2			

6.7.3 Determination of Impact of Modifications Decreasing Generating Capacity Output or Deliverability Status Reductions on Calculation of Initial Financial Security Posting

#### 6.8 Revisions and Addenda to Final Interconnection Study Reports

- 6.8.1 Substantial Error or Omissions; Revised Study Report
- 6.8.2 Other Errors or Omissions; Addendum
- 6.8.3 Only Substantial Errors or Omissions Adjust Posting Dates

#### **7 ACTIVITIES IN PREPARATION FOR PHASE II**

- 7.1 Confirmation or Modification of Deliverability Status
- 7.2 Full/Partial Capacity Deliverability Options for Interconnection Customers
- 7.3 Postings and Cost Estimates for Network Upgrades
- 7.4 Reassessment Process
  - 7.4.1
  - 7.4.2

#### **8 PHASE II INTERCONNECTION STUDY PROCESS**

- 8.1 Scope of Phase II Interconnection Study
  - 8.1.1 Purpose of the Phase II Interconnection Study
  - 8.1.2 Interim Energy-Only Interconnection until DNUs Completed
  - 8.1.3 Cost Estimation Detail
  - 8.1.4 Operational Deliverability Assessment
- 8.2 Determining Phase II Network Upgrades
  - 8.2.1 Reliability Network Upgrades and Local Delivery Network Upgrades
  - 8.2.2 Area Delivery Network Upgrades
- 8.3 Cost Responsibility for Reliability Network Upgrades
- 8.4 Cost Responsibility for Local Delivery Network Upgrades
  - 8.4.1 Cost Responsibility for Area Delivery Network Upgrades
- 8.5 Phase II Interconnection Study Procedures
- 8.6 Accelerated Phase II Interconnection Study Process
- 8.7 Results Meeting with the CAISO and Applicable PTO(s)
- 8.8 [Intentionally Omitted]
- 8.9 Allocation Process for TP Deliverability
  - 8.9.1 First Component: Representing TP Deliverability Used by Prior Commitments
  - 8.9.2 Second Component: Allocating TP Deliverability to the Current Queue Cluster
  - 8.9.3 Criteria for Retaining TP Deliverability Allocation
  - 8.9.4 Parking for Option (A) Generating Facilities
  - 8.9.5 Partial Allocations of Transmission Based Deliverability to Option (A) and Option (B) Generating Facilities
  - 8.9.6 Declining TP Deliverability Allocation

- 8.9.7 Consequences of Failure to Retain TP Deliverability
- 8.9.8 Updates to Phase II Interconnection Study Results

#### 9 ADDITIONAL DELIVERABILITY ASSESSMENT OPTIONS

- 9.1 [Intentionally Omitted]
- 9.2 Annual Full Capacity Deliverability Option
  - 9.2.1
  - 9.2.2
  - 9.2.3
  - 9.2.4
- 9.2.4.1
- 9.2.4.2
- 9.2.4.3
- 9.3 PTO Tariff Option for Full Capacity Deliverability Status
- 9.4 Deliverability from Non-Participating TOs
- 10 Cost Responsibility For Interconnection Customers
- 10.1 Interconnection Customers in a Queue Cluster
- 10.2 Interconnection Customers in the Independent Study Process
- 11 INTERCONNECTION FINANCIAL SECURITY
- 11.1 Types of Interconnection Financial Security
- 11.2 Interconnection Financial Security-Initial Posting
  - 11.2.1
  - 11.2.2
  - 11.2.3 Posting Amount for Network Upgrades
    - 11.2.3.1 Small Generator Interconnection Customers
    - 11.2.3.2 Large Generator Interconnection Customers
  - 11.2.4 Posting Amount for Participating TO Interconnection Facilities
    - 11.2.4.1 Small Generator Interconnection Customers
    - 11.2.4.2 Large Generator Interconnection Customers
  - 11.2.5 Cost Estimates Less than Minimum Posting Amounts
  - 11.2.6 Consequences for Failure to Post
  - 11.2.7 Effect of Decrease in Output on Initial Posting Requirement

#### 11.3. Interconnection Financial Security-Second and Third Postings

- 11.3.1 Second Posting
  - 11.3.1.1
  - 11.3.1.2 Timing of Posting
  - 11.3.1.3 Posting Requirements and Timing for Parked Option (A) Generating Facilities
  - 11.3.1.4 Network Upgrade Posting Amounts

- 11.3.1.4.1 Small Generator Interconnection Customers
- 11.3.1.4.2 Large Generator Interconnection Customers
- 11.3.1.4.3 Cost Estimates Less than Minimum Posting Amounts
- 11.3.1.5 Posting Amount for Participating TO Interconnection Facilities
  - 11.3.1.5.1 Small Generator Interconnection Customers
  - 11.3.1.5.2 Large Generator Interconnection Customers
  - 11.3.1.5.3 Cost Estimates Less than Minimum Posting Amounts
- 11.3.1.6 Early Commencement of Construction Activities
- 11.3.1.7 Consequences for Failure to Post
- 11.3.2 Third Posting
  - 11.3.2.1 Network Upgrades
  - 11.3.2.2 Participating TO Interconnection Facilities
  - 11.3.2.3 Separation of Third Posting
  - 11.3.2.4 Failure to Post

#### 11.4 Withdrawal Or Termination-Effect on Financial Security

- 11.4.1 Conditions for Partial Recovery of Interconnection Financial Security Upon Withdrawal of Interconnection Request or Termination of GIA
- 11.4.2 Determining Refundable Portion of the Interconnection Financial Security for Network Upgrades
  - 11.4.2.1 Withdrawal Between the First Posting and the Deadline for the Second Posting
  - 11.4.2.2 Withdrawal Between the Second Posting and the Commencement of

Construction Activities

- 11.4.2.3 Special Treatment Based on Failure to Obtain Necessary Permit or
- Authorization from Governmental Authority
- 11.4.2.4 After Commencement of Construction Activities
- 11.4.2.5 Notification to CAISO and Accounting by Applicable Participating TO(s)
- 11.5 Adjusting Network Upgrade Postings Following Reassessment Process
- 12 ENGINEERING & PROCUREMENT ("E&P") AGREEMENT
- 13 Generator Interconnection Agreement (GIA)
- 13.1 Tender
  - 13.1.1
  - 13.1.2
- 13.2 Negotiation
- 13.3 Execution And Filing
- 13.4 Commencement Of Interconnection Activities
- 13.5 Interconnection Customer To Meet PTO Handbook Requirements
- 14 PTOs Interconnection Facilities And Network Upgrades

#### 14.1 Schedule

#### 14.2 Construction Sequencing

- 14.2.1 General
- 14.2.2 Construction of Network Upgrades that are or were an Obligation of an Entity other than the Interconnection Customer
- 14.2.3 Advancing Construction of Network Upgrades that are Part of the CAISO's Transmission Plan

#### 14.3 Network Upgrades

- 14.3.1 Initial Funding
- 14.3.2 Repayment of Amounts Advanced for Network Upgrades and Refund of Interconnection Financial Security
  - 14.3.2.1 Repayment of Amounts Advanced Regarding Non-Phased Generating Facilities
  - 14.3.2.2 Repayment of Amounts Advanced Regarding Phased Generating Facilities
  - 14.3.2.3 Interest Payments and Assignment Rights

#### 15 Miscellaneous

#### 15.1 Confidentiality

- 15.1.1 Scope
- 15.1.2 Release of Confidential Information
- 15.1.3 Rights
- 15.1.4 No Warranties
- 15.1.5 Standard of Care
- 15.1.6 Order of Disclosure
- 15.1.7 Remedies
- 15.1.8 Disclosure to FERC, its Staff, or a State
- 15.1.9
- 15.1.10
- 15.1.11

#### 15.2 Delegation of Responsibility

- 15.3 [Not Used]
- 15.4 [Not Used]

#### 15.5 Disputes

- 15.5.1 Submission
- 15.5.2 External Arbitration Procedures
- 15.5.3 Arbitration Decisions
- 15.5.4 Costs

#### 15.6 Local Furnishing Bonds

15.6.1 Participating TOs That Own Facilities Financed by Local Furnishing Bonds

15.6.2 Alternative Procedures for Requesting Interconnection Service

#### 15.7 Change In CAISO Operational Control

#### **Appendix 1 Interconnection Request**

Attachment A Generating Facility Data

#### **Appendix 2 [Intentionally Omitted]**

#### Appendix 3 Generator Interconnection Study Process Agreement for Queue Clusters

Appendix A Assumptions Used in Conducting the Phase I Interconnection Study

Appendix B Data Form to Be Provided by the Interconnection Customer Prior to Commencement of the Phase II Interconnection Study

# Appendix 4 Agreement for the Allocation of Responsibilities with Regard to Generator Interconnection Procedures and Interconnection Study Agreements

Attachment A Interconnection Study Responsibility Allocation

Attachment B Contacts for Notices

#### Appendix 5 Schedule for Release and Review of Per Unit Costs

#### Appendix 6 GIDAP Agreement for Independent Study Process

Appendix A Assumptions Used in Conduction the System Impact Study

Appendix B Data Form to Be Provided by the Interconnection Customer Prior to Commencement of the Phase II Interconnection Study

Appendix 7 Application, Procedures, and Terms and Conditions for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10kW ('10 kW Inverter Process")

#### **Section 1 Objectives And Applicability**

#### 1.1 Objectives And Applicability

The objective of this Generation Interconnection and Deliverability Allocation Procedures (GIDAP)is to implement the requirements for both Small and Large Generating Facility interconnections to the CAISO Controlled Grid and to provide a process for allocating Transmission Plan Deliverability for Interconnection Requests starting with Queue Cluster 5 and for subsequent Queue Clusters. This GIDAP applies to Interconnection Requests that are either assigned to Queue Cluster 5 and subsequent Queue Clusters, or submitted for the Independent Study Process, or Fast Track Process after [effective date of tariff amendment].

#### **Section 2 Scope And Application**

#### 2.1 Application Of Generator Interconnection Procedures

Sections 2 through 15 apply to processing an Interconnection Request pertaining to a Generating Facility that is either: (i) assigned to Queue Clusters 5 and subsequent Queue Clusters, or (ii) included in the Independent Study Process, or (iii) included in the Fast Track Process, after July 25, 2012 pursuant to the terms of this CAISO Tariff for the performance of its Interconnection Studies.

#### 2.2 Comparability

The CAISO shall receive, process, and analyze Interconnection Requests in a timely manner as set forth in this GIDAP. The CAISO will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers as set forth in this GIDAP, whether the Generating Facilities are owned by a Participating TO, its subsidiaries, or Affiliates or others.

#### 2.3 Interconnection Base Case Data

For each Interconnection Study Cycle, the CAISO, in coordination with applicable Participating TO(s), shall publish updated Interconnection Base Case Data, including, as applicable, separate Interconnection Base Case Data for each Group Study to reflect system conditions particular to the Group Study, to a secured section of the CAISO Website: (1) prior to the Phase I Interconnection Study with the Generation reflected in valid Interconnection Requests for the Interconnection Study Cycle, as well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case. along with any associated transmission upgrades or additions; (2) after the Phase I Interconnection Study with the Generation reflected in valid Interconnection Requests submitted in the Cluster Application Window for the Interconnection Study Cycle, and the identified preliminary transmission upgrades or additions, as well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case, along with any associated transmission upgrades or additions; (3) prior to the Phase II Interconnection Study, including all remaining Generation from the Phase I Interconnection Study for the Interconnection Study Cycle, as well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case, along with any associated transmission upgrades or additions; and (4) after the Phase II Interconnection Study, including all remaining Generation from the applicable Phase I Interconnection Study and the identified transmission upgrades and additions for the Interconnection Study Cycle, as

well as all Generation reflected in the Interconnection Requests in the Independent Study Process that entered the CAISO's interconnection queue prior to the creation of the Base Case, along with any associated transmission upgrades or additions.

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

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

#### 2.4 Interconnection Service And Studies

#### 2.4.1 No Applicability to Transmission Service.

Nothing in this GIDAP shall constitute a request for transmission service or confer upon an Interconnection Customer any right to receive transmission service.

#### 2.4.2 The Product.

Interconnection Service allows the Interconnection Customer to connect the Generating Facility to the CAISO Controlled Grid and be eligible to deliver the Generating Facility's 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.

#### 2.4.3 The Interconnection Studies.

For Interconnection Requests in Queue Cluster 5 and subsequent Queue Clusters, the Interconnection Studies consist of a Phase I Interconnection Study, a reassessment conducted prior to the commencement of a Phase II Interconnection Study, a Phase II Interconnection Study, and an update to the Phase II Interconnection Study report to reflect the results of a reassessment conducted after the TP Deliverability allocation process for the Queue Cluster.

For Interconnection Requests processed under the Independent Study Process, the Interconnection Studies consist of a System Impact Study, a Facilities Study, and, as applicable to Full Capacity or Partial Capacity Deliverability Status, Phase I and Phase II Interconnection Studies and a reassessment.

#### 2.4.3.1 The Phase I Interconnection Studies

The Phase I Interconnection Studies for Queue Cluster Generating Facilities will include, but not be limited to, short circuit/fault duty, steady state (thermal and voltage) and stability analyses. The Phase I Interconnection Studies will identify direct Interconnection Facilities and required Reliability Network Upgrades necessary to interconnect the

Generating Facility, mitigate thermal overloads and voltage violations, and address short circuit, stability, and reliability issues associated with the requested Interconnection Service. The Phase I Interconnection Studies will also identify LDNU for Generating Facilities, including those being processed under the Independent Study Process, that have selected Full Capacity or Partial Capacity Deliverability Status. Such LDNU shall be identified in accordance with the On-Peak Deliverability Assessment set forth in Section 6.3.2. The Phase I Interconnection Studies will also provide cost estimates for ADNUs, as described in Section 6.3.2.1.2. The Phase I Interconnection Study report shall include cost estimates for RNUs, LDNUs, ADNUs and Participating TOs Interconnection Facilities that shall, as applicable, establish the basis for the initial Interconnection Financial Security postings under Section 11.2.

#### 2.4.3.2 The Reassessment Prior to Phase II Interconnection Studies

Before undertaking the Phase II Interconnection Studies, the CAISO will conduct a reassessment, as specified in Section 7.4, to conform the Base Case and Interconnection Base Case Data to account for later conditions since the CAISO performed the Phase II Interconnection Study in the prior Interconnection Study Cycle,

#### 2.4.3.3 The Phase II Interconnection Studies

The Phase II Interconnection Studies will include, but not be limited to, short circuit/fault duty, steady state (thermal and voltage) and stability analyses, and will identify direct Interconnection Facilities and required RNUs necessary to interconnect the Generating Facility, mitigate thermal overloads and voltage violations, and address short circuit, stability, and reliability issues associated with the requested Interconnection Service. The Phase II Interconnection Studies shall identify LDNUs for Generating Facilities participating in Phase II (including those being processed under the Independent Study Process) that have elected Full Capacity or Partial Capacity Deliverability Status, and ADNUs for Interconnection Customers selecting Option (B) in accordance with Section 7.2.

The Phase II Interconnection Study report shall also set forth the applicable cost estimates for RNUs, LDNUs, ADNUs and Participating TOs Interconnection Facilities that shall, as applicable, establish the basis for the second and third Interconnection Financial Security postings under Section 11.3.

Where an Interconnection Study report identifies specific transmission facilities for Network Upgrade or Interconnection Facilities, the cost estimates determined in accordance with Section 6.4 will be set forth in present dollar costs as well as time-adjusted dollar costs, adjusted to the estimated year of expenditure for construction of the components being constructed.

#### 2.4.3.4 Update Following TP Deliverability Allocation Process

Following the completion of Phase II Interconnection Studies for the Queue Cluster and provision by the ISO of the results to Interconnection Customers in the Queue Cluster, the ISO will perform the allocation of TP Deliverability to eligible Generating Facilities in accordance with Section 8.9. Based on the results of the allocation process and the responses to those results as reported by affected Interconnection Customers to the ISO, the ISO will provide updates where needed to the Phase II Interconnection Study reports

of affected Interconnection Customers. The update to the Phase II Interconnection Study report provided under this section shall not extend the time for the second Interconnection Financial Security posting under Section 11.3.

#### **Section 3 Interconnection Requests**

#### 3.1 General

Pursuant to CAISO Tariff Section 25.1, an Interconnection Customer shall submit to the CAISO an Interconnection Request in the form of Appendix 1 to this GIDAP. The CAISO will forward a copy of the Interconnection Request to the applicable Participating TO within five (5) Business Days of receipt.

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

#### 3.2 Roles And Responsibilities

- (a) Each Interconnection Request will be subject to the direction and oversight of the CAISO. The CAISO will conduct or cause to be performed the required Interconnection Studies and any additional studies the CAISO determines to be reasonably necessary, and will direct the applicable Participating TO to perform portions of studies where the Participating TO has specific and non-transferable expertise or data and can conduct the studies more efficiently and cost effectively than the CAISO. The CAISO will coordinate with Affected System Operators in accordance with Section 3.7.
- (b) The CAISO will complete or cause to be completed all studies as required within the timelines provided in this. Any portion of the studies performed at the direction of the CAISO by the Participating TOs or by a third party shall also be completed within timelines provided in this GIDAP.
- (c) The CAISO has established a pro forma Roles and Responsibilities Agreement, attached hereto as Appendix 4 and incorporated herein by reference, for execution by the CAISO and the applicable Participating TOs.
- (d) Each Interconnection Customer shall pay the actual costs of all Interconnection Studies, and any additional studies the CAISO determines to be reasonably necessary in response to the Interconnection Request. The CAISO shall reimburse the Participating TO for the actual cost of any portion of all Interconnection Studies that such Participating TO performs at the direction of the CAISO.

#### 3.3 Timing for Submitting Interconnection Requests

#### 3.3.1 Timing for Submitting Interconnection Requests for a Queue Cluster

Except for Interconnection Customers requesting processing under the Independent Study Process or Fast Track Process, Interconnection Requests must be submitted during a Cluster Application Window. The Cluster Application Windows for Queue Cluster 5 were open from October 15, 2011 to November 15, 2011 and March 1, 2012 to March 31, 2012. Starting with Queue Cluster 6, a single Cluster Application Window will

open on April 1 and close on April 30 of each year. If any date set forth in this section is not a Business Day, then the applicable date shall be the next Business Day.

### 3.3.2 Timing for Submitting Interconnection Requests for Independent Study Process and Fast Track Process

Interconnection Customers may submit Interconnection Requests for processing under the Independent Study Process or the Fast Track Process at any time during the year.

#### 3.4 [Not Used]

#### 3.5 Processing of Interconnection Requests

#### 3.5.1 Initiating an Interconnection Request.

To initiate an Interconnection Request, except as set forth for the Fast Track Process in Section 5, and have the Interconnection Request considered for validation under Section 3.5.2, the Interconnection Customer must submit all of the following during the Cluster Application Window, or at any time during the year for proposed Generating Facilities applying for processing under the Independent Study Process:

- (i) An Interconnection Study Deposit equal to \$50,000 plus \$1,000 per MW of electrical output of the Generating Facility, up to a maximum of \$250,000.
- (ii) A completed application in the form of Appendix 1, including requested Deliverability status, requested study process (either Queue Cluster or Independent Study Process), preferred Point of Interconnection and voltage level, and all other required technical data.
- (iii) Demonstration of Site Exclusivity or, for Interconnection Requests in a Queue Cluster, a posting of a Site Exclusivity Deposit of \$100,000 for a Small Generating Facility or \$250,000 for a Large Generating Facility. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Generating Facility or increase in capacity of the existing Generating Facility.

#### 3.5.1.1 Use of Interconnection Study Deposit.

The CAISO shall deposit all Interconnection Study Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. The Interconnection Study Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties 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.

Except for proposed Generating Facilities processed under the Fast Track Process set forth in Section 5, the Interconnection Study Deposits shall be refundable as follows:

(a) Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under Section 3.8 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 have incurred on the Interconnection Customer's behalf.

(b) Should an Interconnection Request made under Section 3.5.1 be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under Section 3.8 more than thirty (30) calendar days after the Scoping Meeting, but on or before thirty (30) calendar days following the Results Meeting (or the latest date permitted under this for a Results Meeting if a 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.

Interconnection Customers in Queue Cluster 5 who have provided the Study Deposit may receive a refund of the Interconnection Study Deposit, less actual costs expended on the Interconnection Studies to date, by withdrawing from the Queue within ten (10) calendar days after July 25, 2012.

- (c) Should an Interconnection Request be withdrawn by the Interconnection Customer or be deemed withdrawn by the CAISO by written notice under Section 3.8 at any time more than thirty (30) calendar days after the Results Meeting (or the latest date permitted for a Results Meeting if a customer elects not to have a Results Meeting) for the Phase I Interconnection Study, or the System Impact Study for proposed Generating Facilities processed under the Independent Study Process, the Interconnection Study Deposit shall be non-refundable.
- (d) Upon execution of a GIA by an Interconnection Customer, the CAISO and the applicable Participating TOs, or the approval by FERC of an unexecuted GIA, 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 exceeds the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.

Notwithstanding the foregoing, an Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request during an Interconnection Study Cycle shall be 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.

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 shall be treated in accordance with CAISO Tariff Section 37.9.4.

#### 3.5.1.2 Obligation for Study Costs.

Except as otherwise provided in Section 3.5.1.1, the CAISO shall charge and the Interconnection Customer(s) shall pay the actual costs of the Interconnection Studies. Where an Interconnection Study is performed by means of a Group Study, the cost of the Group Study will be charged pro rata 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, will be charged solely to the Interconnection Customer that submitted the Interconnection Request.

The Participating TO and any third parties performing work on the Interconnection Customer's behalf shall invoice the CAISO for such work, and the CAISO shall issue invoices for Interconnection Studies that shall include a detailed and itemized accounting of the cost of each Interconnection Study. The CAISO shall draw from the Interconnection Study Deposit any undisputed costs 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 shall pay the undisputed difference in accordance with the CAISO issued invoice within thirty (30) calendar days. The CAISO shall not be obligated to continue to have any studies conducted unless the Interconnection Customer has paid all undisputed amounts in compliance herewith. In the event an Interconnection Study, or portions thereof, is performed by the CAISO, the Interconnection Customer shall pay only the costs of those activities performed by the Participating TO to adequately review or validate that Interconnection Study or portions thereof.

#### 3.5.1.3 Use of Site Exclusivity Deposit.

The CAISO shall deposit all Site Exclusivity Deposits in an interest bearing account at a bank or financial institution designated by the CAISO. 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 by the Interconnection Customer or deemed withdrawn by the CAISO by written notice under Section 3.8. The refund of the Site Exclusivity Deposit shall include interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of withdrawal. The Site Exclusivity Deposit shall continue to be required after the Interconnection Customer either executes a GIA or requests the filing of an unexecuted GIA under Section 13 if Site Exclusivity has not been demonstrated.

#### 3.5.1.4 Proposed Commercial Operation Date.

The proposed Commercial Operation Date of the new Generating Facility or increase in capacity of the existing Generating Facility shall not exceed seven years from the date the Interconnection Request is received by the CAISO, unless the Interconnection Customer demonstrates, and the applicable Participating TO(s) and the CAISO agree,

such agreement not to be unreasonably withheld, that engineering, permitting and construction of the new Generating Facility or increase in capacity of the existing Generating Facility will take longer than the seven year period. The CAISO's agreement to an extension of the proposed Commercial Operation Date does not relieve the Interconnection Customer from compliance with the requirements of any of the criteria in Section 8.9.3 for retention of TP Deliverability.

#### 3.5.2 Validation of Interconnection Request.

#### 3.5.2.1 Acknowledgment of Interconnection Request.

The CAISO shall notify the Interconnection Customer within ten (10) Business Days of receipt of the Interconnection Request, which notice shall state whether the Interconnection Request is deemed complete, valid, and ready to be studied.

