Business Practice Manual

For

Generator Management

Approval History

Approval Date: February, 2014
Effective Date: March, 2014
BPM Owner: Deb Le Vine
BPM Owner's Title: Director of Infrastructure Contracts & Management

Revision History

Version	PRR	Date	Description
32	1430	~~April~~ 5/25/2022	2021 Contract Management Enhancements Initiative updates: • Repower Updates • Aligning CODs with PPAs for Group 3 projects • Allowing project converstions to 100% storage • Retention of interconnection service rights
31	1392	1/1/2022	Conform terminology with VOM Cost Review initative
30	1287	11/20/2020	Changes to incorporate: • Phase I of the hybrid initiative • Off-peak deliverability status
29	1256	3/3/2020	Changes to incorporate FERC order on generator deliverability enhancements
28	1251	2/20/2020	Changes to incorporate: • FERC 845 Implementation of Permissible Technology Advancement and Interconnection Service Capacity • Clarification of Facility Reassessments
27	1211, 1213	1/31/2020	Changes to incorporate:

Version	PRR	Date	Description
			• DMM clarification regarding termination of the negotiated bid upon retirement • Implementing Interconnection Process Enhancements ("IPE") 2018
26	1201, 1205	12/17/2019	Changes to incorporate: • Batch processing of refunds and associated timelines • Impact to Interconnection Customer of not submitting appropriate documents to facilitate the refund • Clarification to the retirement section regarding partial retirement of Generating Facilities
25	1188, 1189	10/30/2019	Changes to incorporate: • Implementing Interconnection Process Enhancements ("IPE") 2018 • Funds Submittal Requirement (Section 6.3; 8.1; and 13.4.1) • Incorporate Tariff changes from the Reliability Must Run / Capacity Procurement Mechanism policy initiative, regarding retirement scenarios, affidavit and RMR designation

24	1159, 1160, 1161	8/09/2019	Changes to incorporate:
			• Implementing Interconnection Process Enhancements ("IPE") 2018
			  ○ Suspension notice
			  ○ Clarify New Resource Interconnection requirements
			  ○ Timing of fuel type changes
			  ○ PPA transparency
			  ○ Increase repowering deposit
			  ○ Clarify measure for modifications after COD

Version	PRR	Date	Description
			○ Ride-through requirements for