#### 3.5.2.2 Deficiencies in Interconnection Request.

An Interconnection Request will not be considered to be a valid request until the CAISO determines that the information contained in the Interconnection Request is complete and the Interconnection Customer has provided all items in satisfaction of Section 3.5.1. If an Interconnection Request fails to meet the requirements set forth in Section 3.5.1, the CAISO shall include in its notification to the Interconnection Customer under Section 3.5.2.1 the reasons for such failure and that the Interconnection Request does not constitute a valid request. The Interconnection Customer shall provide the CAISO the additional requested information needed to constitute a valid request. Whenever additional requested information is provided by the Interconnection Customer, the CAISO shall notify the Interconnection Customer within five (5) Business Days of receipt of the additional requested information whether the Interconnection Request is valid. If the Interconnection Request continues to fail to meet the requirements set forth in Section 3.5.1, the CAISO shall include in its notification to the Interconnection Customer the reasons for such failure. If an Interconnection Request has not been deemed valid, the Interconnection Customer must submit all information necessary to meet the requirements of Section 3.5.1 no later than twenty (20) Business Days after the close of the applicable Cluster Application Window or ten (10) Business Days after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later. Interconnection Requests that have not met the requirements of Section 3.5.1 within twenty (20) Business Days after the close of the applicable Cluster Application Window or ten (10) Business Davs after the CAISO first provided notice that the Interconnection Request was not valid, whichever is later, will be deemed invalid and will not be included in Interconnection Study Cycle or otherwise studied.

Interconnection Requests deemed invalid under this Section 3.5.2.2 are not subject to Section 3.8. Interconnection Customers with invalid Interconnection Request under this Section 3.5.2.2 may seek relief under Section 14.5 by so notifying the CAISO within two (2) Business Days of the notice of invalidity.

#### 3.6 Internet Posting

The CAISO will maintain on the CAISO Website a list of all Interconnection Requests. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or

transmission line or lines where the interconnection will be made; (iv) the most recent projected Commercial Operation Date; (v) the status of the Interconnection Request, including whether it is active or withdrawn; (vi) the availability of any studies related to the Interconnection Request; (vii) the date of the Interconnection Request; (viii) the type of Generating Facility to be constructed (e.g., combined cycle, combustion turbine, wind turbine, and fuel type); and (ix) requested Deliverability status.

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

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

#### 3.7 Coordination With Affected Systems

The CAISO will notify the Affected System Operators that are potentially affected by the Interconnection Customer's Interconnection Request or Group Study within which the Interconnection Customer's Interconnection Request will be studied. The CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators, to the extent possible, and, if possible, the CAISO will include those results (if available) in its applicable Interconnection Study within the time frame specified in this GIDAP. The CAISO will include such Affected System Operators in all meetings held with the Interconnection Customer as required by this GIDAP. The Interconnection Customer will cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems, including providing consent to CAISO's identification to Interconnection Customer's name, Generating Facility project name, and release of information which the Interconnection Customer provided as part of its Interconnection Request to the Affected System, participating in any coordinating activities and communications undertaken by the Affected System or CAISO, signing separate study agreements with Affected System owners and paying for necessary studies. An entity which may be an Affected System shall cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems.

#### 3.8 Withdrawal

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 Section 3.5.2, if the Interconnection Customer fails to adhere to all requirements of this GIDAP, except as provided in Section 14.3 (Disputes), the CAISO shall deem the Interconnection Request to be withdrawn and 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 shall result 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.

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

#### 3.9 Transferability Of Interconnection Request

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.

#### Section 4 Independent Study Process

The CAISO, in coordination with the applicable Participating TO(s), will study Interconnection Requests eligible for treatment under this Independent Study Process independently from other Interconnection Requests.

In the event of a conflict between this Section 4 and another provision of this GIDAP Section 4 shall govern.

#### 4.1 Criteria for Independent Study Process Eligibility

Any Interconnection Request that meets the following criteria will be processed under the Independent Study Process:

- 4.1.1 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 at least two of the following:
  - (i) The Interconnection Customer has obtained, or has demonstrated the ability to obtain, all regulatory approvals and permits needed to complete construction in time to meet the Generating Facility's requested Commercial Operation Date.
  - (ii) The Interconnection Customer is able to provide, or has demonstrated the ability to obtain, a purchase order for generating equipment specific to the proposed Generating Facility, or a statement signed by an officer or authorized agent of the

Interconnection Customer demonstrating that the Interconnection Customer has a commitment for the supply of its major generating equipment in time to meet the Commercial Operation Date through a purchase agreement to which the Interconnection Customer is a party.

- (iii) The Interconnection Customer can provide reasonable evidence of adequate financing or other financial resources necessary to make the Interconnection Financial Security postings required in Sections 11.2 and 11.3.
- **4.1.2** The Interconnection Customer must demonstrate Site Exclusivity.
- 4.1.3 The proposed Generating Facility must be electrically independent of Interconnection Requests included in an existing Queue Cluster, pursuant to Section 4.2, and, in addition, must be electrically independent of any other Generating Facility that is currently being studied under an earlier-queued Independent Study Process Interconnection Request.
- 4.1.4 The CAISO will inform an Interconnection Customer whether it has satisfied the requirements set forth in Sections 4.1.1 and 4.1.2 of the within fifteen (15) Business Days of receiving the Interconnection Request.
- 4.1.5 The CAISO will inform an Interconnection Customer whether it has satisfied the requirement that it be electrically independent of other Interconnection Requests, pursuant to Section 4.2 of the , within fifteen (15) Business Days of receiving the Interconnection Request.
- Any Interconnection Request that does not satisfy the criteria set forth in Sections 4.1.1, 4.1.2, and 4.1.3 shall be deemed withdrawn, without prejudice to the Interconnection Customer submitting a request at a later date, unless the Interconnection Customer notifies the CAISO in writing within ten (10) Business Days that it wishes the CAISO to hold the Interconnection Request for inclusion in the next Queue Cluster, in which event the CAISO will do so.

#### 4.2 Determination of Electrical Independence

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

#### 4.2.1 Flow Impact Test

An Interconnection Request shall have satisfied the requirements of this Section if it satisfies, alternatively, either the set of requirements set forth in Section 4.2.1.1 or the set of requirements set forth in Section 4.2.1.2.

#### 4.2.1.1 Requirement Set Number One : General Independent Study Requests:

The CAISO, in coordination with the applicable Participating TO(s), will perform the flow impact test for an Interconnection Request requesting to be processed under the Independent Study Process as follows:

(i) Identify the transmission facility closest, in terms of electrical distance, to the proposed Point of Interconnection of the Generating Facility being

tested that will be electrically impacted, either as a result of Network Upgrades identified or reasonably expected to be needed by Generating Facilities currently being studied in a Queue Cluster, or as a result of Network Upgrades identified or reasonably expected to be needed by earlier queued Generating Facilities currently being studied through the Independent Study Process. If the current Queue Cluster studies or earlier queued Independent Study Process studies have not yet determined which transmission facilities electrically impacted by the Generating Facility being tested require Network Upgrades, and the CAISO cannot reasonably anticipate whether such transmission facilities will require Network Upgrades from other data, then the CAISO will wait to conduct the independence analysis under this section until sufficient information exists in order to make this determination.

- (ii) The incremental power flow on the transmission facility identified in Section 4.2.1(i) that is caused by the Generating Facility being tested will be divided by the lesser of the Generating Facility's size or the transmission facility capacity. If the result is five percent (5%) or less, the Generating Facility shall pass the flow impact test. If the Generating Facility being tested is tested against the nearest transmission facility and that transmission facility has been impacted by a cluster that required an upgrade as a result of a contingency, then that contingency will be used when applying the flow impact test.
- (iii) If the Generating Facility being tested under the flow impact test is reasonably expected to impact transmission facilities that were identified, per Section 4.2.1 (i), when testing one or more earlier queued Generating Facilities currently being studied through the Independent Study Process, then an additional aggregate power flow test shall be performed on these earlier identified transmission facilities. The aggregate power flow test shall require that the aggregated power flow of the Generating Facility being tested, plus the flow of all earlier queued Generating Facilities currently being studied under the Independent Study Process that were tested against the transmission facilities described in the previous sentence, must be five (5) percent or less of those transmission facilities' capacity.

However, even if the aggregate power flow on any transmission facility tested pursuant to this section (iii) is greater than five (5) percent of the transmission facility's capacity but the incremental power flow as a result of the Generating Facility being tested is one (1) percent or less than of the transmission facility's capacity, the Generating Facility shall pass the test.

If the Generating Facility being tested is tested against the nearest transmission facility and that transmission facility has been impacted by a cluster that required an upgrade as a result of a contingency, then that contingency will be used when applying the flow impact test.

The Generating Facility being tested must pass both this aggregate test as well as the individual flow test described in Section 4.2.1 (ii), in no particular order.

#### 4.2.1.2 Requirement Set Number Two: for Requests for Independent Study of Behind-the-Meter Expansion

This Section 4.2.1.2 applies to an Interconnection Request relating to a behind-the-meter expansion where the existing Generating Facility prime mover is wind technology or solar technology. Such an Interconnection Request submitted under the Independent Study Process will satisfy the requirements of Section 4.2.1 if it satisfies all of the following technical and business criteria for behind-the-meter capacity expansion of a Generating Facility:

- (i) Technical criteria.
  - The total nameplate capacity of the existing Generating Facility plus the incremental increase in capacity does not exceed in the aggregate one hundred twenty-five (125) percent of its previously studied capacity and does not exceed, in the aggregate, one hundred (100) MW.
  - 2) The behind-the-meter capacity expansion shall not take place until after the original Generating Facility has achieved Commercial Operation and all Network Upgrades for the original Generating Facility have been placed in service.
  - 3) The expanded capacity for the Generating Facility has been placed under a separate breaker (the expansion breaker) such that the expansion can be metered separately at all times.
  - 4) Unless specifically requested by the CAISO, the total output of the Generating Facility does not exceed its originally studied capacity at any time. The CAISO will have the authority to trip the expansion breaker if the total output of the Generating Facility exceeds the originally studied capacity.
  - 5) The processing of an Interconnection Request for behind-the-meter expansion under the Independent Study Process shall not result in any increase in the rated Generating Facility electrical output (MW capacity) beyond the rating which pre-existed the Interconnection Request. Further, the processed Interconnection Request shall not operate as a basis under the CAISO Tariff to increase the Net Qualifying Capacity of the Generating Facility beyond the rating which pre-existed the Interconnection Request.
- (ii) Business criteria.
  - The Deliverability Status (Full Capacity, Partial Deliverability or Energy-Only) of the capacity expansion is the same as the Deliverability Status specified for the formally studied Generating Facility.
  - 2) The GIA is amended to reflect the revised operational features of the Generating Facility capacity expansion.

3) The Interconnection Customer may at any time request that the CAISO convert the Interconnection Request for behind-the-meter expansion to an Independent Study Process Interconnection Request to evaluate an incremental increase in electrical output (MW generating capacity) for the existing Generating Facility. The Interconnection Customer must accompany such a conversion request with an appropriate Interconnection Study Deposit and agree to comply with other sections of Section 4 applicable to an Independent Study Process Interconnection Request.

#### 4.2.2 Short Circuit Test

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

#### 4.3 Scoping Meeting

Within five (5) Business Days after the CAISO notifies the Interconnection Customer that if the Generating Facility associated with its Interconnection Request has satisfied the independence test set forth in Section 4.2, the CAISO shall establish a date agreeable to the Interconnection Customer and the applicable Participating TO(s) for the Scoping Meeting. With input from the Participating TO, the CAISO shall evaluate whether the Interconnection Request is at or near the boundary of an affected Participating TO(s)' service territory or of any other Affected System(s) so as to potentially affect such third parties, and, if such is the case, the CAISO shall invite the affected Participating TO(s) and/or Affected System Operator(s), in accordance with Section 3.7, to the Scoping Meeting by informing such third parties, as soon as practicable, of the time and place of the scheduled Scoping Meeting.

The purpose of the Scoping Meeting shall be to discuss the Interconnection Request and review existing studies relevant to the Interconnection Request. The applicable Participating TO(s) and the CAISO will bring to the meeting, as reasonably necessary to accomplish its purpose, technical data, including, but not limited to, (i) general facility loadings, (ii) general instability issues, (iii) general short circuit issues, (iv) general voltage issues, and (v) general reliability issues. The Interconnection Customer will bring to the Scoping Meeting, in addition to the technical data in Attachment A to Appendix 1, any system studies previously performed. The applicable Participating TO(s), the CAISO, and the Interconnection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. The CAISO shall prepare minutes from the meeting, and provide an opportunity for other attendees and the Interconnection Customer to confirm the accuracy thereof. The Scoping Meeting may be omitted by agreement of the Interconnection Customer, Participating TO, and the CAISO.

The CAISO shall, no later than five (5) Business Days after the Scoping Meeting (or agreement to forego such Scoping Meeting), provide the Interconnection Customer with a Independent Study Process Study Agreement (in the form set forth in Appendix 6 to the),

which shall contain an outline of the scope of the system impact and facilities studies and a non-binding good faith estimate of the cost to perform the studies. The Interconnection Customer shall return the executed Independent Study Process Study Agreement or request an extension of time for good cause within thirty (30) Business Days thereafter, or the Interconnection Request shall be deemed withdrawn.

#### 4.4 System Impact Study

- 4.4.1 The system impact study will consist of a short circuit analysis, a stability analysis, a power flow analysis, an assessment of the potential magnitude of financial impacts, if any, on Local Furnishing Bonds, and a proposed resolution, and any other studies that are deemed necessary.
- 4.4.2 The system impact study shall state the assumptions upon which it is based, state the results of the analyses, and provide the requirement or potential impediments to providing the requested Interconnection Service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the Interconnection.
- 4.4.3 The system impact study shall provide a list of Interconnection Facilities and Reliability Network Upgrades that are required as a result of the Interconnection Request along with a non-binding good faith estimate of cost responsibility and the amount of construction time required. The good faith estimate will be based on the Per Unit Costs as described in Section 6.4.
- 4.4.4 The system impact study will be completed and the results transmitted to the Interconnection Customer within ninety (90) calendar days after the execution of an Independent Study Process Study Agreement. The Interconnection Customer shall execute the agreement(s) and deliver them to the CAISO, and shall make its initial posting of Interconnection Financial Security in accordance with Section 11.2, or its Interconnection Request shall be deemed withdrawn.
- 4.4.5 If requested by the Interconnection Customer, a Results Meeting shall be held among the CAISO, the applicable Participating TO(s), and the Interconnection Customer to discuss the results of the system impact study report, including assigned cost responsibility. The CAISO shall prepare minutes from the meeting. Any such Results Meeting will be held within 20 Business Days of the date the system impact study report is provided to the Interconnection Customer.
- 4.4.6 For Interconnection Requests under the Independent Study Process, the initial posting of Interconnection Financial Security described in Section 11.2 will be based on the cost responsibility for Network Upgrades, and Participating TO's Interconnection Facilities set forth in the system impact study. If the system impact study is waived, then such posting will be based upon the cost responsibility set forth in the facilities study described in Section 4.5.

#### 4.5 Facilities Study

The facilities study shall specify and estimate the cost of the equipment, engineering, procurement, and construction work (including overheads) needed to implement the conclusions of the system impact study, including, if applicable, the cost of remedial measures that address the financial impacts, if any, on Local Furnishing Bonds. The facilities study shall also identify (1) the electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment, (2) the nature and estimated cost of the Participating TO's Interconnection Facilities and upgrades necessary to accomplish the Interconnection, and (3) an estimate of the time required to complete the construction and installation of

such facilities or for effecting remedial measures that address the financial impacts, if any, on Local Furnishing Bonds.

- 4.5.2 The facilities study may be waived if the system impact study does not identify any Interconnection Facilities and Reliability Network Upgrades.
- 4.5.3 The facilities study will be completed within ninety (90) calendar days after the Interconnection Customer posts Interconnection Financial Security in accordance with Section11.2 where Network Upgrades are identified. In cases where no Network Upgrades are identified and the required facilities are limited to Interconnection Facilities only, the facilities study will be completed within sixty (60) calendar days after the Interconnection Customer posts Interconnection Financial Security in accordance with Section 11.2.
- 4.5.4 If requested by the Interconnection Customer within ten (10) Business Days of the date of the facilities study report, a Results Meeting shall be held among the CAISO, the applicable Participating TO(s), and the Interconnection Customer to discuss the results of the facilities study report, including assigned cost responsibility. The CAISO shall prepare minutes from the meeting. Any such Results Meeting will be held within twenty (20) Business Days of the date the facilities study report is provided to the Interconnection Customer.
- 4.5.5 For Interconnection Requests under the Independent Study Process, the second posting and third postings of Interconnection Financial Security described in Section 11.3 will be based on the cost responsibility for Network Upgrades and the Participating TO's Interconnection Facilities set forth in the facilities study.

#### 4.6 Deliverability Assessment

Interconnection Customers under the Independent Study Process that request Partial Capacity or Full Capacity Deliverability Status will have a Deliverability Assessment performed as part of the next scheduled Phase I and Phase II Interconnection Studies for Queue Clusters. If the Deliverability Assessment identifies any LDNUs and ADNUs that are triggered by the Interconnection Request, the Interconnection Customer will be responsible to pay its proportionate share of the costs of those Upgrades, pursuant to Sections 6, 7 and 8. If the Generating Facility (or increase in capacity of an existing Generating Facility) achieves its Commercial Operation Date before the Deliverability Assessment is completed and any necessary Delivery Network Upgrades are in service, the proposed Generating Facility (or increase in capacity) will be treated as an Energy-Only Deliverability Status Generating Facility until such Delivery Network Upgrades are in service.

#### 4.7 Extensions of Commercial Operation Date

Extensions of the Commercial Operation Date for Interconnection Requests under the Independent Study Process will not be granted except for circumstances beyond the control of the Interconnection Customer.

#### Section 5 Fast Track Process

#### 5.1 Applicability and Initiation of Fast Track Process Request

Applicability to a proposed Generating Facility. An Interconnection Customer may request interconnection of a proposed Generating Facility to the CAISO Controlled Grid under the Fast Track Process if the Generating Facility is no larger than 5 MW and is requesting Energy-Only Deliverability Status and if the Interconnection Customer's

proposed Generating Facility meets the codes, standards, and certification requirements of Appendices 9 and 10 of this, or if the applicable Participating TO notifies the CAISO that it has reviewed the design for or tested the proposed Small Generating Facility and has determined that the proposed Generating Facility may interconnect consistent with Reliability Criteria and Good Utility Practice.

Applicability to an existing Generating Facility. If the Interconnection of an existing Generating Facility meets the qualifications for Interconnection under CAISO Tariff Section 25.1(d) or (e) but, at the same time, the Interconnection Customer also seeks to repower or reconfigure the existing Generating Facility in a manner that increases the gross generating capacity by not more than 5 MW, then the Interconnection Customer may request that the Fast Track Process be applied with respect to the repowering or reconfiguration of the existing Generating Facility that results in the incremental increase in MW.

<u>Initiating the Fast Track Interconnection Request.</u> To initiate an Interconnection Request under the Fast Track Process, and have the Interconnection Request considered for validation the Interconnection Customer must provide the CAISO with:

- (i) a completed Interconnection Request as set forth in Appendix 1;
- (ii) a non-refundable processing fee of \$500 and a study deposit of \$1,000;and
- (iii) a demonstration of Site Exclusivity. For the Fast Track Process, such demonstration may include documentation reasonably demonstrating a right to locate the Generating Facility on real estate or real property improvements owned, leased, or otherwise legally held by another.

The CAISO shall review and validate the Fast Track Process Interconnection Request pursuant to Section 5.2.

In the event of a conflict between this Section 5 and another provision of this GIDAP, Section 5 shall govern.

#### 5.2 Initial Review

Within fifteen (15) Business Days after the CAISO notifies the Interconnection Customer that the Interconnection Request is deemed complete, valid, and ready to be studied, the applicable Participating TO shall perform an initial review using the screens set forth in Section 5.3 below, shall notify the Interconnection Customer of the results, and shall include with the notification copies of the analysis and data underlying the Participating TO's determinations under the screens.

#### 5.3 Screens

- 5.3.1 The proposed Generating Facility must pass the following screens to be eligible for Interconnection under this Fast Track Process:
- **5.3.1.1** The proposed Generating Facility's Point of Interconnection must be on the CAISO Controlled Grid.

- 5.3.1.2 For interconnection of a proposed Generating Facility to a radial transmission circuit, the aggregated generation on the circuit, including the proposed Generating Facility, shall not exceed 15 percent of the line section annual peak load as most recently measured at the substation. For purposes of this Section 5.3.1.2, a line section shall be considered as that portion of a Participating TO's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the transmission line.
- 5.3.1.3 For interconnection of a proposed Generating Facility to the load side of spot network protectors, the proposed Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5 percent of a spot network's maximum load or 50 kW. For purposes of this Section 5.3.1.3, a spot network shall be considered as a type of distribution system found in modern commercial buildings for the purpose of providing high reliability of service to a single retail customer.
- 5.3.1.4 The proposed Generating Facility, in aggregation with other generation on the transmission circuit, shall not contribute more than 10 percent to the transmission circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.
- 5.3.1.5 The proposed Generating Facility, in aggregate with other generation on the transmission circuit, shall not cause any transmission protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5 percent of the short circuit interrupting capability; nor shall the interconnection proposed for a circuit that already exceeds 87.5 percent of the short circuit interrupting capability.
- 5.3.1.6 The Generating Facility, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Generating Facility proposes to interconnect shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four transmission busses from the Point of Interconnection).
- 5.3.2 If the proposed interconnection passes the screens and no Upgrades are reasonably anticipated, the Interconnection Request shall be approved. Within fifteen (15) Business Days thereafter, the Participating TO will provide the Interconnection Customer with a Small Generator Interconnection Agreement for execution.
- 5.3.3 If the proposed interconnection fails the screens and no Upgrades are reasonably anticipated, but the CAISO and Participating TO determine that the Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards under these procedures, the Participating TO shall, within fifteen (15) Business Days, provide the Interconnection Customer with a Small Generator Interconnection Agreement for execution.
- 5.3.4 If the proposed interconnection passes the screens and Upgrades are reasonably anticipated, the CAISO and Participating TO shall provide the Interconnection Customer with the opportunity to attend a customer options meeting as described in Section 5.4.

#### 5.4 Customer Options Meeting

If the CAISO and Participating TO determine the Interconnection Request cannot be approved without modifications at minimal cost; or a supplemental study or other additional studies or actions; or at significant cost to address safety, reliability, or power quality problems, within the five (5) Business Day period after the determination, the CAISO and Participating TO shall notify the Interconnection Customer and provide copies of all data and analyses underlying its conclusion. Within ten (10) Business Days of the CAISO and Participating TO's determination, the CAISO and Participating TO shall offer to convene a customer options meeting with the CAISO and Participating TO to review possible Interconnection Customer facility modifications or the screen analysis and related results, to determine what further steps are needed to permit the Small Generating Facility to be connected safely and reliably. At the time of notification of the CAISO and Participating TO's determination, or at the customer options meeting, the CAISO and Participating TO shall:

- 5.4.1 Offer to perform facility modifications or modifications to the Participating TO's electric system (*e.g.*, changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Participating TO's electric system; or
- 5.4.2 Offer to perform a supplemental review if the CAISO and Participating TO concludes that the supplemental review might determine that the Generating Facility could continue to qualify for interconnection pursuant to the Fast Track Process, and provide a non-binding good faith estimate of the costs of such review; or
- 5.4.3 Obtain the Interconnection Customer's agreement to continue evaluating the Interconnection Request under the Independent Study Process or Cluster Study Process.

#### 5.5 Supplemental Review

If the Interconnection Customer agrees to a supplemental review, the Interconnection Customer shall agree in writing within fifteen (15) Business Days of the offer, and submit a deposit for the estimated costs in an amount reasonably determined by the CAISO and Participating TO. The Interconnection Customer shall be responsible for the CAISO and Participating TO's actual costs for conducting the supplemental review. The Interconnection Customer must pay any review costs that exceed the deposit within twenty (20) Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the CAISO and Participating TO will return such excess, without interest, within twenty (20) Business Days of the invoice.

- **5.5.1** Within ten (10) Business Days following receipt of the deposit for a supplemental review, the CAISO and Participating TO will determine if the Small Generating Facility can be interconnected safely and reliably.
- 5.5.1.1 If so, then, within fifteen (15) Business Days of such a determination, the Participating TO shall forward a Small Generator Interconnection Agreement to the Interconnection Customer for execution.
- If so, and Interconnection Customer facility modifications are required to allow the Generating Facility to be interconnected consistent with safety, reliability, and power quality standards, the Participating TO shall forward a Small Generator Interconnection Agreement to the Interconnection Customer for execution within fifteen (15) Business Days after confirmation that the Interconnection Customer has agreed to pay for the identified modifications to the Participating TO's electric system.

- 5.5.1.3 If so, and Upgrades to the Participating TO's electric system are required to allow the Small Generating Facility to be interconnected consistent with safety, reliability, and power quality standards, the Participating TO shall forward a Small Generator Interconnection Agreement to the Interconnection Customer for execution within fifteen (15) Business Days that requires the Interconnection Customer to pay the costs of such system modifications prior to interconnection.
- 5.5.2 If not, the Interconnection Request will be deemed withdrawn, without prejudice to the Interconnection Customer resubmitting its Interconnection Request for processing in either a Queue Cluster or under the Independent Study Process.

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

The provisions of this Section 6 shall apply to all Interconnection Requests except those processed under the Independent Study Process selecting Energy Only Deliverability Status, the Fast Track Process, or the 10 kW inverter process as set forth in Appendix 7.

#### 6.1 Initial Activities Following the Close of the Cluster Application Window

#### **6.1.1** Generator Interconnection Study Process Agreement

Within thirty (30) calendar days of the close of a Cluster Application Window, the CAISO shall provide to each Interconnection Customer with a validated Interconnection Request received during the Cluster Application Window a pro forma Generator Interconnection Study Process Agreement in the form set forth in Appendix 3. The pro forma Generator Interconnection Study Process Agreement shall specify that the Interconnection Customer is responsible for the actual cost of the Interconnection Studies, including reasonable administrative costs, and all requirements of this GIDAP. Within three (3) Business Days following the Scoping Meeting, the Interconnection Customer shall 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, shall provide to the Interconnection Customer a signed Generator Interconnection Study Process Agreement. The Interconnection Customer shall execute and deliver to the CAISO the Generator Interconnection Study Process Agreement no later than thirty (30) calendar days after the Scoping Meeting.

#### 6.1.2 Scoping Meeting

Within five (5) Business Days after the CAISO notifies the Interconnection Customer of a Interconnection Request that is complete, valid, and ready for study, the CAISO shall establish a date agreeable to the Interconnection Customer and the applicable Participating TO(s) for the Scoping Meeting. All Scoping Meetings shall occur no later than sixty (60) calendar days after the close of a Cluster Application Window, unless otherwise mutually agreed upon by the Parties. 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 Section 3.7, to the Scoping Meeting by

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

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

The Interconnection Customer will bring to the Scoping Meeting, in addition to the technical data in Attachment A to Appendix 1, any system studies previously performed. The applicable Participating TO(s), the CAISO and the Interconnection Customer will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. 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 shall prepare minutes from the meeting, and provide the Interconnection Customer and the other attendees an opportunity to confirm the accuracy thereof, that will 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.

#### 6.1.3 Grouping Interconnection Requests

At the CAISO's option, and in coordination with the applicable Participating TO(s), Interconnection Requests received during the Cluster Application Window for a particular year may be 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 and the annual Transmission Plan, without regard to the nature of the underlying Interconnection Service. 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.

An Interconnection Request's inclusion 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 . Group Studies shall be conducted in such a manner to ensure the efficient implementation of the annual CAISO Transmission Plan in light of the transmission system's capabilities at the time of each study.

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

The Phase I Interconnection Study shall:

- (i) evaluate the impact of all Interconnection Requests received during the Cluster Application Window for a particular year on the CAISO Controlled Grid,
- (ii) preliminarily identify all LDNU and RNU needed to address the impacts on the CAISO Controlled Grid of the Interconnection Requests,
- (iii) preliminarily identify for each Interconnection Request required Interconnection Facilities,
- (iv) assess the Point of Interconnection selected by each Interconnection Customer and potential alternatives to evaluate potential efficiencies in overall transmission upgrades costs,
- (v) establish the maximum cost responsibility for LDNUs and RNUs assigned to each Interconnection Request, until the issuance of the Phase II Interconnection Study report.
- (vi) provide a good faith estimate of the cost of Interconnection Facilities for each Interconnection Request, and
- (vii) provide a cost estimate of ADNUs for each Generating Facility in a Queue Cluster Group Study.

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

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

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

#### 6.3 Identification of And Cost Allocation for Network Upgrades

#### 6.3.1 Reliability Network Upgrades (RNUs).

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 Section 6.4. 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 R N Us identified as a result of an Interconnection Request studied separately shall be assigned solely to that Interconnection Request.

#### 6.3.2 Delivery Network Upgrades.

#### 6.3.2.1 The On-Peak Deliverability Assessment.

The CAISO, in coordination with the applicable Participating TO(s), shall perform On-Peak Deliverability Assessments for Interconnection Customers selecting Full Capacity or Partial Capacity Deliverability Status in their Interconnection Requests. 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 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.

#### 6.3.2.1.1 Local Delivery Network Upgrades

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

The methodology for the On-Peak Deliverability Assessment will be published on the CAISO Website or, when effective, included in a CAISO Business Practice Manual. The

On-Peak Deliverability Assessment does not convey any right to deliver electricity to any specific customer or Delivery Point.

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 Section 6.4. 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.

#### 6.3.2.1.2 Area Delivery Network Upgrades

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.

#### 6.3.2.1.3 [Intentionally Omitted]

#### 6.3.2.2 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 Phase I Interconnection Study that includes one or more Location Constrained Resource Interconnection Generators (LCRIG), where the fuel source or source of energy for the LCRIG substantially occurs during off-peak conditions.

The transmission upgrades identified under this Section 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 methodology for the Off-Peak Deliverability Assessment will be published on the CAISO Website or, if applicable, included in a CAISO Business Practice Manual.

The CAISO will perform 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 shall be estimated in accordance with 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 cost of all transmission upgrades identified in the Off-Peak Deliverability Assessment performed during the course of the Phase I Interconnection Study shall be estimated in accordance with Section 6.4. 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 Deliverability Status;
- (ii) the estimated costs for these transmission upgrades shall not be assigned to any Interconnection Customer in an Interconnection Study report, such costs shall not be considered in determining the cost responsibility or maximum cost responsibility of the Interconnection Customer for Network Upgrades under this or in determining the Interconnection Financial Security than an Interconnection Customer must post under Section 11;
- (iii) and the applicable Participating TO(s) shall not be responsible under this for financing or constructing such transmission upgrades.

### 6.4 Use Of Per Unit Costs To Estimate Network Upgrade and PTO Interconnection Facilities Costs

Each Participating TO, under the direction of the CAISO, shall publish per unit costs for facilities generally required to interconnect Generation to their respective systems.

These per unit costs shall 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 will be 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 and there is no undue discrimination.

Prior to adoption and publication of final per unit costs for use in the Interconnection Study Cycle, the CAISO shall publish 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 Appendix 5.

#### 6.5 [Intentionally Omitted]

#### 6.6 Phase I Interconnection Study Procedures

The CAISO shall coordinate the Phase I Interconnection Study with applicable Participating TO(s) pursuant to Section 3.2 and any Affected System that is affected by the Interconnection Request pursuant to Section 3.7. 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 Section 15.2. 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 provisions of Section 8.6 apply.

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 in the two associated Cluster Application Windows, 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, workpapers and relevant pre-Interconnection Request and post-Interconnection Request power flow, short circuit and stability databases for the Phase I Interconnection Study, subject to confidentiality arrangements consistent with Section 15.1.

#### 6.7 Phase I Interconnection Study Results Meeting

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. The CAISO shall prepare the minutes from the meetings, and provide the Interconnection Customer and the other attendees an opportunity to confirm the accuracy thereof.

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 ISO 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 Section 6.8, whether it is necessary to follow the final Phase I Interconnection Study report with a revised study report or an addendum. I 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.

#### 6.7.1 Commercial Operation Date.

At the 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 under Section 15.5. The Interconnection Customer must notify the CAISO within five (5) Business Days following the Results Meeting that it is initiating dispute procedures under Section 15.5.

#### 6.7.2 Modifications.

- At any time during the course of the Interconnection Studies, the Interconnection Customer, the applicable Participating TO(s), or the CAISO may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to the applicable Participating TO(s), the CAISO, and Interconnection Customer, such acceptance not to be unreasonably withheld, the CAISO shall modify the Point of Interconnection and/or configuration in accordance with such changes without altering the Interconnection Request's eligibility for participating in Interconnection Studies.
- At the Phase I Interconnection Study Results Meeting, the Interconnection Customer should be prepared to discuss any desired modifications to the Interconnection Request. After the issuance of the final Phase I Interconnection Study, but no later than ten (10) Business Days following the Phase I Interconnection Study Results Meeting, the Interconnection Customer shall submit to the CAISO, in writing, modifications to any information provided in the Interconnection Request. The CAISO will forward the

Interconnection Customer's modification to the applicable Participating TO(s) within one (1) Business Day of receipt.

Modifications permitted under this Section shall include specifically: (a) a decrease in the electrical output (MW) of the proposed project pursuant to Section 7.1; (b) modifying the technical parameters associated with the Generating Facility technology or the Generating Facility step-up transformer impedance characteristics; and (c) modifying the interconnection configuration.

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

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

# 6.7.3 Determination of Impact of Modifications Decreasing Generating Capacity Output or Deliverability Status Reductions on Calculation of Initial Financial Security Posting

After receiving from the Interconnection Customer any modification elections involving decreases in electrical output (MW) of the Generating Facility and/or changes (*i.e.*, reductions) in Deliverability status as permitted in Section 7.1, the CAISO, in coordination with the applicable Participating TO(s), will determine, based on best engineering judgment, whether such modifications will eliminate the need for any Delivery Network Upgrades identified in the Phase I Interconnection Study report. The CAISO and applicable Participating TO(s) will not conduct any re-studies in making this determination.

If the CAISO and applicable Participating TO(s) should determine that one or more Delivery Network Upgrades identified in the Phase I Interconnection Study are no longer needed, then, solely for purposes of calculating the amount of the Interconnection Customer's initial Financial Security Posting under Section 11.2, such Delivery Network Upgrade(s) will be considered to be removed from the plan of service described in the Interconnection Customer's Phase I Interconnection Study report and the cost estimates for such upgrades shall not be included in the calculation of Interconnection Financial Security in Section 11.2. The CAISO will inform in a timely manner any Interconnection Customers so affected, and provide the Interconnection Customers with written notice of the revised initial Interconnection Financial Security posting amounts. No determination under this Section shall affect either (i) the timing for the initial Interconnection Financial Security posting or (ii) the maximum value for the Interconnection Customer's total cost responsibility for Network Upgrades established by the Phase I Interconnection Study report.

## 6.8 Revisions and Addenda to Final Interconnection Study Reports

## 6.8.1 Substantial Error or Omissions; Revised Study Report

Should the CAISO discover, through written comments submitted by an Interconnection Customer or otherwise, that a final Phase I or Phase II Interconnection Study Report (which can mean a final Phase I or Phase II Interconnection Study Report for cluster studies or a final System Impact or Facilities report for the Independent Study Process) contains a substantial error or omission, the CAISO will cause a revised final report to be issued to the Interconnection Customer. A substantial error or omission shall mean an error or omission that results in one or more of the following:

- (i) understatement or overstatement of the Interconnection Customer's cost responsibility for either Network Upgrades or Participating TO Interconnection Facilities by more than five (5) percent or one million dollars (\$1,000,000), whichever is greater; or
- (ii) results in a delay to the schedule by which the Interconnection Customer can achieve Commercial Operation, based on the results of the final Interconnection Study, by more than one year.

A dispute over the plan of service by an Interconnection Customer shall not be considered a substantial error or omission unless the Interconnection Customer demonstrates that the plan of service was based on an invalid or erroneous study assumption that meets the criteria set forth above.

## 6.8.2 Other Errors or Omissions; Addendum

If an error or omission in an Interconnection Study report (for either the cluster process or Independent Study Process) is not a substantial error or omission, the CAISO shall not issue a revised final Interconnection Study report, although the error or omission may result in an adjustment of the corresponding Interconnection Financial Security. Rather, the CAISO shall document such error or omission and make any appropriate correction by issuing an addendum to the final report.

The CAISO and applicable Participating TO shall also incorporate, as needed, any corrected information pertinent to the terms or conditions of the GIA in the draft GIA provided to an Interconnection Customer pursuant to Section 13.

# 6.8.3 Only Substantial Errors or Omissions Adjust Posting Dates

Unless the error or omission is a substantial error resulting in the issuance of a revised final Interconnection Study report, the correction of an error or omission shall not operate to delay any deadline for posting Interconnection Financial Security set forth in Section 11. In the case of a substantial error or omission resulting in the issuance of a revised final Phase I or Phase II Interconnection Study report, the deadline for posting Interconnection Financial Security shall be extended as set forth in Section 11. In addition to issuing a revised final report, the CAISO will promptly notify the Interconnection Customer of any revised posting amount and extended due date occasioned by a substantial error or omission.

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

# Section 7 Activities in Preparation for Phase II

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 (Data Form to Be Provided by the Interconnection Customer Prior to Commencement of the Phase II Interconnection Study) to the Generator Interconnection Study Process Agreement. Within such Appendix B, the Interconnection Customer shall provide the information in Sections 7.1 and, if the for Interconnection Customers seeking Full or Partial Deliverability Capacity, 7.2 below:

# 7.1 Confirmation or Modification of Deliverability Status

Within such Appendix B, the Interconnection Customer shall either

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

# 7.2 Full/Partial Capacity Deliverability Options for Interconnection Customers

This section applies to Interconnection Requests for which the Generating Facility Deliverability Status is either Full Capacity or Partial Capacity.

Within such Appendix B, the Interconnection Customer must select one of two options with respect to its Generating Facility:

Option (A), which means that the Generating Facility requires TP Deliverability 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 Section 11.2 for the cost responsibility assigned to it in the Phase I Interconnection Study for RNUs and LDNUs; or,

Option (B), which means that the Interconnection Customer will assume cost responsibility for Delivery Network Upgrades (both ADNUs and LDNUs, to the extent applicable) without cash repayment under Section 14.2.1 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 Section 11.2 for the cost responsibility assigned to it in the Phase I Interconnection Study for RNUs, LDNUs and ADNUs.

# 7.3 Postings and Cost Estimates for Network Upgrades

Until such time as the Phase II Interconnection Study report is issued to the Interconnection Customer, the costs assigned to Interconnection Customers for RNUs and LDNUs in the Phase I Interconnection Study report shall establish the maximum value for

- (i) each Interconnection Customer's cost responsibility; and
- the initial posting of Interconnection Financial Security required from each Interconnection Customer under Section 11.2 for such Network Upgrades.

The Phase I 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 initial Interconnection Financial Security Posting under Section 11.2

# 7.4 Reassessment Process

- 7.4.1 The ISO will perform a reassessment of the Phase I Interconnection Study base case prior to the beginning of the GIDAP Phase II Interconnection Studies. 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) the performance of earlier queued Interconnection Customers with executed GIAs with respect to required milestones and other obligations,
  - (c) compliance of earlier queued Interconnection Customers that were allocated TP Deliverability under this GIDAP with the retention criteria;
  - (d) the results of the TP Deliverability allocation from the prior Interconnection Study cycle; and,
  - (e) transmission additions and upgrades approved in the most recent TPP cycle.

The reassessment will be used to develop the base case for the Phase II Interconnection Study

**7.4.2** Where, as a consequence of the reassessment, the ISO determines that changes to the previously identified Delivery Network Upgrades in Queue Clusters earlier than the current

Interconnection Study Cycle will cause changes to plans of service set out in executed GIAs, such changes will serve as a basis for amendments to GIAs.

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

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

## 8.1 Scope Of Phase II Interconnection Study

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

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

- (i) update, as necessary, analyses performed in the Phase I Interconnection Studies to account for the withdrawal of Interconnection Requests from the current Queue Cluster;
- (ii) identify final RNUs needed to physically and reliably interconnect the Generating Facilities and provide final cost estimates;
- (iii) identify final LDNUs needed to interconnect those Generating Facilities selecting Full Capacity or Partial Capacity Deliverability Status and provide final cost estimates,
- (iv) identify final ADNUs for Interconnection Customers selecting Option (B), as provided below and provide revised cost estimates;
- (v) identify, for each Interconnection Request, the Participating TO's Interconnection Facilities for the final Point of Interconnection and provide a +/-20% cost estimate; 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 Interconnection Financial Security Postings under Section 11.2 and 11.3 Where the cost estimations applicable to the total of RNUs and LDNUs are based upon the Phase I Interconnection Study (because the cost estimation for the subtotal of RNUs and LDNUs were lower and so establish maximum cost responsibility under Section 10.1), the Phase II Interconnection Study report shall recite this fact.

# 8.1.2 Interim Energy-Only Interconnection until DNUs Completed

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 into service, unless interim partial capacity deliverability measures are developed pursuant to Section 8.1.4.

#### 8.1.3 Cost Estimation Detail

With respect to the items detailed in 8.1.1, he Phase II Interconnection Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work, including the financial impacts (i.e., on Local Furnishing Bonds), if any, and schedule for effecting remedial measures that address such financial impacts, needed on the CAISO Controlled Grid to implement the conclusions of the updated Phase II Interconnection Study technical analyses in accordance with Good Utility Practice to physically and electrically connect the Interconnection Customer's Interconnection Facilities to the CAISO Controlled Grid. The Phase II Interconnection Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Participating TO's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities.

# 8.1.4 Operational Deliverability Assessment

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. The CAISO will consider operational Deliverability Assessment results stated for the first year in the pertinent annual Net Qualifying Capacity process that the CAISO performs for the next Resource Adequacy Compliance Year. The study results for any other years studied in operational Deliverability Assessment will be advisory and provided to the Interconnection Customer for its use only and for informational purposes only.

The CAISO will publish the methodology under which the CAISO will perform the operational Deliverability assessment on the ISO Website or within a Business Practice Manual.

## 8.2 Determining Phase II Network Upgrades

# 8.2.1 Reliability Network Upgrades and Local Delivery Network Upgrades

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).

# 8.2.2 Area Delivery Network Upgrades

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

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

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

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

# 8.3 Cost Responsibility for Reliability Network Upgrades

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.
- (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.

# 8.4 Cost Responsibility for Local Delivery Network Upgrades

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

## 8.4.1 Cost Responsibility for Area Delivery Network Upgrades

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 Interconnection Financial Security Posting for Interconnection Customers selecting Option (B).

# 8.5 Phase II Interconnection Study Procedures

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 Section 3.7. Existing studies shall be used to the extent practicable when conducting the Phase II Interconnection Study. The CAISO will coordinate Base Case development with the applicable Participating TOs to ensure the Base Cases are accurately developed. The CAISO shall use Reasonable Efforts to commence the Phase II Interconnection Study by May 1 of each year, and to complete and issue to Interconnection Customers the Phase II Interconnection Study report within two hundred 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, workpapers 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 Section 15.1.

## 8.6 Accelerated Phase II Interconnection Study Process

The 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 re-assessment in preparation for the Phase II Interconnection Study under Section 7.4.

## 8.7 Results Meeting With The CAISO And Applicable PTO(s)

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.

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 ISO 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.

# 8.8 [Intentionally Omitted]

## 8.9 Allocation Process for TP Deliverability

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 Section 8.9.2. The TP Deliverability available for allocation will 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 Section 8.9.3 in order to retain the allocation.

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).

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 eligibility status and retention information, and anticipated release of allocation results to Interconnection Customers. There are two components to the allocation process.

# 8.9.1 First Component: Representing TP Deliverability Used by Prior Commitments

The CAISO will identify the following commitments that will utilize MW quantities of TP Deliverability:

- (a) The proposed Generating Facilities corresponding to earlier queued Interconnection Requests meeting the criteria set forth below:
  - (i) proposed Generating Facilities in Queue Cluster 4 or earlier that have executed PPAs with Load-Serving Entities and have GIAs that are in good standing.
  - (ii) proposed Generating Facilities in Queue Cluster 5 and subsequent Queue Clusters that were previously allocated TP Deliverability and have met the criteria to retain the allocation set forth in Section 8.9.4.
- (b) any Maximum Import Capability included as a planning objective in the Transmission Plan:
- (c) any other commitments having a basis in the Transmission Plan.

This first component is performed for the purpose of determining the amount of TP Deliverability available for allocation to the current queue cluster in accordance with section 8.9.2, and shall not affect the rights and obligations of proposed Generating Facilities in Queue Cluster 4 or earlier with respect to the construction and funding of Network Upgrades identified for such Generating Facilities, or their requested Deliverability Status. Such rights and obligations will continue to be determined pursuant to the GIP and the Generating Facility's GIA.

## 8.9.2 Second Component: Allocating TP Deliverability To The Current Queue Cluster

If the CAISO determines, under Section 8.9.1.1 above, that no TP Deliverability exists for allocation to the current Queue Cluster, then no allocation of TP Deliverability shall be made to the current Queue Cluster. If TP Deliverability is available for allocation, then the ISO will allocate such capacity to eligible Generating Facilities.

The CAISO shall allocate any TP Deliverability available after taking into account the commitments described in the prior section to eligible Generating Facilities in the current Interconnection Study Cycle and eligible parked Generating Facilities from the previous Interconnection Study Cycle.

The ISO shall allocate available TP Deliverability to Generating Facilities according to the Interconnection Customers' 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. The demonstration must relate to the same proposed Generating Facility as described in Appendix A to the Interconnection Request. The Generating Facility shall be assigned a numerical score reflecting the Interconnection Customer's demonstration of having met the criteria below under the methodology set forth in the Business Practice Manual. At a minimum, the Generating Facility must meet (1)d and (2)a or (2)d.

- (1) Permitting status. An Interconnection Customer's Generating Facility must meet at least one of the following:
  - 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 document (or equivalent environmental permitting document) indicating likely approval of the requested permit and/or which indicates that the permitting authority has not found an environmental impact which would likely prevent the permit approval.
  - 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 ISO 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.
  - b. The Interconnection Customer has an executed and regulator-approved power purchase agreement.
  - 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 Generation Facility on one hundred percent (100%) of the real property footprint necessary for the entire Generating facility.
- b. The Interconnection Customer demonstrates Site Exclusivity.

In allocating TP Deliverability under this section, in a situation where the available amount of TP Deliverability can accommodate only one out of two or more Generating Facilities requesting TP Deliverability and such Generating Facilities score equally under the criteria above, then the CAISO will allocate the TP Deliverability to such equally scoring Generating Facilities according to lowest LDNU cost estimates.

# 8.9.3 Criteria For Retaining TP Deliverability Allocation

Once a Generating Facility is allocated TP Deliverability under Section 8.9.1, the Interconnection Customer annually, on the date set forth and according to the process described in the Business Practice Manual, must demonstrate that the Generating Facility meets the following criteria to retain its TP Deliverability:

- The Generating Facility shall remain 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 level d Section 8.9.2(2), then the Interconnection Customer must, by the start of the next allocation cycle, demonstrate achievement of level a, b or c of 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 ISO 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

The Interconnection Customer will provide the required information in the form of an affidavit as described in the Business Practice Manual.

## 8.9.4 Parking for Option (A) Generating Facilities

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

(1) Withdraw its Interconnection Request

- (2) Enter into a GIA, in which case the Interconnection Request shall automatically convert to Energy Only Deliverability Status. In such circumstances, upon execution of the GIA, any Interconnection Financial Security shall be adjusted to remove the obligation for Interconnection Financial Security pertaining to LDNUs
- (3) Park the Interconnection Request; in which case the Interconnection Request may remain in the Interconnection queue until the next allocation of TP Deliverability in which it may participate in accordance with the requirements of Section 8.9.1. Parking an Interconnection Request does not confer a preference with respect to any other Interconnection Request with respect to allocation of TP Deliverability.

# 8.9.5 Partial Allocations of Transmission Based Deliverability to Option (A) and Option (B) Generating Facilities

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

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

# 8.9.6 Declining TP Deliverability Allocation

An Interconnection Customer having an Option (A) Generating Facility that has not previously parked and is allocated the entire amount of requested TP Deliverability may decline all or a portion of the TP Deliverability allocation and park the Generating Facility Request as described in Section 8.9.4(3).

# 8.9.7 Consequences of Failure to Retain TP Deliverability

An Interconnection Customer's failure to retain its allocation of TP Deliverability shall not be considered a Breach of the GIA. Upon failure of the Interconnection Customer to retain TP Deliverability, the Deliverability status of the Generating Facility corresponding to the Interconnection Request shall convert to Energy Only Deliverability Status as to that portion of the Generating Facility which has not retained the TP Deliverability.

## 8.9.8 Updates to Phase II Interconnection Study Results

Upon completion of the allocation of TP Deliverability in accordance with Section 8.9.2, the ISO will provide the allocation results to the Interconnection Customers for eligible Generating Facilities in the current Queue Cluster and eligible parked Generating Facilities in the prior Queue Cluster. Each of these Interconnection Customers will then have seven (7) calendar days to inform the ISO of its decisions in accordance with Sections 8.9.4, 8.9.5, and 8.9.6. Following the ISO's receipt of this information from all affected Interconnection Customers, the ISO will provide updates where needed to the Phase II Interconnection Study reports for all Generating Facilities whose Network Upgrades have been affected.

## **Section 9 Additional Deliverability Assessment Options**

# 9.1 [Intentionally Omitted]

## 9.2 Annual Full Capacity Deliverability Option

- **9.2.1** Generating Facilities eligible for Deliverability under this Section are
  - (i) a Generating Facility previously studied as Energy-Only Deliverability Status in the last Interconnection Study Cycle under the CAISO Tariff (including a Small Generating Facility studied under the provisions of Appendix S of the CAISO Tariff) or which has GIA under which the Generating Facility is Energy Only Deliverability Status and such GIA is in good standing at the time of request under this Section;
  - (ii) an Option (A) Generating Facility not allocated TP Deliverability in the last Interconnection Study Cycle that converted to Energy-Only Deliverability Status and has a GIA in good standing and desires to seek additional Deliverability with respect to the Energy Only portion of the Generating Facility
  - (iii) an Option (B) Generating Facility which chose Partial Capacity Deliverability Status and has a GIA in good standing, and desires to seek additional Deliverability with respect to the Energy Only portion of its Generating Facility.

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. To be considered in the annual assessment, the Interconnection Customer must make such a request which complies with Section 9.2.3 below within the corresponding annual Cluster Application Window.

- **9.2.2** Any Interconnection Customer selecting this option will be studied immediately following the Phase II Deliverability assessment in the Interconnection Study Cycle in which the Interconnection Customer submitted the request.
- **9.2.3** Interconnection Customers must submit an Interconnection Request as set forth in Appendix 1 along with a non-refundable \$10,000 study fee.
- **9.2.4** After allocating transmission system capability, including capability associated with both existing capability and capability relating to approved transmission upgrades, to Interconnection Customers in the Queue Cluster who originally requested Full Capacity

Deliverability Status in the Phase II Interconnection Study, the CAISO will perform additional studies using the Deliverability study procedures set forth in Section 6.3.2 to determine the availability of any remaining transmission system capability for Interconnection Customers requesting Full Capacity Deliverability Status as part of the annual process described in this Section.

- **9.2.4.1** In determining available transmission capability, priority will be given to Interconnection Customers whose Generating Facilities have the lowest transfer distribution factors, calculated according to the Deliverability study procedures.
- 9.2.4.2 If there is sufficient available transmission capability for the Interconnection Customer to achieve Full Capacity Deliverability Status, then the Interconnection Customer's Generating Facility will be considered to have Full Capacity Deliverability Status.
- 9.2.4.3 If the assessment of available transmission capability conducted under this Section indicates that there is some transmission capacity available for use by the Interconnection Customer, but less than is necessary to achieve Full Capacity Deliverability Status for the Interconnection Customer's Generating Facility, then the Interconnection Customer's Generating Facility will be considered to be partially deliverable, and the amount of transmission capability made available to that Interconnection Customer's Generating Facility will be equal to the determination of available transmission capability for the Generating Facility rounded down to the nearest 50 MW increment.

## 9.3 PTO Tariff Option for Full Capacity Deliverability Status

To the extent that a Participating TO's tariff provides the option for customers taking interconnection service under the Participating TO's tariff to obtain Full Capacity Deliverability Status, the CAISO will, in coordination with the applicable Participating TO, perform the necessary Deliverability studies to determine the Deliverability of customers electing such option. The CAISO 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.

# 9.4 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 following provisions:

(a) The Generating Facility seeking Full or Partial Capacity Deliverability Status under the CAISO Tariff must submit a request to the CAISO to study it for such Status. Such study request will be in the form of the CAISO's pro forma Interconnection Request, must include the Generating Facility's intended Point of Delivery to the CAISO Controlled Grid, and must be submitted during a Cluster Application Window. The Generating Facility will be required to satisfy the same study deposit and Interconnection Financial Security posting requirements as an Interconnection Customer.

- (b) The Non-Participating TO that serves as the interconnection provider to the Generating Facility must treat the CAISO as an Affected System in the interconnection study process for the Generating Facility.
- (c) As part of the Non-Participating TO's interconnection study process, the CAISO, in its sole discretion and on a case-by-case basis, will determine the adequacy of transmission on the Non-Participating TO's system for the Generating Facility to be deemed fully deliverable to the elected Point of Delivery to the CAISO Controlled Grid. Only those proposed Generating Facilities (or proposed increases in Generating Facility capacity) for which the CAISO has determined there is adequate transmission capacity on the Non-Participating TO system to provide full Deliverability to the applicable Point of Delivery will be eligible to be assessed for Full or Partial Capacity Deliverability Status under the CAISO Tariff.
- (d) If the Generating Facility is eligible for study for Full or Partial Capacity Deliverability Status, the CAISO will include the Generating Facility in the Interconnection Study process for the Queue Cluster associated with the Cluster Application Window in which the Generating Facility has submitted its study request. The Point of Delivery with the CAISO will be treated as the Point of Interconnection for purposes of including the Generating Facility in a Group Study with any applicable CAISO Interconnection Customers in the relevant Queue Cluster. Pursuant to the Queue Cluster Interconnection Study process the Generating Facility will be allocated its cost responsibility share of any applicable LDNUs or ADNUs.

The Generating Facility shall be permitted to select an Option (A) or Option (B) Deliverability option under Section 7.2 (and will be treated as an Option (B) Generating Facility if a selection is not provided to the CAISO) and permitted to participate in TP Deliverability allocation under Section 8.

- (e) The CAISO, Participating TO, and Interconnection Customer will execute any necessary agreements for reimbursement of study costs incurred it to assure cost attribution for any Network Upgrades relating to any Deliverability status conferred to each such interconnection customer under the Non-Participating TO's tariff.
- (f) The Non-Participating TO's interconnection customer will receive repayment of funds expended for the construction of the LDNUs, and, as applicable, ADNUs, on the CAISO Controlled Grid in the same manner as CAISO Interconnection Customers, as specified in Section 14.3.2.

# **Section 10 Cost Responsibility For Interconnection Customers**

## 10.1 Interconnection Customers in a Queue Cluster.

(a) RNUs and LDNUs. Until the Phase II Interconnection Study report is issued to the Interconnection Customer, the costs assigned to Interconnection Customers for RNUs and LDNUs in the Phase I Interconnection Study report shall establish the maximum cost responsibility for such Network Upgrades and the maximum initial Interconnection Financial Security required in Section 11.2.

After the CAISO issues the Phase II Interconnection Study report to the Interconnection Customer, the maximum value for Interconnection Financial Security required of each Interconnection Customer for RNUs and LDNUs shall be established comparing the subtotal cost for RNUs and LDNUs determined in the final Phase I Interconnection Study

to the subtotal cost for RNUs and LDNUs determined in the final Phase II Interconnection Study, and utilizing the lower subtotal. The lower subtotal for RNUs and LDNUs shall also establish the Interconnection Customers' maximum cost responsibility for RNUs and LDNUs after issuance of the Phase II Interconnection Study report.

(b) ADNUs. 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 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 Section 11.

The ADNU cost estimates provided any 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 Section 7.4. Accordingly, for such Interconnection Customers, the most recent annual reassessment undertaken under Section 7.4 shall provide the most recent cost estimates for the Interconnection Customer's ADNUs.

# 10.2 Interconnection Customers in the Independent Study Process.

(a) RNUs and LNUs. the maximum value for the Interconnection Customer's Financial Security for RNUs shall be established by the lesser of the costs for such Network Upgrades assigned to the Interconnection Customer in the final System Impact Study report or final Facilities Study report.

For such Interconnection Customers choosing Full Capacity or Partial Capacity Deliverability status, the maximum value of LDNUs shall be established by the lesser of the costs for such Network Upgrades assigned to the Interconnection Customer in the final Phase I Interconnection Study or the final Phase II Interconnection Study.

(b) ADNUs. 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 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 Section 11.

The ADNU cost estimates provided any 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 ADNU adjusted in the reassessment process undertaken under Section 7.4

## Section 11 Interconnection Financial Security

## 11.1 Types Of Interconnection Financial Security

The Interconnection Financial Security posted by an Interconnection Customer may be any combination of the following types of Interconnection Financial Security provided in favor of the applicable Participating TO(s):

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

Interconnection Financial Security instruments as listed above shall be in such form as the CAISO and applicable Participating TO(s) may reasonably require from time to time by notice to Interconnection Customers or in such other form as has been evaluated and approved as reasonably acceptable by the CAISO and applicable Participating TO(s).

The CAISO shall publish and maintain standardized forms related to the types of Interconnection Financial Security listed above which shall be accessible on the CAISO Website. The CAISO shall require the use of standardized forms of Interconnection Financial Security to the greatest extent possible. If at any time the guarantor of the Interconnection Financial Security fails to maintain the credit rating required by this Section, the Interconnection Customer shall provide to the applicable Participating TO(s) replacement Interconnection Financial Security meeting the requirements of this Section within five (5) Business Days of the change in credit rating.

Interest on a cash deposit standing to the credit of the applicable Participating TO(s) in an interest-bearing escrow account under subpart (d) of this Section will accrue to the Interconnection Customer's benefit and will be added to the Interconnection Customer's account on a monthly basis.

# 11.2 Interconnection Financial Security-Initial Posting

- The Interconnection Customer shall post, with notice to the CAISO, two separate Interconnection Financial Security instruments: (i) a posting relating to the applicable Network Upgrades; (ii) a posting relating to the Participating TO's Interconnection Facilities.
- Timing of Postings. The postings set forth in this Section shall be made on or before ninety (90) calendar days after issuance of the final Phase I Interconnection Study report for Interconnection Customers in a Queue Cluster, or on or before sixty (60) calendar days after the CAISO provides the results of the System Impact Study for Interconnection Customers in the Independent Study Process.

Revised Cluster Study Reports. If the CAISO revises a final Phase I Interconnection Study report pursuant to Section 6.8, the initial postings will be due from the Interconnection Customer by the later of ninety (90) calendar days after issuance of the original final Phase I Interconnection Study Report or forty (40) calendar days after issuance of the revised final Phase I Interconnection Study Report.

Revised Independent Study Track Reports. If the CAISO revises a final System Impact Study report pursuant to Section 6.8, the initial postings will be due from the Interconnection Customer by the later of ninety (90) calendar days after issuance of the original final System Impact report or thirty (30) calendar days after issuance of the revised System Impact Study report.

# 11.2.3 Posting Amount for Network Upgrades.

## 11.2.3.1 Small Generator Interconnection Customers

Each Interconnection Customer for a Small Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Small Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument as follows:

1) Interconnection Customers selecting Energy Only Deliverability Status must post for RNUs.

The posting amount for such RNUs shall equal the lesser of fifteen percent (15%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades or (ii) \$20,000 per megawatt of electrical output of the Small 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, including any requested modifications thereto, but in no event less than \$50,000.

2) Interconnection Customers selecting Option (A) Full Capacity or Partial Capacity Deliverability Status must post for RNUs and LDNUs.

The posting amount for such RNUs and LDNUs shall equal the lesser of fifteen percent (15%) of the total RNU and LDNU cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades or (ii) \$20,000 per megawatt of electrical output of the Small 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, including any requested modifications thereto, but in no event less than \$50,000.

3) <u>Interconnection Customers selecting Option (B) Full Capacity or Partial Capacity Deliverability Status must post for RNUs, LDNUs and ADNUs.</u>

The posting amount for such RNUs, LDNUs and ADNUs shall equal the lesser of fifteen percent (15%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades or (ii) \$20,000 per megawatt of electrical output of the Small 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, including any requested modifications thereto, but in no event less than \$50,000.

# 11.2.3.2 Large Generator Interconnection Customers

Each Interconnection Customer for a Large Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Large Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument as follows:

1) Interconnection Customers selecting Energy Only Deliverability Status must post for RNUs.

The posting amount for such RNUs shall equal the lesser of (i) fifteen percent (15%) of the total RNU cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades, (ii) \$20,000 per megawatt of electrical output of the Large 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, including any requested modifications thereto, or (iii) \$7,500,000, but in no event less than \$500,000.

In addition, if an Interconnection Customer switches its status from Full Capacity Deliverability Status to Energy-Only Deliverability Status within five (5) Business Days following the Phase I Interconnection Study Results Meeting, the required Interconnection Financial Security for Network Upgrades shall, for purposes of this section, be additionally capped at an amount no greater than the total cost responsibility assigned to the Interconnection Customer in the Phase I Interconnection Study for Reliability Network Upgrades.

2) <u>Interconnection Customers selecting Option (A) Full Capacity or Partial Capacity Deliverability Status must post for RNUs and LDNUs.</u>

The posting amount for such RNUs and LDNUs shall equal the lesser of (i) fifteen percent (15%) of the total RNU and LDNU cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades, (ii) \$20,000 per megawatt of electrical output of the Large 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, including any requested modifications thereto, or (iii) \$7,500,000, but in no event less than \$500,000.

3) <u>Interconnection Customers selecting Option (B) Full Capacity or Partial Capacity Deliverability Status must post for RNUs, LDNUs and ADNUs.</u>

The posting amount for such RNUs, LDNUs and ADNUs shall be equal to the lesser of (i) fifteen percent (15%) of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Network Upgrades, (ii) \$20,000 per megawatt of electrical output of the Large 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, including any requested modifications thereto, or (iii) \$7,500,000, but in no event less than \$500,000.

# 11.2.4 Posting Amount for Participating TO Interconnection Facilities.

#### 11.2.4.1 Small Generator Interconnection Customers

Each Interconnection Customer for a Small Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Small Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument in an amount of fifteen (15) percent of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Participating TO's Interconnection Facilities or (ii) \$20,000 per megawatt of electrical output of the Small 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, including any requested modifications thereto, but in no event less than \$50,000.

# 11.2.4.2 Large Generator Interconnection Customers

Each Interconnection Customer for a Large Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Large Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument in an amount equal to the lesser of (i) fifteen (15) percent of the total cost responsibility assigned to the Interconnection Customer in the final Phase I Interconnection Study or System Impact Study for Participating TO's Interconnection Facilities, (ii) \$20,000 per megawatt of electrical output of the Large 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, including any requested modifications thereto, or (iii) \$7,500,000, but in no event less than \$500,000.

## 11.2.5 Cost Estimates Less than Minimum Posting Amounts.

If the costs of either the estimated Network Upgrades or the Participating TO Interconnection Facilities are less than the minimum posting amounts that would apply under Sections 10.2.3 or 10.2.4, then the posting amount required will be equal to the estimated Network Upgrades amount or the Participating TO Interconnection Facilities amount.

## 11.2.6 Consequences for Failure to Post.

The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this Section shall result in the Interconnection Request being deemed withdrawn and subject to Section 3.8. The Interconnection Customer shall provide the CAISO and the Participating TO with written notice that it has posted the required Interconnection Financial Security no later than the applicable final day for posting.

# 11.2.7 Effect of Decrease in Output on Initial Posting Requirement.

If an Interconnection Customer decreases the electrical output of its facility after the completion of the Phase I Interconnection Study, pursuant to Section 6.7.2, and the CAISO, in consultation with the applicable Participating TO(s), is able to reasonably determine, prior to the date for initial posting of Interconnection Financial Security, that as a result of such decrease (solely or in combination with other modifications made by Interconnection Customers in the same Study Group) some of the Network Upgrades and/or Participating TO Interconnection Facilities identified in the Phase I Interconnection Study will no longer be required, then the calculation of the initial posting of Interconnection Financial Security will not include those Network Upgrades and/or

Participating TO Interconnection Facilities. Such determination will be made based on the CAISO's best engineering judgment and will not include any re-studies.

## 11.3 Interconnection Financial Security-Second and Third Postings

## 11.3.1 Second Posting

The Interconnection Customer shall make second postings, with notice to the CAISO, of two separate Interconnection Financial Security instruments: (i) a second posting relating to the Network Upgrades; (ii) a second posting relating to the Participating TO's Interconnection Facilities. The cost responsibility estimates for calculating the second and third Interconnection Financial Security Posting shall be set forth in the Phase II Interconnection Study report the System Impact Study, or the Facilities Study.

# 11.3.1.2 Timing of Posting

The second postings shall be made on or before one hundred eighty (180) calendar days after issuance of the final Phase II Interconnection Study report for Interconnection Customers in a Queue Cluster, or on or before one hundred twenty (120) calendar days after the CAISO provides the results of the Facilities Study for Interconnection Customers in the Independent Study.

Revised Cluster Study Reports. If the CAISO revises a final Phase II Interconnection Study report pursuant to Section 6.8, the second postings will be due by the later of one hundred-eighty (180) calendar days after issuance of the original final Phase II Interconnection Study report or sixty (60) calendar days after issuance of the revised final Phase II Interconnection Study report.

Revised Independent Study Track Reports. If the CAISO revises the final Facilities Study report pursuant to Section 6.8, the postings will be due by the later of one hundred-twenty (120) calendar days after the issuance of the original final Facilities Study report or thirty (30) calendar days from the issuance of the revised Facilities Study report.

# 11.3.1.3 Posting Requirements and Timing for Parked Option (A) Generating Facilities

For an Interconnection Customer choosing Option (A) whose Generating Facility was not allocated TP Deliverability in the first TP Deliverability allocation following its receipt of the final Phase II Interconnection Study, and who chooses to park the Interconnection Request, the posting due date will be extended by 12 months.

For an Interconnection Customer choosing Option (A) whose Generating Facility was allocated TP Deliverability for less than the full amount of its Interconnection Request, and who chooses to seek additional TP Deliverability for the remainder of the requested Deliverability of the Interconnection Request in the next allocation cycle, the postings for RNU, Participating TO Interconnection Facilities and for LDNUs corresponding to the initial allocation of TP Deliverability will be due in accordance with the dates specified above. The posting due date for the LDNUs corresponding to the remainder of the requested Deliverability will be extended by 12 months.

# 11.3.1.4 Network Upgrade Posting Amounts

# 11.3.1.4.1 Small Generator Interconnection Customers

For each Interconnection Customer for a Small Generating Facility assigned to a Queue Cluster or an Interconnection Customer for a Small Generating Facility in the

Independent Study Process, the second Interconnection Financial Security instrument shall bring the security amount up to the following:

- 1) For Interconnection Customers selecting Energy Only Deliverability Status: the lesser of (i) \$1 million or (ii) thirty (30) percent of the total cost responsibility assigned to the Interconnection Customer for RNUs in either the final Phase II Interconnection Study report, or for Independent Study Process Interconnection Customers, the System Impact Study, or Facilities Study, whichever is lower. In no event shall the total amount posted be less than \$100,000.
- 2) For Interconnection Customers who have Option (A) Generating Facilities, the lesser of (i) \$1 million or (ii) thirty (30) percent of the total cost responsibility assigned to the Interconnection Customer for RNUs and LDNUs in the final Phase II Interconnection Study or, for Independent Study Process Interconnection Customers, in either the System Impact Study or Facilities Study, whichever is lower.

However, in no event shall the total amount posted be less than \$100,000.

- 3) For Interconnection Customers who have Option (B) Generating Facilities: the lesser of (i) \$1 million or (ii) the sum of:
  - (a) thirty (30) percent of the cost responsibility assigned to the Interconnection Customer for RNUs and LDNUs in the final Phase II Interconnection Study or, for Independent Study Process Interconnection Customers, in either the System Impact Study or Facilities Study, whichever is lower; plus,
  - (b) thirty (30) percent of the cost responsibility assigned to the Interconnection Customer for ADNUs in the final Phase II Interconnection Study. However, to the extent that the Option (B) Interconnection Customer's Generating Facility is allocated TP Deliverability, the cost responsibility assigned to the Interconnection Customer for ADNUs will be adjusted to reflect the allocation of TP Deliverability. If the allocation of TP Deliverability is for the full Deliverability of the Interconnection Request, then the ADNU cost responsibility will equal zero (0). If the allocation of TP Deliverability is less than the full Deliverability of the Interconnection Request, then the ADNU cost responsibility will be reduced pro rata.

However, in no event shall the total amount posted be less than \$100,000.

# 11.3.1.4.2 Large Generator Interconnection Customers

Each Interconnection Customer for a Large Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Large Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument that brings the security amount up to the following:

1) For Interconnection Customers selecting Energy Only Deliverability Status: the lesser of (i) \$15 million or (ii) thirty (30) percent of the total cost responsibility assigned to the Interconnection Customer for RNUs in the, final Phase II Interconnection Study, System Impact Study, or Facilities Study, whichever is lower. In no event shall the total amount posted be less than \$500,000.

2) For Interconnection Customers, who have Option (A) Generating Facilities the lesser of (i) \$15 million or (ii) thirty (30) percent of the total cost responsibility assigned to the Interconnection Customer for RNUs and LDNUs in the final Phase II Interconnection Study or, for Independent Study Process Interconnection Customers, in either the System Impact Study or Facilities Study, whichever is lower.

However, in no event shall the total amount posted be less than \$500,000.

- 3) For Interconnection Customers who have Option (B) Generating Facilities: the lesser of (i) \$15 million or (ii) the sum of:
  - (a)thirty (30) percent of the cost responsibility assigned to the Interconnection Customer for RNUs and LDNUs in the final Phase II Interconnection Study or, for Independent Study Process Interconnection Customers, in either the System Impact Study or Facilities Study, whichever is lower; plus
  - (b) thirty (30) percent of the cost responsibility assigned to the Interconnection Customer for ADNUs in the final Phase II Interconnection Study. However, to the extent that the Option (B) Interconnection Customer's Generating Facility is allocated TP Deliverability, the cost responsibility assigned to the Interconnection Customer for ADNUs will be adjusted to reflect the allocation of TP Deliverability. If the allocation of TP Deliverability is for the full Deliverability of the Interconnection Request, then the ADNU cost responsibility will equal zero (0). If the allocation of TP Deliverability is less than the full Deliverability of the Interconnection Request, then the ADNU cost responsibility will be reduced pro rata.

However, in no event shall the total amount posted be less than \$500,000.

## 11.3.1.4.3 Cost Estimates Less than Minimum Posting Amounts.

If the costs of the estimated Network Upgrades are less than the posting amounts set forth in Section 11.3.1.4.2 above, then posting amount required will be equal to the estimated Network Upgrade amount.

# 11.3.1.5 Posting Amount for Participating TO Interconnection Facilities.

# 11.3.1.5.1 Small Generator Interconnection Customers

Each Interconnection Customer for a Small Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Small Generating Facility in the Independent Study Process shall post an Interconnection Financial Security instrument such that the total Interconnection Financial Security posted by the Interconnection Customer for Participating TO Interconnection Facilities equals the lesser of (i) \$1 million or (ii) thirty (30) percent of the total cost responsibility assigned to the Interconnection Customer for Participating TO Interconnection Facilities in the final Phase II Interconnection Study or Facilities Study. In no event shall the total amount posted be less than \$100,000.

#### 11.3.1.5.2 Large Generator Interconnection Customers

Each Interconnection Customer for a Large Generating Facility assigned to a Queue Cluster and each Interconnection Customer for a Large Generating Facility in the

Independent Study Process shall post an Interconnection Financial Security instrument such that the total Interconnection Financial Security posted by the Interconnection Customer for Participating TO Interconnection Facilities equals the lesser of (i) \$15 million or (ii) thirty (30) percent of the total cost responsibility assigned to the Interconnection Customer for Participating TO Interconnection Facilities in the final Phase II Interconnection Study or Facilities Study. In no event shall the total amount posted be less than \$500,000.

# 11.3.1.5.3 Cost Estimates Less than Minimum Posting Amounts.

If the costs of the estimated Participating TO Interconnection Facilities are less than the posting amounts set forth in Section 11.3.1.5.2 above, the posting amount required will be equal to the estimated Participating TO Interconnection Facilities amount.

# 11.3.1.6 Early Commencement of Construction Activities

If the start date for Construction Activities of Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer is prior to one hundred eighty (180) calendar days after issuance of the final Phase II Interconnection Study report for Interconnection Customers in a Queue Cluster or prior to one hundred twenty (120) calendar days after issuance of the final Facilities Study report for Interconnection Customers in the Independent Study Process, that start date must be set forth in the Interconnection Customer's GIA, and the Interconnection Customer shall make its second posting of Interconnection Financial Security pursuant to Section 10.3.2 rather than Section 10.3.1.

## 11.3.1.7 Consequences for Failure to Post

The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this Section shall constitute grounds for termination of the GIA pursuant to LGIA Article 2.3 or SGIA Article 3.3, whichever is applicable.

## 11.3.2 Third Posting

On or before the start of Construction Activities for Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer, whichever is earlier, the Interconnection Customer shall modify the two separate Interconnection Financial Security instruments posted pursuant to Section 11.3.1.

## 11.3.2.1 Network Upgrades

With respect to the Interconnection Financial Security Instrument for Network Upgrades, the Interconnection Customer shall modify this Instrument so that it equals one hundred (100) percent of the total cost responsibility assigned to the Interconnection Customer for RNUs, LDNUs and ADNUs as determined in Section 11.3.1.3.1 for Small Generator Interconnection Customers or in Section 11.3.1.3.2 for Large Generator Interconnection Customers.

An Interconnection Customer whose Option (B) Generating Facility was not allocated TP Deliverability and elects to have a party other than the applicable Participating TO(s) construct an LDNU or ADNU is not required to make the third posting for its cost responsibilities for such LDNU or ADNU. However, such Interconnection Customer will be required to demonstrate its financial capability to pay for the full cost of construction of its share, as applicable, of the LDNU or ADNU pursuant to Section 24.4.6.1 of the CAISO Tariff. An Interconnection Customer's election to have a party other than an applicable Participating TO construct an LDNU or ADNU does not relieve the Interconnection

Customer of the responsibility to fund or construct such LDNU or ADNU. Upon the Interconnection Customer's demonstration to the CAISO that the Interconnection Customer has expended the amount of the avoided posting requirement on construction of the LDNU or ADNU described here, the Interconnection Customer's second posting for these facilities will be returned to the Interconnection Customer, unless the Participating TO and Interconnection Customer agree to an alternative arrangement.

# 11.3.2.2 Participating TO Interconnection Facilities

With respect to the Interconnection Financial Security Instrument for Participating TO Interconnection Facilities, the Interconnection Customer shall modify this instrument so that it equals one hundred (100) percent of the total cost responsibility assigned to the Interconnection Customer for Participating TO Interconnection Facilities in the final Phase II Interconnection Study for Interconnection Customers in a Queue Cluster, or the final Facilities Study for Interconnection Customers in the Independent Study Process.

# 11.3.2.3 Separation of Third Posting

If an Interconnection Customer's Network Upgrades and/or Interconnection Facilities are separated into two or more specific components and/or can be separated into two or more separate and discrete phases of construction and the Participating TO is able to identify and separate the costs of the identified discrete components and/or phases of construction, then the Participating TO, the CAISO, and the Interconnection Customer may negotiate, as part of the Generator Interconnection Agreement, a division of the third Interconnection Financial Security posting into discrete Interconnection Financial Security amounts and may establish discrete milestone dates (however, outside dates must be included) for posting the amounts corresponding to each component and/or phase of construction related to the Network Upgrades and/or Interconnection Facilities described in the Generator Interconnection Agreement.

## 11.3.2.4 Failure to Post

The failure by an Interconnection Customer to timely post the Interconnection Financial Security required by this Section shall constitute grounds for termination of the GIA pursuant to LGIA Article 2.3 or SGIA Article 3.3, whichever is applicable.

#### 11.4 Withdrawal Or Termination- Effect On Financial Security

Except as set forth in Section 11.4.1, withdrawal of an Interconnection Request or termination of a GIA shall allow the applicable Participating TO(s) to liquidate the Interconnection Financial Security, or balance thereof, posted by the Interconnection Customer for Network Upgrades at the time of withdrawal.

To the extent the amount of the liquidated Interconnection Financial Security plus capital, if any, separately provided by the Interconnection Customer to satisfy its obligation to finance Network Upgrades exceeds the total cost responsibility for Network Upgrades assigned to the Interconnection Customer, the applicable Participating TO(s) shall remit to the Interconnection Customer the excess amount.

Withdrawal of an Interconnection Request or termination of a GIA shall result in the release to the Interconnection Customer of any Interconnection Financial Security posted by the Interconnection Customer for Participating TO Interconnection Facilities, except with respect to any amounts necessary to pay for costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer for the Participating TO's Interconnection Facilities and for which the applicable Participating TO(s) has not been reimbursed.

# 11.4.1 Conditions for Partial Recovery of Interconnection Financial Security Upon Withdrawal of Interconnection Request or Termination of GIA

A portion of the Interconnection Financial Security shall be released to the Interconnection Customer, consistent with Section 11.4.2, if the withdrawal of the Interconnection Request or termination of the GIA occurs for any of the following reasons:

- (a) Failure to Secure a Power Purchase Agreement. At the time of withdrawal of the Interconnection Request or termination of the GIA, the Interconnection Customer demonstrates to the CAISO that it has failed to secure an acceptable power purchase agreement for the Energy or capacity of the Generating Facility after a good faith effort to do so. A good faith effort can be established by demonstrating participation in a competitive solicitation process or bilateral negotiations with an entity other than an Affiliate that progressed, at minimum, to the mutual exchange by all counter-parties of proposed term sheets.
- (b) <u>Failure to Secure a Necessary Permit.</u> At the time of withdrawal of the Interconnection Request or termination of the GIA, the Interconnection Customer demonstrates to the CAISO that it has received a final denial from the primary issuing Governmental Authority of any permit or other authorization necessary for the construction or operation of the Generating Facility.
- (c) Increase in the Cost of Participating TO's Interconnection Facilities. The Interconnection Customer withdraws the Interconnection Request or terminates the GIA based on an increase of more than 30% or \$300,000, whichever is greater, in the estimated cost of Participating TO's Interconnection Facilities between the Phase I Interconnection Study and the Phase II Interconnection Study, provided, however, that the Interconnection Financial Security shall not be released if this increase in the estimated cost is due to the Interconnection Customer's requested modification to the interconnection configuration.
- (d) Material Change in Interconnection Customer Interconnection Facilities Created by a CAISO Change in the Point of Interconnection. The Interconnection Customer withdraws the Interconnection Request or terminates the GIA based on a material change from the Phase I Interconnection Study in the Point of Interconnection for the Generating Facility mandated by the CAISO and included in the final Phase II Interconnection Study. A material change in the Point of Interconnection shall be where Point of Interconnection has moved to (i) a different substation, (ii) a different line on a different right of way, or (iii) a materially different location than previously identified on the same line.
- (e) An Interconnection Customer having selected Option (A) in accordance with Section 7.2 is not allocated TP Deliverability and notifies the CAISO of its election to withdraw by the deadline for the second posting of Interconnection Financial Security. This condition does not apply to an Interconnection Customer whose Generating Facility was allocated TP Deliverability for a portion of its Interconnection Request and elected to seek additional Deliverability in the next TP Deliverability allocation process.
- (f) For an Interconnection Customer having selected Option (B) in accordance with Section 7.2 an increase in the Phase II Interconnection Study cost estimates for ANDUs over the Phase I Interconnection Study cost estimates for ADNUs of either twenty (20) percent, or \$20 million, whichever is less. Provided, however, that the Interconnection Financial Security shall not be released if this increase in

the estimated cost of ADNUs is due to the Interconnection Customer's requested modification to the interconnection configuration.

# 11.4.2 Determining Refundable Portion of the Interconnection Financial Security for Network Upgrades.

# 11.4.2.1 Withdrawal Between the First Posting and the Deadline for the Second Posting

If the Interconnection Customer either withdraws its Interconnection Request or terminates its GIA under any of the conditions (a)-(f) of Section 11.4.1 above and at any time between the initial posting and the deadline for the second posting of the Interconnection Financial Security for applicable Network Upgrades, then the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for the applicable Network Upgrades and reimburse the Interconnection Customer the lesser of:

- a. the Interconnection Financial Security plus (any other provided security plus any separately
  provided capital) less (all costs and expenses incurred or irrevocably committed to finance
  Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer),
  or
- the Interconnection Financial Security plus (any other provided security plus any separately provided capital) minus the lesser of fifty (50) percent of the value of the posted Interconnection Financial Security for Network Upgrades or
- c. \$10,000 per requested and approved megawatt of the Generating Facility Capacity at the time of withdrawal.

# 11.4.2.2 Withdrawal Between the Second Posting and the Commencement of Construction Activities

If the Interconnection Customer either withdraws or terminates its GIA under any of the conditions (a)-(f) of Section 11.4.1 above and at any time after the between the second posting of the Interconnection Financial Security for applicable Network Upgrades and the Commencement of Construction Activities for such Network Upgrades, then the applicable Participating TO(s) shall liquidate the Interconnection Financial Security for the applicable Network Upgrades and reimburse the Interconnection Customer the lesser of:

- a. the Interconnection Financial Security plus (any other provided security plus any separately
  provided capital) less (all costs and expenses incurred or irrevocably committed to finance
  Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer),
  or
- b. the Interconnection Financial Security plus (any other provided security plus any separately provided capital) minus the lesser of fifty (50) percent of the value of the posted Interconnection Financial Security for Network Upgrades or \$20,000 per requested and approved megawatt of the Generating Facility Capacity at the time of withdrawal.

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

If, at any time after the second posting requirement, the Interconnection Customer withdraws the Interconnection Request or terminates the GIA, as applicable, in accordance with Section 11.4.1(b), and the Delivery Network Upgrades to be financed by the Interconnection Customer

are also to be financed by one or more other Interconnection Customers, then Section 11.4.2.2 shall apply, except that the Interconnection Customer shall not be reimbursed for its share of any actual costs incurred or irrevocably committed by the applicable Participating TO(s) for Construction Activities.

## 11.4.2.4 After Commencement of Construction Activities.

Except as otherwise provided in Section 11.4.2.3, once Construction Activities on Network Upgrades on behalf of the Interconnection Customer commence, any withdrawal of the Interconnection Request or termination of the GIA by the Interconnection Customer will be treated as follows:

The applicable Participating TO(s) shall liquidate the Interconnection Financial Security, or balance thereof, posted by the Interconnection Customer for Network Upgrades at the time of withdrawal.

To the extent the amount of the liquidated Interconnection Financial Security plus capital, if any, separately provided by the Interconnection Customer to satisfy its obligation to finance Network Upgrades exceeds the total cost responsibility for Network Upgrades assigned to the Interconnection Customer, the applicable Participating TO(s) shall remit to the Interconnection Customer the excess amount.

Withdrawal of an Interconnection Request or termination of a GIA shall result in the release to the Interconnection Customer of any Interconnection Financial Security posted by the Interconnection Customer for Participating TO Interconnection Facilities, except with respect to any amounts necessary to pay for costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer for the Participating TO's Interconnection Facilities and for which the applicable Participating TO(s) has not been reimbursed in accordance with this Section.

# 11.4.2.5 Notification to CAISO and Accounting by Applicable Participating TO(s).

The applicable Participating TO(s) shall notify the CAISO within one (1) Business Day of liquidating any Interconnection Financial Security. Within twenty (20) calendar days of any liquidating event, the applicable Participating TO(s) shall provide the CAISO and Interconnection Customer with an accounting of the disposition of the proceeds of the liquidated Interconnection Financial Security and remit to the CAISO all proceeds not otherwise reimbursed to the Interconnection Customer or applied to costs incurred or irrevocably committed by the applicable Participating TO(s) on behalf of the Interconnection Customer in accordance with this Section.

All non-refundable portions of the Interconnection Financial Security remitted to the CAISO in accordance with this Section shall be treated in accordance with CAISO Tariff Section 37.9.4.

# 11.5 Adjusting Network Upgrade Postings Following Reassessment Process

For Interconnection Customers having selected Option (B), the most recent reassessment conduced under Section 7.4 in any Interconnection Study Cycle following the Interconnection Customer's receipt of its Phase II Interconnection study report shall provide the most recent cost estimates for the Interconnection Customer's ADNUs and the Interconnection Customer shall adjust its Interconnection Financial Security for Network Upgrades to correspond to the most recent estimate for ADNUs.

# Section 12 Engineering & Procurement ("E&P") Agreement

Prior to executing a GIA, an Interconnection Customer may, in order to advance the implementation of its interconnection, request and the applicable Participating TO(s) shall offer the Interconnection Customer, an E&P Agreement that authorizes the applicable Participating TO(s) to begin engineering and

procurement of long lead-time items necessary for the establishment of the interconnection. However, the applicable Participating TO(s) shall not be obligated to offer an E&P Agreement if the Interconnection Customer is in Dispute Resolution as a result of an allegation that the Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the . The E&P Agreement is an optional procedure. The E&P Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer and to make advance payments or provide other satisfactory security for such costs.

The Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If the Interconnection Customer withdraws its application for interconnection or either Party terminates the E&P Agreement, to the extent the equipment ordered can be canceled under reasonable terms, the Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, the applicable Participating TO(s) may elect: (i) to take title to the equipment, in which event the applicable Participating TO(s) shall refund the Interconnection Customer any amounts paid by Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to the Interconnection Customer, in which event the Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

# **Section 13 Generator Interconnection Agreement (GIA)**

#### 13.1 Tender

- 13.1.1 Within thirty (30) Calendar Days after the CAISO provides the final Phase II Interconnection Study report, or the Facilities Study report (or System Impact Study report if the Facilities Study is waived) to the Interconnection Customer, the applicable Participating TO(s) and the CAISO shall tender a draft GIA, together with draft appendices. The draft GIA shall be in the form of the FERC-approved form of GIA set forth in CAISO Tariff Appendix T or Appendix CC, as applicable. The Interconnection Customer shall provide written comments, or notification of no comments, to the draft appendices to the applicable Participating TO(s) and the CAISO within (30) calendar days of receipt.
- Consistent with Sections 15.3 and 13.1.1, when the transmission system of a Participating TO, in which the Point of Interconnection is not located, is affected, such Participating TO shall tender a separate agreement, in the form of the GIA, as appropriately modified.

## 13.2 Negotiation

Notwithstanding Section 13.1, at the request of the Interconnection Customer, the applicable Participating TO(s) and CAISO shall begin negotiations with the Interconnection Customer concerning the appendices to the GIA at any time after the CAISO provides the Interconnection Customer with the final Phase II Interconnection Study report. The applicable Participating TO(s) and CAISO and the Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft GIA for not more than one hundred twenty (120) calendar days after the CAISO provides the Interconnection Customer with the final Phase II Interconnection Study report, or the Facilities Study report (or System Impact Study report if the Facilities Study is waived). If the Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft GIA pursuant to Section 13.1 and request submission of the unexecuted GIA with FERC or initiate Dispute Resolution procedures pursuant to Section 15.5. If the Interconnection Customer requests termination of the negotiations, but, within one

hundred twenty (120) calendar days after issuance of the final Phase II Interconnection Study report, fails to request either the filing of the unexecuted GIA or initiate Dispute Resolution, it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed and returned the GIA, requested filing of an unexecuted GIA, or initiated Dispute Resolution procedures pursuant to Section 15.5 within one hundred twenty (120) calendar days after issuance of the final Phase II Interconnection Study report, it shall be deemed to have withdrawn its Interconnection Request. The applicable Participating TO(s) and CAISO shall provide to the Interconnection Customer a final GIA within fifteen (15) Business Days after the completion of the negotiation process.

# 13.3 Execution And Filing

The Interconnection Customer shall either: (i) execute the appropriate number of originals of the tendered GIA as specified in the directions provided by the CAISO and return them to the CAISO, as directed, for completion of the execution process; or (ii) request in writing that the applicable Participating TO(s) and CAISO file with FERC a GIA in unexecuted form. The GIA shall be considered executed as of the date that all three Parties have signed the GIA. As soon as practicable, but not later than ten (10) Business Days after receiving either the executed originals of the tendered GIA (if it does not conform with a FERC-approved standard form of interconnection agreement) or the request to file an unexecuted GIA, the applicable Participating TO(s) and CAISO shall file the GIA with FERC, as necessary, together with an explanation of any matters as to which the Interconnection Customer and the applicable Participating TO(s) or CAISO disagree and support for the costs that the applicable Participating TO(s) propose to charge to the Interconnection Customer under the GIA. An unexecuted GIA should contain terms and conditions deemed appropriate by the applicable Participating TO(s) and CAISO for the Interconnection Request. If the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted GIA, they may proceed pending FERC action.

## 13.4 Commencement Of Interconnection Activities

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

## 13.5 Interconnection Customer To Meet PTO Handbook Requirements

The Interconnection Customer's Interconnection Facilities shall be designed, constructed, operated and maintained in accordance with the applicable Participating TO's Interconnection Handbook.

# Section 14 PTOs Interconnection Facilities And Network Upgrades

#### 14.1 Schedule

The applicable Participating TO(s) and the Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of the applicable Participating TO's Interconnection Facilities and the Network Upgrades.

## 14.2 Construction Sequencing

## 14.2.1 General

In general, the sequence of construction of Stand Alone Network Upgrades or other Network Upgrades for a single Interconnection Request, or Network Upgrades identified for the interconnection of Generating Facilities associated with multiple Interconnection Requests, shall be determined, to the maximum extent practical, in a manner that accommodates the proposed Commercial Operation Date set forth in the GIA of the Interconnection Customer(s) associated with the Stand Alone Network Upgrades or other Network Upgrades.

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

The applicable Participating TO(s) shall be responsible for financing and constructing any Network Upgrades necessary to support the interconnection of the Generating Facility of an Interconnection Customer with a GIA whenever the Network Upgrades were included in the Interconnection Base Case Data for a Phase II Interconnection Study on the basis that they were Network Upgrades associated with Generating Facilities of Interconnection Customers that have an executed GIA (or its equivalent predecessor agreement) or unexecuted GIA (or its equivalent predecessor agreement) filed with FERC, and such GIA specifies that the Participating TO would construct the Network Upgrades, and either:

- the Network Upgrades will not otherwise be completed because such GIA or equivalent predecessor agreement was subsequently terminated or the Interconnection Request has otherwise been withdrawn; or
- (ii) the Network Upgrades will not otherwise be completed in time to support the Interconnection Customer's In-Service Date because construction has not commenced in accordance with the terms of such GIA (or its equivalent predecessor agreement).

Where the Participating TO is constructing ADNUs for Option (B) Interconnection Customers and one of the two conditions above occurs, the Participating TO shall continue to construct such ADNUs with financing provided from the Interconnection Financial Security of those Option (B) Interconnection Customers' Interconnection referred to above, with any additional financing requirements to be reapportioned among those remaining Option (B) Interconnection Customers who still need the ADNUs.

The obligation under this Section arises only after the CAISO, in coordination with the applicable Participating TO(s), determines that the Network Upgrades remain needed to support the interconnection of the Interconnection Customer's Generating Facility notwithstanding, as applicable, the absence or delay of the Generating Facility that is contractually, or was previously contractually, associated with the Network Upgrades.

Further, to the extent the timing of such Network Upgrades was not accounted for in determining a reasonable Commercial Operation Date among the CAISO, applicable Participating TO(s), and the Interconnection Customer as part of the Phase II Interconnection Study, the applicable Participating TO(s) will use Reasonable Efforts to ensure that the construction of such Network Upgrades can accommodate the Interconnection Customer's proposed Commercial Operation Date. If, despite Reasonable Efforts, it is anticipated that the Network Upgrades cannot be constructed in time to accommodate the Interconnection Customer's proposed Commercial Operation Date, the Interconnection Customer may commit to pay the applicable Participating TO(s) any costs associated with expediting construction of the Network Upgrades to meet the original proposed Commercial Operation Date. The expediting costs under Section shall be in addition to the Interconnection Customer's cost responsibility.

# 14.2.3 Advancing Construction of Network Upgrades that are Part of the CAISO's Transmission Plan

An Interconnection Customer with a GIA, in order to maintain its In-Service Date as specified in the GIA, may request that the CAISO and applicable Participating TO(s) advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such In-Service Date and (ii) would otherwise not be completed, pursuant to an approved CAISO Transmission Plan covering the PTO Service Territory of the applicable Participating TO(s), in time to support such In-Service Date. Upon such request, the applicable Participating TO(s) will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the applicable Participating TO(s) any associated expediting costs. The Interconnection Customer shall be entitled to refunds, if any, in accordance with the GIA, for any expediting costs paid.

## 14.3 Network Upgrades

With the exception of LDNUs and ADNUs for Option (B) Generating Facilities that were not allocated TP Deliverability, Network Upgrades will be constructed by the applicable Participating TO(s). Interconnection Customers may, at their discretion, select parties other than the applicable PTOs to construct certain LDNUs and ADNUs required by their Option (B) Generating Facilities that are not allocated TP Deliverability, if such LDNUs and ADNUs are eligible for construction by parties other than the applicable PTO pursuant to Section 24.5.2 of the CAISO Tariff. Such ADNUs and LDNUs will be incorporated into the CAISO Controlled Grid pursuant to the provisions for Merchant Transmission Facilities in CAISO Tariff Sections 24.4.6.1, and 36.11. Unless the Interconnection Customer elects construction by a party other than the applicable Participating TO, the applicable Participating TO(s) will be obligated to construct the LDNUs and ADNUs This Section shall not apply to an Interconnection Customer's right to build Stand Alone Network Upgrade(s) in accordance with the LGIA.

# 14.3.1 Initial Funding

RNUs and LDNUs shall be funded by the Interconnection Customer(s) either by means of drawing down the Interconnection Financial Security or by the provision of additional capital, at each Interconnection Customer's election, up to a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s). The applicable Participating TO(s) shall be responsible for funding any capital costs for the RNUs and LDNUs that exceed the total cost responsibility assigned to the Interconnection Customer(s).

- (a) Where the funding responsibility for any RNUs and LDNUs has been assigned to a single Interconnection Customer, the applicable Participating TO(s) shall invoice the Interconnection Customer under LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, up to a maximum amount no greater than that established by the cost responsibility assigned to each Interconnection Customer(s) for the RNUs or LDNUs, respectively.
- (b) Where the funding responsibility for an RNU has been assigned to more than one Interconnection Customer in accordance with this GIDAP, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, for such RNU in accordance with their respective cost responsibilities. Each Interconnection

Customer may be invoiced up to a maximum amount no greater than that established by the cost responsibility assigned to that Interconnection Customer.

- (c) Where the funding responsibility for an LDNU has been assigned to more than one Interconnection Customer, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, for such LDNUs based on their respective cost responsibilities. Each Interconnection Customer may be invoiced up to a maximum amount no greater than that established by the cost responsibility assigned to that Interconnection Customer.
- (d) Where the funding responsibility for an ADNU being constructed by one or more Participating TO has been assigned to more than one Option (B) Interconnection Customer, the applicable Participating TO(s) shall invoice each Interconnection Customer under LGIA Article 12.1 or SGIA Article 6.1, whichever is applicable, for such ADNUs based on their respective cost responsibilities.

Any permissible extension of the Commercial Operation Date of a Generating Facility will not alter the Interconnection Customer's obligation to finance Network Upgrades where the Network Upgrades are required to meet the earlier Commercial Operation Date(s) of other Generating Facilities that have also been assigned cost responsibility for the Network Upgrades.

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

## 14.3.2.1 Repayment of Amounts Advanced Regarding Non-Phased Generating Facilities

Upon the Commercial Operation Date of a Generating Facility that is not a Phased Generating Facility, the Interconnection Customer shall be entitled to a repayment for the Interconnection Customer's contribution to the cost of Network Upgrades as follows.

For RNUs, in accordance with the Interconnection Customer's cost responsibility assigned , up to a maximum of \$60,000 per MW of generating capacity as specified in the GIA.

For LDNUs, except for LDNUs for Option (B) Generating Facilities that were not allocated TP Deliverability, in accordance with the Interconnection Customer's assigned cost responsibility.

Option (B) Generating Facilities that were not allocated TP Deliverability will not receive repayment for LDNUs or ADNUs.

Such repayment amount shall be paid to the Interconnection Customer by the applicable Participating TO(s) on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the Generating Facility's Commercial Operation Date; or (2) any alternative payment schedule that is mutually agreeable to the Interconnection Customer and Participating TO, provided that such amount is paid within five (5) years of the Commercial Operation Date.

For Network Upgrades for which the Interconnection Customer did not receive repayment, the Interconnection Customer will be eligible to receive Merchant Transmission Congestion Revenue Rights (CRRs) in accordance with the CAISO Tariff Section 36.11 associated with the Network Upgrades, or portions thereof that were

funded by the Interconnection Customer. Such CRRs would take effect upon the Commercial Operation Date of the Generating Facility in accordance with the GIA.

# 14.3.2.2 Repayment of Amounts Advanced Regarding Phased Generating Facilities

Upon the Commercial Operation Date of each phase of a Phased Generating Facility, the Interconnection Customer shall be entitled to a repayment for the Interconnection Customer's contribution to the cost of Network Upgrades for that completed phase in accordance with the Interconnection Customer's cost responsibility assigned for the phase and subject to the limitations specified in Section 14.3.2.1, if all of the following conditions are satisfied:

- (a) The Generating Facility is capable of being constructed in phases;
- (b) The Generating Facility is specified in the GIA as being constructed in phases;
- (c) The completed phase corresponds to one of the phases specified in the GIA;
- (d) The phase has achieved Commercial Operation and the Interconnection Customer has tendered notice of the same pursuant to the GIA;
- (e) All parties to the GIA have confirmed that the completed phase meets the requirements set forth in the GIA and any other operating, metering, and interconnection requirements to permit generation output of the entire capacity of the completed phase as specified in the GIA;
- (f) The Network Upgrades necessary for the completed phase to meet the desired level of Deliverability are in service; and
- (g) The Interconnection Customer has posted one hundred (100) percent of the Interconnection Financial Security required for the Network Upgrades for all the phases of the Generating Facility (or if less than one hundred (100) percent has been posted, then all required Interconnection Financial Security instruments to the date of commencement of repayment).

Upon satisfaction of these conditions (a) through (g), the Interconnection Customer shall be entitled to receive a partial repayment of its financed cost responsibility in an amount equal to the percentage of the Generating Facility declared to be in Commercial Operation multiplied by the cost of the Network Upgrades associated with the completed phase. The Interconnection Customer shall be entitled to repayment in this manner for each completed phase until the entire Generating Facility is completed.

A reduction in the electrical output (MW capacity) of the Generating Facility pursuant to Article 5.19.4 of the LGIA shall not diminish the Interconnection Customer's right to repayment pursuant to this Section. If the GIA includes a partial termination provision and the partial termination right has been exercised with regard to a phase that has not been built, then the Interconnection Customer's eligibility for repayment under this Section as to the remaining phases shall not be diminished. If the Interconnection Customer completes one or more phases and then defaults on the GIA, the Participating TO and the CAISO shall be entitled to offset any losses or damages resulting from the default against any repayments made for Network Upgrades related to the completed phases provided that the party seeking to exercise the offset has complied with any requirements which may be required to apply the stream of payments utilized to make the repayment to the Interconnection Customer as an offset.

Any repayment amount for completion of a phase shall include any tax gross-up or other tax-related payments associated with the Network Upgrades not refunded to the Interconnection Customer, and shall be paid to the Interconnection Customer by the applicable Participating TO(s) on a dollar-for-dollar basis either through (1) direct payments made on a levelized basis over the five-year period commencing on the date by the requirements of items (a) through (g) above have been fulfilled,; or (2) any alternative payment schedule that associates the completion of Network Upgrades with the completion of particular phases and that is mutually agreeable to the Interconnection Customer and Participating TO.

# 14.3.2.3 Interest Payments and Assignment Rights

Any phased or non-phased repayment shall include interest calculated in accordance with the methodology set forth in FERC's regulations at 18 C.F.R. §35.19a(a)(2)(iii) from the date of any payment for Network Upgrades through the date on which the Interconnection Customer receives a repayment of such payment. The Interconnection Customer may assign such repayment rights to any person.

# 14.4 Special Provisions For Affected Systems, Other Affected PTOs

The Interconnection Customer shall enter into an agreement with the owner of the Affected System and/or other affected Participating TO(s), as applicable. The agreement shall specify the terms governing payments to be made by the Interconnection Customer to the owner of the Affected System and/or other affected Participating TO(s) as well as the repayment by the owner of the Affected System and/or other affected Participating TO(s). If the affected entity is another Participating TO, the initial form of agreement will be the GIA, as appropriately modified.

Any repayment by the owner of the Affected System shall be in accordance with FERC Order No. 2003-B (109 FERC  $\P$  61,287).

## **Section 15 Miscellaneous**

# 15.1 Confidentiality

For the purposes of this Section 15.1, "Party" or "Parties" shall mean the CAISO, Participating TO(s), Interconnection Customer or any combination of the CAISO, Participating TO(s) or the Interconnection Customer.

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

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Parties receiving the information that the information is confidential.

If requested by any Party, the other Parties shall provide in writing, the basis for asserting that the information referred to in this Section warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

These confidentiality provisions are limited to information provided pursuant to this GIDAP.

## 15.1.1 Scope

Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a nonconfidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or breach of the GIA; or (6) is required, in accordance with Section 15.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the . Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

#### 15.1.2. Release of Confidential Information

No Party shall release or disclose Confidential Information to any other person, except to its employees, consultants, Affiliates (limited by FERC's Standards of Conduct requirements set forth in Part 358 of FERC's Regulations, 18 C.F.R. Part 358), or to Affected Systems, or to parties who may be or considering providing financing to or equity participation with the Interconnection Customer, or to potential purchasers or assignees of the Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this Section and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Section.

## 15.1.3 Rights

Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Parties. The disclosure by each Party to the other Parties of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

#### 15.1.4 No Warranties

By providing Confidential Information, no Party makes any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, no Party obligates itself to provide any particular information or Confidential Information to the other Parties nor to enter into any further agreements or proceed with any other relationship or joint venture.

## 15.1.5 Standard of Care

Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Parties under these procedures or its regulatory requirements.

## 15.1.6 Order of Disclosure

If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires any Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Parties with prompt notice of such request(s) or requirement(s) so that the other Parties may seek an appropriate protective order or waive compliance with the terms of these confidentiality provisions . Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

### 15.1.7 Remedies

Monetary damages are inadequate to compensate a Party for another Party's breach of its obligations under this Section 15.1. Each Party accordingly agrees that the other Parties shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party breaches or threatens to breach its obligations under this Section 15.1, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the breach of this Section 15.1, but shall be in addition to all other remedies available at law or in equity. Further, the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Section 15.1.

### 15.1.8 Disclosure to FERC, its Staff, or a State

Notwithstanding anything in this Section 15.1 to the contrary, and pursuant to 18 C.F.R. section 1b.20, if FERC or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence, the Party shall provide the requested information to FERC or its staff, within the time provided for in the request for information. In providing the information to FERC or its staff, the Party must, consistent with 18 C.F.R. Section 388.112, request that the information be treated as confidential and non-public by FERC and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Parties prior to the release of the Confidential Information to FERC or its staff. The Party shall notify the other applicable Parties when it is notified by FERC or its staff that a request to release Confidential Information has been received by FERC, at which time any of the Parties may respond before such information would be made public, pursuant to 18 C.F.R. Section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules and regulations.

Subject to the exception in Section 15.1.8, any Confidential Information shall not be disclosed by the other Parties to any person not employed or retained by the other Parties, except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Parties, such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this GIDAP or as a transmission service provider or a Balancing Authority including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Parties in writing of the information it claims is confidential. Prior to any disclosures of another Party's

Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party in writing and agrees to assert confidentiality and cooperate with the other Party in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

- **15.1.10** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a breach of this provision).
- 15.1.11 The Participating TO or CAISO shall, at the Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time of Confidential Information is no longer needed.

### 15.2 Delegation Of Responsibility

The CAISO and the Participating TOs may use the services of subcontractors as deemed appropriate to perform their obligations under this GIDAP. The applicable Participating TO or CAISO shall remain primarily liable to the Interconnection Customer for the performance of its respective subcontractors and compliance with its obligations of this GIDAP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

- 15.3 [Not Used]
- 15.4 [Not Used]

### 15.5 Disputes

If an Interconnection Customer disputes withdrawal of its Interconnection Request under Section 3.8, the CAISO will forward any information regarding the disputed withdrawal received under Section 3.8 within one (1) Business Day to the GIDAP Executive Dispute Committee, consisting of the Vice President responsible for administration of this GIDAP, the CAISO Vice President responsible for customer affairs, and an additional Vice President. The GIDAP Executive Dispute Committee shall have five (5) Business Days to determine whether or not to restore the Interconnection Request. If the GIDAP Executive Dispute Committee concludes that the Interconnection Request should have been withdrawn, the Interconnection Customer may seek relief in accordance with the CAISO ADR Procedures.

All disputes, other than those arising from Section 3.8, arising out of or in connection with this GIDAP whereby relief is sought by or from the CAISO shall be settled in accordance with the CAISO ADR Procedures.

Disputes arising out of or in connection with this GIDAP not subject to the CAISO ADR Procedures shall be resolved as follows:

### 15.5.1 Submission

In the event either Party has a dispute, or asserts a claim, that arises out of or in connection with the GIA, the GIDAP, or their performance, such Party (the "disputing Party") shall provide the other Party with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party. In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations

within thirty (30) calendar days of the other Party's receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of the GIA and GIDAP.

### 15.5.2 External Arbitration Procedures

Any arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) calendar days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The two arbitrators so chosen shall within twenty (20) calendar days select a third arbitrator to chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable FERC regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Section 15.5, the terms of this Section 15.5 shall prevail.

#### 15.5.3 Arbitration Decisions

Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) calendar days of appointment and shall notify the Parties in writing of such decision and the reasons therefore. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the GIA and shall have no power to modify or change any provision of the GIA and in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with FERC if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

### 15.5.4 Costs

Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel and one half of the cost of the third arbitrator chosen; or (2) one half the cost of the single arbitrator jointly chosen by the Parties.

### 15.6 Local Furnishing Bonds

### 15.6.1 Participating TOs That Own Facilities Financed by Local Furnishing Bonds

This provision is applicable only to a Participating TO that has financed facilities for the local furnishing of electric energy with Local Furnishing Bonds. Notwithstanding any other provisions of this, the Participating TO and the CAISO shall not be required to provide Interconnection Service to the Interconnection Customer pursuant to this and the GIA if the provision of such Interconnection Service would jeopardize the tax-exempt status of any Local Furnishing Bond(s) issued for the benefit of the Participating TO.

### 15.6.2 Alternative Procedures for Requesting Interconnection Service

If a Participating TO determines that the provision of Interconnection Service requested by the Interconnection Customer would jeopardize the tax-exempt status of any Local Furnishing Bond(s) issued for the benefit of the Participating TO, it shall advise the Interconnection Customer and the CAISO within (30) calendar days of receipt of the Interconnection Request.

The Interconnection Customer thereafter may renew its request for the same interconnection Service by tendering an application under Section 211 of the Federal Power Act, in which case the Participating TO, within ten (10) calendar days of receiving a copy of the Section 211 application, will waive its rights to a request for service under Section 213(a) of the Federal Power Act and to the issuance of a proposed order under Section 212(c) of the Federal Power Act, and the CAISO and Participating TO shall provide the requested Interconnection Service pursuant to the terms and conditions set forth in this and the GIA.

### 15.7 Change In CAISO Operational Control

If the CAISO no longer has control of the portion of the CAISO Controlled Grid at the Point of Interconnection during the period when an Interconnection Request is pending, the CAISO shall transfer to the applicable former Participating TO or successor entity which has ownership of the Point of Interconnection any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net deposit amount and the costs that the former Participating TO or successor entity incurs to evaluate the request for interconnection shall be paid by or refunded to the Interconnection Customer, as appropriate. The CAISO shall coordinate with the applicable former Participating TO or successor entity which has ownership of the Point of Interconnection to complete any Interconnection Study, as appropriate, that the CAISO has begun but has not completed. If the CAISO has tendered a draft GIA to the Interconnection Customer but the Interconnection Customer has neither executed the GIA nor requested the filling of an unexecuted GIA with FERC, unless otherwise provided, the Interconnection Customer must complete negotiations with the applicable former Participating TO or successor entity which has the ownership of the Point of Interconnection.

## Appendix 1 Interconnection Request INTERCONNECTION REQUEST

Provide three copies of this completed form pursuant to Section 7 of this Appendix 1 below.

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

	Cogeneration         (MW)           Reciprocating Engine         (MW)           Biomass         (MW)           Steam Turbine         (MW)           Gas Turbine         (MW)           Wind         (MW)           Hydro         (MW)           Photovoltaic         (MW)           Combined Cycle         (MW)
	Other (please describe):
d. Prope	eral description of the equipment configuration (e.g. number, size, type, etc):  Proposed In-Service Date (first date transmission is needed to the facility), Trial  Operation date and Commercial Operation Date by day, month, and year and term of service (dates must be sequential);  osed Trial Operation Date:  osed Commercial Operation Date:  osed Term of Service (years):
e.	Name, address, telephone number, and e-mail address of the Interconnection Customer's contact person (primary person who will be contacted);
	Name: Title: Company Name: Street Address: City, State: Zip Code: Phone Number: Fax Number: Email Address: DUNS Number:
f.	Approximate location of the proposed Point of Interconnection (i.e., specify transmission facility interconnection point name, voltage level, and the location of interconnection);
g.	Interconnection Customer data (set forth in Attachment A)
	The Interconnection Customer shall provide to the CAISO the technical data called for in Attachment A to this Interconnection Request. Three (3) copies are required
below Interc	cable deposit amount made payable to California ISO. Send check to CAISO (see section of for details) along with the: onnection Request for processing. Inment A (Interconnection Request Generating Facility Data).
	nce of Site Exclusivity as specified in the GIDAP and name(s), address(es) and contact nation of site owner(s) (check one):
Depos	ached to this Interconnection Request sit in lieu of Site Exclusivity will be provided at a later date in dance with this

5.

6.

New Resource Interconnection California ISO P.O. Box 639014 Folsom, CA 95763-9014

Overnight address: 250 Outcropping Way, Folsom, CA 95630

8. Representative of the Interconnection Customer to contact:

	[To be completed by the Interconnection Customer] Name:
	Title:
	Company Name:
	Street Address:
	City, State:
	Zip Code:
	Phone Number:
	Fax Number:
	Email Address:
9.	This Interconnection Request is submitted by:
	Legal name of the Interconnection Customer:
	By (signature):
	Name (type or print):
	Title:
	Date:

### **Interconnection Request**

### **Attachment A Generating Facility Data**

### **GENERATING FACILITY DATA**

Provide three copies of this completed form.

Congreting English Information

- 1. Provide two original prints and one reproducible copy (no larger than 36" x 24") of the following:
  - A. Site drawing to scale, showing generator location and Point of Interconnection with the CAISO Controlled Grid.
  - B. Single-line diagram showing applicable equipment such as generating units, step-up transformers, auxiliary transformers, switches/disconnects of the proposed interconnection, including the required protection devices and circuit breakers. For wind and photovoltaic generator plants, the one line diagram should include the distribution lines connecting the various groups of generating units, the generator capacitor banks, the step up transformers, the distribution lines, and the substation transformers and capacitor banks at the Point of Interconnection with the CAISO Controlled Grid.

۷.	Gene	erating Facility information					
	A.	Total Generating Facility rated output (MW):					
	B.	Generating Facility auxiliary Load (MW):					
	C.	Project net capacity (A-B)(MW):					
	D.	Standby Load when Generating Facility is off-line (MW):					
	E.	Number of Generating Units:					
		(Please repeat the following items for each generator)					
	F.	Individual generator rated output (MW for each unit):					
	G.	Manufacturer:					
	H.	Year Manufactured					
	I.	Nominal Terminal Voltage (kV):					
	J.	Rated Power Factor (%):					
	K.	Type (Induction, Synchronous, D.C. with Inverter):					
	L.	Phase (three phase or single phase):					
	M.	Connection (Delta, Grounded WYE, Ungrounded WYE, impedance grounded):					
	N.	Generator Voltage Regulation Range (+/- %):					
	Ο.	Generator Power Factor Regulation Range:					
	P.	For combined cycle plants, specify the plant net output capacity (MW) for an outage of					
		the steam turbine or an outage of a single combustion turbine					
3.	Synd	chronous Generator – General Information:					
	(Ple	ase repeat the following for each generator model)					
	A.	Rated Generator speed (rpm):					
	B.	Rated MVA:Rated Generator Power Factor:					
	C.						
	D.	Generator Efficiency at Rated Load (%):					
	E.	Moment of Inertia (including prime mover):					
	F.	Inertia Time Constant (on machine base) H: sec or MJ/MVA					
	G.	SCR (Short-Circuit Ratio - the ratio of the field current required for rated open-circuit					
		voltage to the field current required for rated short-circuit current):					
	H.	Please attach generator reactive capability curves.					
	I.	Rated Hydrogen Cooling Pressure in psig (Steam Units only):					

4.

5.

J. Please attach a plot of generator terminal voltage versus field current that shows the air gap line, the open-circuit saturation curve, and the saturation curve at full load and rated power factor.

	se repeat the following for each generator model)
A.	Indicate the Manufacturer and Type of excitation system used for the generator. For exciter type, please choose from 1 to 9
	below or describe the specific excitation system.  (1) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is independent of the generator terminal voltage and current.
	(2) Rotating DC commentator exciter with continuously acting regulator. The regulator power source is bus fed from the generator terminal voltage.
	(3) Rotating DC commutator exciter with non-continuously acting regulator (i.e., regulator adjustments are made in discrete increments).
	(4) Rotating AC Alternator Exciter with non-controlled (diode) rectifiers. The regulator power source is independent of the generator terminal voltage and current (not bus-fed).
	(5) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers. The regulator power source is fed from the exciter output voltage.
	<ul> <li>(6) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers.</li> <li>(7) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is</li> </ul>
	(7) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from the generator terminal voltage.
	(8) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from a combination of generator terminal voltage and current (compound-source controlled rectifiers system.
_	(9) Other (specify):
B.	Attach a copy of the block diagram of the excitation system from its instruction manual. The diagram should show the input, output, and all feedback loops of the excitation system.
C.	Excitation system response ratio (ASA):
D. E.	Full load rated exciter output voltage:  Maximum exciter output voltage (ceiling voltage):
F.	Other comments regarding the excitation system?
(Please PSS u	System Stabilizer Information e repeat the following for each generator model. All new generators are required to install nless an exemption has been obtained from WECC. Such an exemption can be obtained as that do not have suitable excitation systems.)
A.	Manufacturer:
B.	Is the PSS digital or analog?
C.	Note the input signal source for the PSS?  Bus frequency Shaft speed Bus Voltage  Other (specify source)
D.	Please attach a copy of a block diagram of the PSS from the PSS Instruction Manual and the correspondence between dial settings and the time constants or PSS gain.
E:	Other comments regarding the PSS?

	comple for both		A for steam, gas or combined-cycle turbines, Part B for hydro turbines, an					
A.	Steam	n, gas or	r combined-cycle turbines:					
	(1) (2)	If stea	/pe of unit (Steam, Gas, or Combined-cycle): am or combined-cycle, does the turbine system have a reheat process (i.e high and low pressure turbines)? am with reheat process, or if combined-cycle, indicate in the space					
	(3)		ded, the percent of full load power produced by each turbine:  Low pressure turbine or gas turbine:  High pressure turbine or steam turbine:  ———————————————————————————————————					
B.	Hydro	turbine						
	(1) (2) (3) (4)	Lengt Avera Typica	ne efficiency at rated load:% th of penstock:ft age cross-sectional area of the penstock:ft2 al maximum head (vertical distance from the bottom of the penstock, at the					
	(5) (6) (7) (8)	Is the Water Avera	to the water level):ft water supply run-of-the-river or reservoir: r flow rate at the typical maximum head:ft3/sec age energy rate:kW-hrs/acre-ft sated yearly energy production:kW-hrs					
C.	. ,		s section for each machine, independent of the turbine type.					
	(2)	Turbine manufacturer:MW  Maximum turbine power output:MW						
	(3) (4)		num turbine power output (while on line):MW rnor information:					
	( )	(a) (b)	Droop setting (speed regulation):					
		(c)	Other comments regarding the turbine governor system?					
			Data:					
Induct	ion Ge	n∆rat∧r	Data.					
	tion Ge		ator Power Factor at rated load:					
Induct A. B. C.	Rated Mome	I Genera ent of Ine	ertia (including prime mover):ertia (including Prime mover):ertia blocking? Yes, No					

	Average Site Elevation: Single Phase Three Phase
	Field Volts:
	Field Amperes:
	Motoring Power (MW):
	Neutral Grounding Resistor (If Applicable):
	I22t or K (Heating Time Constant):
	Rotor Resistance:
	Stator Resistance:
	Stator Reactance:
	Rotor Reactance:
	Magnetizing Reactance:
	Short Circuit Reactance:
	Exciting Current:
	Temperature Rise:
	Frame Size:
	Design Letter: Reactive Power Required In Vars (No Load):
	Reactive Power Required In Vars (No Load):  Reactive Power Required In Vars (Full Load):
	Total Rotating Inertia, H: Per Unit on 100 MVA Base
	Total Rotating menta, 11 Fer onit on 100 MVA base
	Note: A completed General Electric Company Power Systems Load Flow (PSLF) data sheet must be supplied with the Interconnection Request. If other data sheets are more appropriate to the proposed device then they shall be provided and discussed at Scoping Meeting.
8.	<ul> <li>Generator Short Circuit Data</li> <li>For each generator model, provide the following reactances expressed in p.u. on the generator base:</li> <li>X"1 – positive sequence subtransient reactance:p.u**</li> </ul>
	X2 – negative sequence reactance:p.u**
	• X0 – zero sequence reactance:
	7.6 <b>-2</b> 5.6 55-4 5.10 1.00 1.00 1.00 1.00 1.00 1.00 1.00
	Generator Grounding (select 1 for each model):
	A Solidly grounded
	B Grounded through an impedance
	(Impedance value in p.u on generator base. R:p.u.
	X:p.u.)
	C Ungrounded
9.	Step-Up Transformer Data
	For each step-up transformer, fill out the data form provided in Table 1.
10.	Interconnection Facilities Line Data
	There is no need to provide data for new lines that are to be planned by the Participating TO. However, for transmission lines that are to be planned by the generation developer, please provide the following information:
	al Voltage:kV
Line Le	ngth: miles
Line ter	mination Points:

Conduc	uctor Type: Size:							
If bundle	uctor Type: Size:, dled. Number per phase:, Bundle s	pacing:in.						
Phase (	e Configuration. Vertical: , Horizont	al:						
Phase S	e Spacing: A-B:ft., B-C:ft., C-	A:ft.						
	nce of lowest conductor to Ground at full loa							
Ground	nd Wire Type: Size: Dis	ance to Ground:ft						
Attach 7	h Tower Configuration Diagram							
	ner line ratings in amperes (normal and eme							
Positive	ve Sequence Resistance (R):	_ p.u.** (for entire line length)						
Positive	ve Sequence Reactance: ( X ):	_ p.u**(for entire line length)						
Zero Se	Sequence Resistance (R0):	p.u.** (for entire line length)						
Zero Se	Sequence Reactance: ( X0 ):	p.u** (for entire line length)						
Line Ch	Sequence Reactance: ( X0 ):  Charging (B/2): p.u**							
** On 10	100-MVA and nominal line voltage (kV) Bas	se se						
10a.	For Wind/photovoltaic plants, provide collector System Equivalence Impedance Data Provide values for each equivalence collector circuit at all voltage levels.							
Summe Positive Positive Zero Se Zero Se Line Ch	ve Sequence Reactance: (X1): p.u*	(for entire line length of each collector circuit) (for entire line length of each collector circuit) or entire line length of each collector circuit) r entire line length of each collector circuit) tire line length of each collector circuit)						
11.	Inverter-Based Machines							
	Number of inverters to be interconnected	pursuant to this Interconnection Request:						
Inverter manufacturer, model name, number, and version:								
	List of adjustable set points for the protect	tive equipment or software:						
Max design fault contribution current:								
	Start-up requirements:	Start-up requirements:						
		pany Power Systems Load Flow (PSLF) data sheet must uest. If other data sheets are more appropriate to the ded and discussed at Scoping Meeting.						

### 12. Load Flow and Dynamic Models:

Provide load flow model for the generating plant and its interconnection facilities in GE PSLF \*.epc format, including new buses, generators, transformers, interconnection facilities. An equivalent model is required for the plant with generation collector systems. This data should reflect the technical data provided in this Attachment A.

For each generator, governor, exciter and power system stabilizer, select the appropriate dynamic model from the General Electric PSLF Program Manual and provide the required input data. **Include any user written \*.p EPCL files to simulate inverter based plants' dynamic responses (typically needed for inverter based PV/wind plants).** Provide a completed \*.dyd file that contains the information specified in this section.

If you require assistance in developing the models, we suggest you contact General Electric. Accurate models are important to obtain accurate study results. Costs associated with any changes in facility requirements that are due to differences between model data provided by the generation developer and the actual generator test data, may be the responsibility of the generation developer.

### TABLE 1

### TRANSFORMER DATA (Provide for each level of transformation)

UNIT	
NUMBER OF TRANSFORMERS	PHASE

RATING	H Winding	X Winding	Y Winding	
Rated MVA			· · · · · · · · · · · · · · · · · · ·	
Connection (Delta, Wye, Gnd.)	·			
Cooling Type (OA,OA/FA, etc) :			<del></del>	
Temperature Rise Rating				
Rated Voltage				
BIL				
Available Taps (% of rating)				
Load Tap Changer? (Y or N)				
Tap Settings				
IMPEDANCE	H-X	H-Y	X-Y	
Percent				
MVA Base				
Tested Taps				
WINDING RESISTANCE	Н	X	Υ	
Ohms	<del></del>		<del></del>	
CURRENT TRANSFORMER RATIOS				
H				

Percent exciting current at 100 % Voltage; \_\_\_\_\_ 110% Voltage\_\_\_\_\_

Supply copy of nameplate and manufacture's test report when available

### **Appendix 2 [Intentionally Omitted]**

### Appendix 3

### GENERATOR INTERCONNECTION STUDY PROCESS AGREEMENT FOR QUEUE CLUSTERS

THIS AGREEMENT is I	made and entered into this	day of	, 20	by and between
, a	organized and existin	ng under th	e laws of th	ne State of ,
("Interconnection Customer") ar	nd the California Independen	t System C	Operator Co	orporation, a California
nonprofit public benefit corporat	ion existing under the laws o	of the State	of Californ	ia, ("CAISO"). The
Interconnection Customer and t	he CAISO each may be refe	rred to as a	a "Party," o	r collectively as the
"Parties."	·			•

#### **RECITALS**

WHEREAS, the Interconnection Customer is proposing to develop a Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_\_; and

WHEREAS, the Interconnection Customer desires to interconnect the Generating Facility with the CAISO Controlled Grid pursuant to the Queue Cluster process; and

WHEREAS, the Interconnection Customer has requested the CAISO to conduct or cause to be performed Interconnection Studies to assess the system impact of interconnecting the Generating Facility to the CAISO Controlled Grid and to specify and estimate the cost of the equipment, engineering, procurement and construction work needed on the Participating TO's electric system in accordance with Good Utility Practice to physically and electrically connect the Generating Facility to the CAISO Controlled Grid:

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the CAISO's FERC-approved Generation Interconnection Procedures in CAISO Tariff Appendix DD or the Master Definitions Supplement, Appendix A to the CAISO Tariff, as applicable.
- 2.0 The Interconnection Customer elects and the CAISO shall conduct or cause to be performed Interconnection Studies, including any accelerated Interconnection Study, in accordance with the CAISO Tariff.
- 3.0 The scope of the Interconnection Studies shall be subject to the assumptions set forth in Appendices A and B to this Agreement.
- 4.0 The Interconnection Studies will be based upon the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the Scoping Meeting, subject to any modifications in accordance with Section 6.7.1 of the and modifications to the proposed Commercial Operation Date of the Generating Facility permitted by the . The CAISO reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Studies. If the Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the Interconnection Studies may be modified as specified in the .

- 5.0 The Interconnection Study report for each Interconnection Study shall provide the information specified in the GIDAP.
- 6.0 The Interconnection Customer shall provide an Interconnection Study Deposit, a Site Exclusivity Deposit, if applicable, and other Interconnection Financial Security for the performance of the Interconnection Studies in accordance with the provisions of Sections 3.5.1 and 11 of the GIDAP.

Following the issuance of an Interconnection Study report, the CAISO shall charge and the Interconnection Customer shall pay its share of the actual costs of the Interconnection Study pursuant to Section 3.5.1 of the GIDAP.

Any difference between the deposits made toward the Interconnection Study process and associated administrative costs, including any accelerated studies, and the actual cost of the Interconnection Studies and associated administrative costs shall be paid by or refunded to the Interconnection Customer, in the appropriate allocation, in accordance with Section 3.5.1 of the GIDAP.

- 7.0 Pursuant to Section 3.7 of the GIDAP, the CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems. The CAISO may provide a copy of the Phase I Interconnection Study results to an Affected System Operator and the Western Electricity Coordinating Council. Requests for review and input from Affected System Operators or the Western Electricity Coordinating Council may arrive at any time prior to interconnection.
- 8.0 Substantial portions of technical data and assumptions used to perform the Phase I Interconnection Study, such as system conditions, existing and planned generation, and unit modeling, may change after the CAISO provides the Interconnection Study results to the Interconnection Customer. Interconnection Study results will reflect available data at the time the CAISO provides the Phase I Interconnection Study report to the Interconnection Customer. The CAISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.

### 9.0 **[NOT USED]**

- 10.0 The CAISO shall maintain records and accounts of all costs incurred in performing the Interconnection Study in sufficient detail to allow verification of all costs incurred, including associated overheads. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time at the CAISO's offices and at its own expense, to audit the CAISO's records as necessary and as appropriate in order to verify costs incurred by the CAISO. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the CAISO representative, within one hundred eighty (180) calendar days following receipt by the Interconnection Customer of the CAISO's notification of the final costs of the Interconnection Study.
- 11.0 In accordance with Section 3.8 of the GIDAP, the Interconnection Customer may withdraw its Interconnection Request at any time by written notice to the CAISO. Upon receipt of such notice, this Agreement shall terminate, subject to the requirements of Section 3.5.1 and 11.4 of the GIDAP.
- 12.0 Pursuant to Section 6.1.1 of the GIDAP, this Agreement shall become effective upon the date the fully executed Agreement is received by the CAISO. If the CAISO does not receive the fully executed Agreement and deposit or other Interconnection Financial

Security pursuant to Section 3.5.1 of the GIDAP, then the Interconnection Request will be deemed withdrawn upon the Interconnection Customer's receipt of written notice by the CAISO pursuant to Section 3.8 of the GIDAP.

- 13.0 Miscellaneous.
- Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Agreement, shall be resolved in accordance with Section 15.5 of the GIDAP.
- 13.2 Confidentiality. Confidential Information shall be treated in accordance with Section 15.1 of the GIDAP.
- 13.3 Binding Effect. This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 13.4 Conflicts. In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.
- 13.5 Rules of Interpretation. This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Agreement or such Appendix to this Agreement, or such Section of the or such Appendix to the , as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".
- 13.6 Entire Agreement. This Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.
- 13.7 No Third Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

13.8 Waiver. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this Agreement shall, if requested, be provided in writing.

Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.

- 13.9 Headings. The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- 13.10 Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 13.11 Amendment. The Parties may by mutual agreement amend this Agreement by a written instrument duly executed by both of the Parties.
- 13.12 Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations.
- 13.13 Reservation of Rights. The CAISO shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 13.14 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- 13.15 Assignment. This Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Agreement without the consent

of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that the Interconnection Customer shall have the right to assign this Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Generating Facility, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Section will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Section is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

By:	
Printed Name:	
itle:	
Oate:	_
Insert name of the Interconnection Customer]	
Зу:	
Printed Name:	
itle:	
Data:	

**California Independent System Operator Corporation** 

### Appendix A

### ASSUMPTIONS USED IN CONDUCTING THE PHASE I INTERCONNECTION STUDY

The Phase I Interconnection Study will be based upon the information set forth in the Interconnection Request and agreed upon in the Scoping Meeting held on , subject to any modifications in accordance with Section 6.2of the GIDAP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.
Deliverability status requested
( Full Capacity,Partial Deliverability for percent of Full CapacityEnergy only)
NOTICE: YOUR CHOICE OF DELIVERABILITY STATUS CAN AFFECT YOUR ABILITY TO QUALIFY YOUR GENERATING FACILITY AS A RESOURCE ADEQUACY RESOURCE OR AFFECT YOUR TRANSACTIONS FOR SALE OF POWER. PLEASE GIVE CONSIDERATION TO YOUR CHOICE OF DELIVERABILITY STATUS

### Appendix B

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

Generating Facility size (MW):
Provide two copies of this completed form and other required plans and diagrams in accordance with Section 8.1 of the GIDAP.
Provide location plan and one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.
One set of metering is required for each generation connection to the new bus or existing CAISO Controlled Grid station. Number of generation connections:
On the one line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)
On the one line indicate the location of auxiliary power. (Minimum load on CT/PT)
Will an alternate source of auxiliary power be available during CT/PT maintenance? Yes No
Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes No (Please indicate on one line).
What type of control system or PLC will be located at the Interconnection Customer's Generating Facility?
What protocol does the control system or PLC use?
Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.
Physical dimensions of the proposed interconnection station:
Bus length from generation to interconnection station:
Line length from interconnection station to the Participating TO's transmission line.
Tower number observed in the field. (Painted on tower leg)*

Number of third party easements required for transmission lines\*: \* To be completed in coordination with the Participating TO or CAISO. Is the Generating Facility in the Participating TO's service area? Yes No Local service provider for auxiliary and other power: Please provide proposed schedule dates: Environmental survey start: Environmental impact report submittal: Procurement of project equipment: Begin Construction Date: Generator step-up transformer Date: receives back feed power Generation Testing Date:\_\_\_\_\_ Commercial Operation Date: \_\_\_\_\_ Level of Deliverability: Choose one of the following: \_\_\_\_Energy Only Full Capacity TP Deliverability: Choose one of the following:

Option (A), which means that the Generating Facility requires TP Deliverability to be able to

Option (B), which means that the Interconnection Customer will continue to commercial

continue to commercial operation.

operation without an allocation of TP Deliverability.

### Appendix 4

# AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY AGREEMENTS

This Agreement for the Allocation of Res	sponsibilities With Regard to Generator Inte	erconnection
Procedures and Interconnection Study Agreemer	nts ("Agreement"), dated	, is
entered into between the California Independent	System Operator Corporation ("CAISO") a	and [NAME OF
PTO] ("F	PTO"). The CAISO and PTO are jointly re	ferred to as the
"Parties" and individually, as a "Party."		

WHEREAS, this Agreement will ensure an independent assessment of new Generating Facility impacts on the CAISO Controlled Grid and take advantage of the respective expertise of the Parties to facilitate efficient and cost effective Interconnection Study procedures in a manner consistent with the Federal Energy Regulatory Commission's ("FERC") July 1, 2005 Order (112 FERC ¶ 61,009), FERC's August 26, 2005 Order (112 FERC ¶ 61,231), and prior FERC Orders recognizing that Order No. 2003 did not allocate responsibilities between transmission owners and transmission providers for the provision of Interconnection Service and suggesting those parties enter into an agreement to allocate those responsibilities. Southwest Power Pool, Inc., 106 FERC ¶ 61,254 (2004).

NOW THEREFORE, in view of the respective responsibilities assigned to the Parties and the foregoing FERC orders, and the provisions of the CAISO's Generator Interconnection Procedures set forth in CAISO Tariff Appendix DD, the CAISO and PTO agree to the following allocation of responsibilities for a centralized Interconnection Study process under the direction and oversight of the CAISO:

### 1. **DEFINITIONS**

Unless otherwise defined herein, all capitalized terms shall have the meaning set forth in the CAISO Tariff.

### 2. TERM OF AGREEMENT

This Agreement shall become effective upon the date specified in the first paragraph above and shall remain in effect until (1) terminated by all Parties in writing, or (2) with respect to the PTO, upon the termination of that entity's status as a PTO pursuant to the Transmission Control Agreement, as amended from time to time.

### 3. PROVISIONS FOR ALLOCATION OF RESPONSIBILITIES BETWEEN CAISO AND PTO

Interconnection Service: The Parties acknowledge that, as the transmission provider, the CAISO is responsible for reliably operating the transmission grid. The Parties also recognize that while the CAISO is a transmission provider under the CAISO Tariff, the CAISO does not own any transmission facilities, and the PTO owns, constructs, and maintains the facilities to which Generating Facilities are to be interconnected, and that the PTO may construct or modify facilities to allow the interconnection. While the Parties recognize that the CAISO will be responsible for conducting or causing to be performed Interconnection Studies and similar studies, the PTO will participate in these studies and conduct certain portions of studies, under the direction and oversight of, and approval by, the CAISO, as provided in this Agreement. The CAISO shall not enter into any Interconnection Study agreement with an Interconnection Customer that is contrary to these rights.

### 3.2 [INTENTIONALLY LEFT BLANK]

### 3.3 Transmission Owners' Right to Participation in Studies, Committees and Meetings:

- 3.3.1 In the event that an Interconnection Customer proposes to interconnect a Generating Facility with the PTO's facilities, or the PTO is an owner of an affected system, the PTO shall have the right to participate in any Interconnection Study or any other study conducted in connection with such request for Interconnection Service. "Participate" in this Section 3.3.1 means physically perform any study or portion thereof in connection with an Interconnection Request, under the direction and oversight of, and approval by, the CAISO pursuant to Section 3.4 of this Agreement; provide or receive input, data or other information regarding any study or portion thereof consistent with Section 3.4 of this Agreement; and, when any study or portion thereof in connection with an Interconnection Request is physically performed by an entity other than the PTO, perform activities necessary to adequately review or validate, as appropriate, any results of the study or portions thereof and provide recommendations.
- 3.3.2 In the event that an Interconnection Customer proposes to interconnect a Generating Facility with the PTO's facilities, or the PTO is an owner of an affected system, the PTO shall have the right to participate in all meetings expressly established pursuant to the CAISO. As appropriate, the PTO may participate in all other material or substantive communications in connection with an Interconnection Request.
- 3.4 Interconnection Study Responsibility Allocation: In complying with its responsibility for conducting or causing to be performed Interconnection Studies, the CAISO will assign responsibility for performance of portions of the Interconnection Studies to the PTO, under the direction and oversight of, and approval by, the CAISO, as set forth in Attachment A, except as specifically qualified as follows:
  - For any tasks specifically assigned to the PTO pursuant to Attachment A or 3.4.1 otherwise mutually agreed upon by the CAISO and the PTO, the CAISO reserves the right, on a case-by-case basis, to perform or reassign to a mutually agreed upon and pre-qualified contractor such task only where: (a) the quality and accuracy of prior PTO Interconnection Study work product resulting from assigned tasks has been deemed deficient by the CAISO, the CAISO has notified the PTO pursuant to the notice provision of Section 4.16 of this Agreement in writing of the deficiency, and the deficiency has not been cured pursuant to Section 3.4.2 of this Agreement; (b) the timeliness of PTO Interconnection Study work product has been deemed deficient, and either (i) the CAISO has not been notified of the reasons and actions taken to address the timeliness of the work, or (ii) if notified, the stated reasons and actions taken are insufficient or unjustifiable and the PTO has not cured the deficiency pursuant to Section 3.4.2 of this Agreement; (c) the PTO has failed, in a mutually agreed upon timeframe, to provide the CAISO with information or data related to an Interconnection Request despite a written request by the CAISO, pursuant to Section 3.5 hereof, to do so, and such data is the responsibility of the PTO to provide to the CAISO, subject to Section 4.3 of this Agreement; (d) the PTO advises the CAISO in writing that it does not have the resources to adequately or timely perform the task according to the applicable timelines set forth in Attachment A; or (e) the estimated cost of the PTO performing the task has been determined in writing by the CAISO to significantly exceed the cost of the CAISO or mutually agreed upon contractor performing the task, inclusive of the costs that will be incurred by the PTO in exercising its review rights of the results of any such tasks performed by such third party(ies). If the CAISO deviates from the assignments set forth in Attachment A based on the foregoing factors, the

CAISO will provide the PTO with a written explanation for the deviation and any associated reassignments of work. The PTO may contest the deviation pursuant to the Dispute Resolution procedures set forth in Section 4.1 of this Agreement.

Task(s) may only be reassigned in accordance with this Section 3.4.1 where the PTO has been deemed to be deficient in relation to that (those) particular task(s).

### 3.4.2 Cure for reassigned Interconnection Study work

The CAISO shall not reassign task(s) without the opportunity to cure, as specified in Section 3.4.1 of this Agreement. The following actions will serve to cure the deficiencies and result in restoring the assignment(s) as provided in Attachment A:

- (a) The CAISO and PTO shall negotiate in good faith and agree to a corrective action plan proposed by the PTO, including a reasonably adequate cure period, and the corrective action plan is satisfactorily implemented.
- (b) The CAISO determines the deficiency is cured without an action plan.
- 3.4.3 Assessment of prior PTO Interconnection Study work shall only be based on work conducted under the process that becomes effective concurrent with the effective date of this Agreement. Further, assessment of prior PTO Interconnection Study work shall be based on work conducted no earlier than the eighteen (18) month period prior to the date of the CAISO notice of deviation from assignments set forth in Attachment A to this Agreement.
- Information Exchange: The PTO shall provide the CAISO, subject to confidentiality requirements in Section 4.3 of this Agreement, with any documentation or data requested by the CAISO reasonably necessary to permit the CAISO to perform, review, validate and approve any Interconnection Study, or portion thereof, performed by the PTO. The CAISO shall provide the PTO with any documentation or data requested by the PTO, subject to confidentiality requirements in Section 4.3 of this Agreement, reasonably necessary to perform, review, and validate any Interconnection Study, or portion thereof.
- 3.6 Consistency with Provisions for Centralized Interconnection Study Process: The CAISO and PTO have determined that the processes and allocation of responsibilities in Section 3.4 of this Agreement ensure that impacts to the CAISO Controlled Grid are independently assessed and that the assignment of responsibilities minimizes handoffs, takes advantage of non-transferable skills, and promotes the efficiency and cost-effectiveness of the centralized Interconnection Study processes, consistent with Section 3.2
- 3.7 Re-Studies: If any re-studies are required, the CAISO will confer with the PTO as to the need for a re-study. The CAISO will make the final determination regarding the need for a re-study, subject to dispute resolution procedures.
- 3.8 Use of Contractors: Nothing in this Agreement shall prevent either the CAISO or the PTO from using qualified, mutually agreed upon third party contractors to meet that Party's rights or obligations under this Agreement or the . To promote the efficiency of the process, the CAISO and PTO will collaborate to identify a list of the mutually agreed to qualified contractors available to the Parties.
- 3.9 Performance Standards: Each Party shall perform all of its obligations under the GIDAP, this Agreement, and any FERC approved Interconnection Study procedures that may be adopted by the CAISO to implement the GIDAP or this Agreement in accordance with

Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice.

3.10 Recovery of Costs: In accordance with Section 3.5.1 of the GIDAP, the PTO shall recover all actual costs from the CAISO incurred in performing Interconnection Studies or portions thereof assigned to it by the CAISO, including all costs incurred in exercising its right to review, and make recommendations on, Interconnection Studies or portions thereof performed by the CAISO and/or contractors under Section 3.8 of this Agreement.

### 4 GENERAL TERMS AND CONDITIONS

- **4.1** Dispute Resolution: In the event any dispute regarding the terms, conditions, and performance of this Agreement is not settled informally, the Parties shall follow the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff.
- 4.2 Liability: No Party to this Agreement shall be liable to any other Party for any direct, indirect, special, incidental or consequential losses, damages, claims, liabilities, costs or expenses (including attorneys fees and court costs) arising from the performance or non-performance of its obligations under this Agreement regardless of the cause (including intentional action, willful action, gross or ordinary negligence, or force majeure); provided, however, that a Party may seek equitable or other non-monetary relief as may be necessary to enforce this Agreement and that damages for which a Party may be liable to another Party under another agreement will not be considered damages under this Agreement.
- **4.3** Confidentiality: Confidential Information shall be treated in accordance with Section 14.1 of the GIDAP.
- **4.4** Binding Effect: This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 4.5 Conflicts: In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.
- 4.6 Rules of Interpretation: This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section, Attachment, or Appendix means such Article or Section of this Agreement or such Attachment or Appendix to this Agreement, or such Section of the or such Appendix to the , as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article or Section; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

- 4.7 Entire Agreement: This Agreement, including all Attachments hereto, constitutes the entire agreement among the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, among the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants, which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.
- 4.8 No Third Party Beneficiaries: This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 4.9 Waiver: The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party. Any waiver at any time by a Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Any waiver of this Agreement shall, if requested, be provided in writing. Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- **4.10** Headings: The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- **4.11** Multiple Counterparts: This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 4.12 Modification by the Parties: The Parties may amend this Agreement and any Appendices to this Agreement only (1) by mutual agreement of the Parties by a written instrument duly executed by the Parties, subject to FERC approval or (2) upon the issuance of a FERC order, pursuant to Section 206 of the Federal Power Act. It is the Parties' intent that FERC's right to change any provision of this Agreement shall be limited to the maximum extent permissible by law and that any such change, if permissible, shall be in accordance with the Mobile-Sierra public interest standard applicable to fixed rate agreements. United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332 (1956). Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations. Notwithstanding the foregoing, Attachment B (Notices) may be modified as set forth in Section 4.15 of this Agreement. and the CAISO and the PTO may from time to time mutually agree to deviate from Attachment A in accordance with the provisions of this Agreement, however, such deviation shall be subject to Section 4.9 of this Agreement and not considered a course of dealing.
- 4.13 No Partnership: This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act

on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Partv.

- 4.14 Assignment: This Agreement may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.
- 4.15 Notices: Any notice, demand, or request provided in this Agreement, or served, given, or made in connection with it, will be in writing and deemed properly served, given, or made if delivered in person, transmitted by facsimile, or sent by United States mail, postage prepaid, to the persons specified in Attachment B hereto unless otherwise provided in this Agreement. Any Party may at any time, by notice to all other Parties, change the designation or address of the person specified in Attachment B as the person who receives notices pursuant to this Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement in multiple originals, each of which shall constitute and be an original effective agreement among the Parties.

### **California Independent System Operator Corporation**

3y:
Printed Name:
itle:
Date:
NAME OF PTO]
By:
Printed Name:
itle:
Date:

### **ATTACHMENT A**

### INTERCONNECTION STUDY RESPONSIBILITY ALLOCATION

Description of Generator Interconnection Process: Roles and Responsibilities of CAISO and PTOs.

Purpose: This Attachment A to the "AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO GENERATOR INTERCONNECTION PROCEDURES AND INTERCONNECTION STUDY AGREEMENTS" serves as further clarification of the roles and responsibilities of the parties to this Agreement. The CAISO will assign responsibility for performance of portions of the Interconnection Studies to the relevant PTOs, under the direction and oversight of, and approval by, the CAISO, as set forth in this Attachment A. This document serves as a general overview of only the roles and responsibilities as between the CAISO and PTOs. This Agreement does not include the process steps, involvement or obligations of the Interconnection Customer (IC). This Agreement is not inclusive of all procedures necessary to comply with all provisions of the GIA, and Generator Interconnection Study Process Agreement for Queue Clusters.

### Interconnection Request (IR) Process

- CAISO forwards the IR to the PTO within three (3) Business Days (BD) of receipt of IR from Interconnection Customer (IC)
- 2. PTO(s) provides any feedback regarding IR to CAISO within 3 BD
- 3. CAISO distributes draft Scoping Meeting minutes for review within 5 BD of Scoping Meeting.
- 4. PTO(s) provide any comments to the Scoping Meeting minutes within 2 BD of receipt of draft Scoping Meeting minutes.
- 5. CAISO issues the final Scoping Meeting minutes within 3 BD of receipt of comments.

Phase I Interconnection Study Timeline

Line	Phase I Cluster Study	Typical Calendar Days	Timeline (Days)
1	CAISO and PTOs develop initial Generating Facility groups for initial Dispatch assumptions and cost allocation purposes (except for thermal overload and short circuit mitigation).	1	1
2	PTOs develop draft Base Cases, each representing all Generating Facilities in the queue cluster, and deliver to CAISO.	14	2-15
3	PTO develops preferred and alternative, if applicable, direct interconnection plans, including the need for an Interconnection Grid Substation (IGS).	14	2-15
4	CAISO reviews and approves direct interconnection plans and change files.	5	16-20
5	CAISO updates deliverability base case. PTOs update reliability base cases. PTOs develop draft contingency lists.	10	21-30
6	CAISO reviews and approves reliability base cases and contingency lists.	5	31-35
7	CAISO performs peak Deliverability Assessment identifying constrained facilities and prepares results summary.	21	36-56
8	At the CAISO's direction, the PTOs perform the off- peak Load Flow, and summer peak and off-peak Post Transient and Stability analyses and submits draft study results to CAISO for review and direction.	21	36-56
9	CAISO and PTOs develop mitigation plans and determine RNU and LDNU	21	57-77
10	CAISO develops deliverability base case with TP upgrades only.	7	78-84
11	CAISO performs deliverability assessment for the purpose of determining incremental ADNUs and proposes ADNU.	21	85-105
12	CAISO and PTOs finalize ADNU.	14	106-119
13	CAISO develops shift factors for cost allocation purposes of all Network Upgrades and usage of previously triggered Network Upgrades.	7	120-126
14	CAISO performs off-peak deliverability assessment.	14	127-140
Short C	Circuit Duty		
15	CAISO coordinates with other potentially affected facility owners <sup>1</sup> .	n/a	n/a
16	CAISO directs PTO to develop Base Case and run short circuit analysis.	106	21-126
17	PTO performs facilities review. (Note: possibly for feedback into the power flow studies and PTO mitigation plans.)	14	127-140
18	PTO prepares draft study results and submits to the CAISO for review and direction.	14	141-154
Facility	cost estimates and schedules		
19	At the CAISO's direction, PTO(s) prepares cost	134	21-154

	estimates and schedules for the direct assignment facilities and Network Upgrades identified in the power		
	flow, short circuit duty, post transient, and stability studies.		
Study R			
20	At the CAISO's direction, PTO(s) prepares draft report for impacts in its service territory.	120	21-140
21	CAISO compiles all results into a draft report that covers grid impacts, as appropriate. CAISO reviews integrated draft report and submits comments, recommendations and direction to the PTO.	10	141-150
22	PTO incorporates CAISO's directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report. PTO submits final draft report to the CAISO.	10	151-160
23	CAISO finalizes the report and provides final approved report to ICs, PTO, and any applicable Affected Systems.	10	161-170
	CAISO performs Reassessment and prepares amended study reports for affected earlier queued interconnection customer interconnection requests.		

[footnote 1: In accordance with the WECC Short Circuit Duty Procedure]

### Phase II Interconnection Study Process\*\*

\*\*All Interconnection Studies will be under the direction and oversight of, and approval by, the CAISO and may involve more than one PTO.

	ayv				

Line	Phase II Cluster Study	Typical Calendar Days	Timeline (Days)
1	CAISO and PTOs update Base Cases based on the annual reassessment study results.	7	1-7
2	CAISO reviews and approves Base Cases.	7	8-14

	PTOs update contingency lists.		
3	CAISO reviews and approves contingency lists.	5	15-19
4	CAISO performs peak Deliverability Assessment identifying constrained facilities and prepares results summary.	21	20-40
5	At the CAISO's direction, the PTOs perform the off- peak Load Flow, and summer peak and off-peak Post Transient and Stability analyses and submit draft study results to CAISO for review and direction.	21	20-40
6	CAISO and PTOs determine RNU and LDNU.	21	41-61
7	CAISO performs peak Deliverability Assessment for Option B projects for the purpose of identifying ADNU.	28	62-89
8	PTOs performs additional reliability assessment with all LDNUs modeled and identify	28	62-89
9	CAISO and PTOs determine ADNU and additional RNU and LDNU.	14	90-103
10	CAISO develops cost allocation table.	7	104-110
11	CAISO performs off-peak Deliverability Assessment.	14	111-124
12	PTOs update short-circuit duty results with all RNU and LDNU.	105	20-124
13	PTOs update short-circuit duty results with ADNU.	21	125-145
14	CAISO performs operational deliverability assessment.	60	111-170
15	PTOs perform operational reliability assessment.	60	111-170
Study F	Report Including Facility Costs and Schedules		1
16	At the CAISO's direction, PTOs prepare detailed cost estimates and schedules for the direct assignment facilities and schedules for RNU and LDNU identified in the overall plan of service and including individual segments.	91	20-110
17	At the CAISO's direction, PTOs prepare draft reports that include detailed cost estimates and schedules for the direct assignment facilities and Network Upgrades identified in the overall plan of service and including individual segments.	131	20-150
18	CAISO reviews draft report and submits comments, recommendations and direction to the PTOs.	14	151-164
19	PTOs incorporate CAISO directions, conclusions and recommendations and add operational assessment conclusions to the draft report. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report.	21	165-185
20	CAISO finalizes the reports and tenders the reports to IC.	20	186-205

### **ATTACHMENT B**

### **CONTACTS FOR NOTICES**

[Section 4.15]

### California ISO

Manager, Transmission Engineering 250 Outcropping Way Folsom, CA 95630 Phone: 916.351.2104 Fax: 916.351.2264

[NAME OF PTO]

[Address of PTO]

### Appendix 5 Schedule for Release and Review of Per Unit Costs

### SCHEDULE FOR RELEASE AND REVIEW OF PER UNIT COSTS

	Schedule for the Release and Review of Per	Anticipated
Line	Unit Costs	Calendar Date(s)
	Annual Review, Update, and Posting of Per	
	Unit Costs	
	PTOs to review and update their per unit costs.	October – mid-January
	PTOs to provide their updated per unit costs to	
	the CAISO for CAISO review and posting to the	Mid-January
	CAISO Website.	
	CAISO to review and post the PTO per unit costs	Third week of January
	to the CAISO Website for stakeholder review.	•
	Provide two weeks for stakeholders to review the	Last week of January and
	posted per unit costs.	first week of February
	CAISO to schedule and conduct a one-day	Cooped woods of Fohmsons
	stakeholder meeting in February to discuss the	Second week of February
	posted per unit costs with stakeholders.  Provide two weeks following the scheduled	
	stakeholder meeting for stakeholders to provide	Last two weeks of
	comments to the CAISO.	February
	Provide two weeks for CAISO and PTOs to	
	review and address stakeholder comments.	First two weeks of March
	Provide three weeks following the stakeholder	First three weeks of
	meeting for PTOs to review, update as needed,	March
	and finalize their per unit costs.	
	PTOs to provide their final per unit costs to the	End of third week of
	CAISO for posting to the CAISO Website.	March
	CAISO to review and post the PTOs' final per unit	Fourth week of March
	costs to the CAISO Website.	
	Final per unit costs are posted and available for	Last week of March to
	use to estimate the costs of Network Upgrades	first of April
	and Interconnection Facilities.	'

### Appendix 6 GIDAP AGREEMENT FOR INDEPENDENT STUDY PROCESS

THIS AGREEMENT is ma	ade and entered into this	day of	, 20	by and between	
, a	organized and existin	g under the	e laws of th	ne State of ,	
("Interconnection Customer") and	the California Independent	t System O	perator Co	rporation, a California	а
nonprofit public benefit corporation	n existing under the laws o	f the State	of Californ	ia, ("CAISO"). The	
Interconnection Customer and the	e CAISO each may be refer	rred to as a	a "Party," o	r collectively as the	
"Parties."	·			·	

### **RECITALS**

WHEREAS, the Interconnection Customer is proposing to develop a Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_\_; and

WHEREAS, the Interconnection Customer desires to interconnect the Generating Facility with the CAISO Controlled Grid pursuant to the Independent Study Process; and

WHEREAS, the Interconnection Customer has requested the CAISO to conduct or cause to be performed Interconnection Studies to assess the system impact of interconnecting the Generating Facility to the CAISO Controlled Grid and to specify and estimate the cost of the equipment, engineering, procurement and construction work needed on the Participating TO's electric system in accordance with Good Utility Practice to physically and electrically connect the Generating Facility to the CAISO Controlled Grid:

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the CAISO's FERC-approved Generation Interconnection Procedures in CAISO Tariff Appendix DD or the Master Definitions Supplement, Appendix A to the CAISO Tariff, as applicable.
- 2.0 The Interconnection Customer elects and the CAISO shall conduct or cause to be performed Interconnection Studies in accordance with the CAISO Tariff.
- 3.0 The scope of the applicable Interconnection Studies shall be subject to the assumptions set forth in Appendices A and B to this Agreement.
- 4.0 The Interconnection Studies will be based upon the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the Scoping Meeting, subject to any modifications in accordance with Section 6.1.2 of the GIDAP and modifications to the proposed Commercial Operation Date of the Generating Facility permitted by the . The CAISO reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Studies. If the Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the Interconnection Studies may be modified as specified in the .
- The Interconnection Study report for each Interconnection Study shall provide the information specified in the GIDAP.

The Interconnection Customer shall provide an Interconnection Study Deposit and other Interconnection Financial Security for the performance of the Interconnection Studies in accordance with the provisions of Sections 3.5.1 and 11 of the GIDAP.

Following the issuance of an Interconnection Study report, the CAISO shall charge and the Interconnection Customer shall pay its share of the actual costs of the Interconnection Study pursuant to Section 3.5.1 of the GIDAP.

Any difference between the deposits made toward the Interconnection Study process and associated administrative costs, including any accelerated studies, and the actual cost of the Interconnection Studies and associated administrative costs shall be paid by or refunded to the Interconnection Customer, in the appropriate allocation, in accordance with Section 3.5.1 of the GIDAP.

- 7.0 Pursuant to Section 3.7 of the GIDAP, the CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems. The CAISO may provide a copy of the System Impact Study results to an Affected System Operator and the Western Electricity Coordinating Council. Requests for review and input from Affected System Operators or the Western Electricity Coordinating Council may arrive at any time prior to interconnection.
- 8.0 Substantial portions of technical data and assumptions used to perform the System Impact Study, such as system conditions, existing and planned generation, and unit modeling, may change after the CAISO provides the Interconnection Study results to the Interconnection Customer. Interconnection Study results will reflect available data at the time the CAISO provides the System Impact Study report to the Interconnection Customer. The CAISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.
- 9.0 The CAISO shall maintain records and accounts of all costs incurred in performing the Interconnection Study in sufficient detail to allow verification of all costs incurred, including associated overheads. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time at the CAISO's offices and at its own expense, to audit the CAISO's records as necessary and as appropriate in order to verify costs incurred by the CAISO. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the CAISO representative, within one hundred eighty (180) calendar days following receipt by the Interconnection Customer of the CAISO's notification of the final costs of the Interconnection Study.
- 10.0 In accordance with Section 3.8 of the GIDAP, the Interconnection Customer may withdraw its Interconnection Request at any time by written notice to the CAISO. Upon receipt of such notice, this Agreement shall terminate, subject to the requirements of Sections 3.5.1 and 15.1 of the GIDAP.
- 11.0 This Agreement shall become effective upon the date the fully executed Agreement is received by the CAISO. If the CAISO does not receive the fully executed Agreement and deposit or other Interconnection Financial Security pursuant to Section 3.5.1 of the GIDAP, then the Interconnection Request will be deemed withdrawn upon the Interconnection Customer's receipt of written notice by the CAISO pursuant to Section 3.8 of the GIDAP.
- 12.0 Miscellaneous.

- 12.1 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Agreement, shall be resolved in accordance with Section 15.5 of the GIDAP.
- 12.2 Confidentiality. Confidential Information shall be treated in accordance with Section 15.1 of the GIDAP.
- 12.3 Binding Effect. This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 12.4 Conflicts. In the event of a conflict between the body of this Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.
- 12.5 Rules of Interpretation. This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa: (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Agreement or such Appendix to this Agreement, or such Section of the or such Appendix to the , as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".
- 12.6 Entire Agreement. This Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.
- 12.7 No Third Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 12.8 Waiver. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this

Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this Agreement shall, if requested, be provided in writing.

Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.

- 12.9 Headings. The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- 12.10 Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 12.11 Amendment. The Parties may by mutual agreement amend this Agreement by a written instrument duly executed by both of the Parties.
- 12.12 Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations.
- Reservation of Rights. The CAISO shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 12.14 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- 12.15 Assignment. This Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement; and provided further that the Interconnection Customer shall have the right to assign this Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Generating Facility, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing

arrangement entered into by the Interconnection Customer pursuant to this Section will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of assignment right(s). Any attempted assignment that violates this Section is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

By:	
Printed Name:	
Title:	
Date:	
[Insert name of the Interconnection Customer]	
Ву:	
Printed Name:	
Title:	
Date:	

**California Independent System Operator Corporation** 

#### Appendix A

# ASSUMPTIONS USED IN CONDUCTING THE SYSTEM IMPACT STUDY

The System Impact Study will be based upon the information set forth in the Interconnection Request and agreed upon in the Scoping Meeting held on , subject to any modifications in accordance with Section 6.1.2 of the GIDAP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.

Deliverability Status requested (Full Capacity, Partial Deliverability, or Energy-Only)

## Appendix B Data Form, Pre-Facilities Study

# DATA FORM TO BE PROVIDED BY THE INTERCONNECTION CUSTOMER PRIOR TO COMMENCEMENT OF THE FACILITIES STUDY

Generating Facility size (MW):
Provide two copies of this completed form and other required plans and diagrams in accordance with Section 4.5 of the GIDAP.
Provide location plan and one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.
One set of metering is required for each generation connection to the new bus or existing CAISO Controlled Grid station. Number of generation connections:
On the one line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)
On the one line indicate the location of auxiliary power. (Minimum load on CT/PT)
Will an alternate source of auxiliary power be available during CT/PT maintenance?  Yes  No
Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes No (Please indicate on one line).
What type of control system or PLC will be located at the Interconnection Customer's Generating Facility?
What protocol does the control system or PLC use?
Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.
Physical dimensions of the proposed interconnection station:
Bus length from generation to interconnection station:
Line length from interconnection station to the Participating TO's transmission line.
Tower number observed in the field. (Painted on tower leg)*

Number of third party easements required for transmission lines\*:

\* To be completed in coordination with the Participating TO or CAISO. Is the Generating Facility in the Participating TO's service area? Yes No Local service provider for auxiliary and other power: Please provide proposed schedule dates: Environmental survey start: Environmental impact report submittal: \_\_\_\_\_\_ Procurement of project equipment: Begin Construction Date: Generator step-up transformer Date: receives back feed power Generation Testing Date:\_\_\_\_\_ Commercial Operation Date: \_\_\_\_\_ Level of Deliverability Status: Choose one of the following: \_\_\_\_Energy-Only \_\_\_\_Full Capacity Partial Capacity (expressed in fraction of Full Capacity)

#### Appendix 7

# Application, Procedures, and Terms and Conditions for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10 kW ("10 kW Inverter Process")

- 1.0 The Interconnection Customer ("Customer") completes the Interconnection Request ("Application") and submits it to the Participating TO ("Company").
- 2.0 The Company acknowledges to the Customer receipt of the Application within three Business Days of receipt.
- 3.0 The Company evaluates the Application for completeness and notifies the Customer within ten Business Days of receipt that the Application is or is not complete and, if not, advises what material is missing.
- 4.0 The Company verifies that the Small Generating Facility can be interconnected safely and reliably using the screens contained in the Fast Track Process in the Generator Interconnection and Deliverability Allocation Procedures (GIDAP). The Company has 15 Business Days to complete this process. Unless the Company determines and demonstrates that the Small Generating Facility cannot be interconnected safely and reliably, the Company approves the Application and returns it to the Customer. Note to Customer: Please check with the Company before submitting the Application if disconnection equipment is required.
- 5.0 After installation, the Customer returns the Certificate of Completion to the Company. Prior to parallel operation, the Company may inspect the Small Generating Facility for compliance with standards which may include a witness test, and may schedule appropriate metering replacement, if necessary.
- 6.0 The Company notifies the Customer in writing that interconnection of the Small Generating Facility is authorized. If the witness test is not satisfactory, the Company has the right to disconnect the Small Generating Facility. The Customer has no right to operate in parallel until a witness test has been performed, or previously waived on the Application. The Company is obligated to complete this witness test within ten Business Days of the receipt of the Certificate of Completion. If the Company does not inspect within ten Business Days or by mutual agreement of the Parties, the witness test is deemed waived.
- 7.0 Contact Information The Customer must provide the contact information for the legal applicant (i.e., the Interconnection Customer). If another entity is responsible for interfacing with the Company, that contact information must be provided on the Application.
- 8.0 Ownership Information Enter the legal names of the owner(s) of the Small Generating Facility. Include the percentage ownership (if any) by any utility or public utility holding company, or by any entity owned by either.
- 9.0 UL1741 Listed This standard ("Inverters, Converters, and Controllers for Use in Independent Power Systems") addresses the electrical interconnection design of various forms of generating equipment. Many manufacturers submit their equipment to a Nationally Recognized Testing Laboratory (NRTL) that verifies compliance with UL1741. This "listing" is then marked on the equipment and supporting documentation.

# Application for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10kW

This Application is considered complete when it provides all applicable and correct information required below. Additional information to evaluate the Application may be required.

## Processing Fee A non-refundable processing

A non-refundable processing fee of \$100 must accompany this Application.

Interconnection Customer			
Name:			
Contact Person:			
Address:			
City:	State:Zi (Evening):		_Zip
Telephone (Day):	(Evening	g):	
Fax:	E-Mail Ad	E-Mail Address:	
Contact (if different from Inte			
Name:			
Address:			
City:	State:		Zip:
Telephone (Day):	(E	vening):	
Fax:	E-Mai		
Location (if different from about Electric Service Company:Account Number:			
Inverter Manufacturer:		Model	
Inverter Manufacturer: Nameplate Rating:	(kW)	(kVA)	(AC Volts)
Single PhaseT	hree Phase	(	
Single Phase T System Design Capacity:	(kW)	(kVA	)
Prime Mover: Photovoltaic	Reciprocating Engine	Fuel Cell	
Energy Source: Solar Wind	Hydro Diesel Natural		
Fuel Oil Oth Is the equipment UL1741 Lis	ted?Yes	No	<del></del>
If Yes, attach manufacturer's			
Estimated Installation Date:	[	Estimated In-Ser	vice Date:

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 Generator Interconnection Procedures (), or the Participating TO has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

List components of the Small Generating Facility equipment package that are currently certified:

2	— — — — — — — — — — — — — — — — — — —
agree to abide by the Terms and Cor	knowledge, the information provided in this Application is true. I ditions for Interconnecting an Inverter-Based Small Generating urn the Certificate of Completion when the Small Generating Facility
Signed:	
Title:	Date:
Contingent Approval to Interconnect (For Company use only)	he Small Generating Facility
	ng Facility is approved contingent upon the Terms and Conditions Small Generating Facility No Larger than 10kW and return of the
Company Signature:	
Title:	Date:
Application ID number:	
Company waives inspection/witness	est? Yes No

#### **Small Generating Facility Certificate of Completion**

Is the Small Generating Facility	y owner-installed? Yes No	
Interconnection Customer:		
Contact Person:		
Address:		
Location of the Small Generating	ng Facility (if different from above):	
	State:	
	(Evening):	
	E-Mail Address: _	
Electrician:		
Name:		
Address:		
City:	State:	Zip Code:
Telephone (Day):	(Evening):	
Fax:	E-Mail Addre	ss:
License number:		
Date Approval to Install Facility	granted by the Company:	
Application ID number:		
Inspection:		
The Small Generating Facility h	has been installed and inspected in	compliance with the local
building/electrical code of		
Signed (Local electrical wiring i	inspector, or attach signed electrical	inspection):
Date:		

As a condition of interconnection, you are required to send/fax a copy of this form along with a copy of the signed electrical permit to (insert Company information below):

Name:		
Company:		
Address:		
City	State	ZIP:
Fax:		
Energizing the Small Gen	Small Generating Facility (For Company of erating Facility is approved contingent uper-Based Small Generating Facility No La	on the Terms and Conditions for
Company Signature:		
Title:	Date:	

## Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW

### 1.0 Construction of the Facility

The Interconnection Customer (the "Customer") may proceed to construct (including operational testing not to exceed two hours) the Small Generating Facility when the Participating TO (the "Company") approves the Interconnection Request (the "Application") and returns it to the Customer.

#### 2.0 Interconnection and Operation

The Customer may operate Small Generating Facility and interconnect with the Company's electric system once all of the following have occurred:

- 2.1 Upon completing construction, the Customer will cause the Small Generating Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and
- 2.2 The Customer returns the Certificate of Completion to the Company, and
- 2.3 The Company has either:
  - 2.3.1 Completed its inspection of the Small Generating Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes. All inspections must be conducted by the Company, at its own expense, within ten Business Days after receipt of the Certificate of Completion and shall take place at a time agreeable to the Parties. The Company shall provide a written statement that the Small Generating Facility has passed inspection or shall notify the Customer of what steps it must take to pass inspection as soon as practicable after the inspection takes place; or
  - 2.3.2 If the Company does not schedule an inspection of the Small Generating Facility within ten business days after receiving the Certificate of Completion, the witness test is deemed waived (unless the Parties agree otherwise); or
  - 2.3.3 The Company waives the right to inspect the Small Generating Facility.
- 2.4 The Company has the right to disconnect the Small Generating Facility in the event of improper installation or failure to return the Certificate of Completion.
- 2.5 Revenue quality metering equipment must be installed and tested in accordance with applicable ANSI standards.

#### 3.0 Safe Operations and Maintenance

The Customer shall be fully responsible to operate, maintain, and repair the Small Generating Facility as required to ensure that it complies at all times with the interconnection standards to which it has been certified.

#### 4.0 Access

The Company shall have access to the disconnect switch (if the disconnect switch is required) and metering equipment of the Small Generating Facility at all times. The Company shall provide reasonable notice to the Customer when possible prior to using its right of access.

#### 5.0 Disconnection

The Company may temporarily disconnect the Small Generating Facility upon the following conditions:

- 5.1 For scheduled outages upon reasonable notice.
- 5.2 For unscheduled outages or emergency conditions.
- 5.3 If the Small Generating Facility does not operate in the manner consistent with these Terms and Conditions.
- 5.4 The Company shall inform the Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

#### 6.0 Indemnification

The Parties shall at all times indemnify, defend, and save the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or inactions of its obligations under this agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

#### 7.0 Insurance

The Parties each agree to maintain commercially reasonable amounts of insurance.

#### 8.0 Limitation of Liability

Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under paragraph 6.0.

#### 9.0 Termination

The agreement to operate in parallel may be terminated under the following conditions:

- 9.1 By the Customer
  - By providing written notice to the Company.
- 9.2 By the Company

If the Small Generating Facility fails to operate for any consecutive 12-month period or the Customer fails to remedy a violation of these Terms and Conditions.

#### 9.3 Permanent Disconnection

In the event this Agreement is terminated, the Company shall have the right to disconnect its facilities or direct the Customer to disconnect its Small Generating Facility.

#### 9.4 Survival Rights

This Agreement shall continue in effect after termination to the extent necessary to allow or require either Party to fulfill rights or obligations that arose under the Agreement.

#### 10.0 Assignment/Transfer of Ownership of the Facility

This Agreement shall survive the transfer of ownership of the Small Generating Facility to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the Company.

## Appendix 8 [intentionally omitted]

#### **Appendix 9 Certification Codes and Standards**

IEEE1547 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity)

UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems

IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems

NFPA 70 (2002), National Electrical Code

IEEE Std C37.90.1-1989 (R1994), IEEE Standard Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems

IEEE Std C37.90.2 (1995), IEEE Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers

IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network Transformers

IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors

IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits

IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits

ANSI C84.1-1995 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms

NEMA MG 1-1998, Motors and Small Resources, Revision 3

IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

NEMA MG 1-2003 (Rev 2004), Motors and Generators, Revision 1

#### Appendix 10

#### **Certification of Small Generator Equipment Packages**

- Small Generating Facility equipment proposed for use separately or packaged with other equipment in an interconnection system shall be considered certified for interconnected operation if (1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards referenced below by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment pursuant to the relevant codes and standards listed in Appendix 9, (2) it has been labeled and is publicly listed by such NRTL at the time of the interconnection application, and (3) such NRTL makes readily available for verification all test standards and procedures it utilized in performing such equipment certification, and, with consumer approval, the test data itself. The NRTL may make such information available on its website and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.
- 2.0 The Interconnection Customer must verify that the intended use of the equipment falls within the use or uses for which the equipment was tested, labeled, and listed by the NRTL.
- 3.0 Certified equipment shall not require further type-test review, testing, or additional equipment to meet the requirements of this interconnection procedure; however, nothing herein shall preclude the need for an on-site commissioning test by the parties to the interconnection nor follow-up production testing by the NRTL.
- 4.0 If the certified equipment package includes only interface components (switchgear, inverters, or other interface devices), then an Interconnection Customer must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and is consistent with the testing and listing specified for this type of interconnection equipment.
- Provided the generator or electric source, when combined with the equipment package, is within the range of capabilities for which it was tested by the NRTL, and does not violate the interface components' labeling and listing performed by the NRTL, no further design review, testing or additional equipment on the customer side of the point of common coupling shall be required to meet the requirements of this interconnection procedure.
- 6.0 An equipment package does not include equipment provided by the utility.
- 7.0 Any equipment package approved and listed in a state by that state's regulatory body for interconnected operation in that state prior to the effective date of these small generator interconnection procedures shall be considered certified under these procedures for use in that state.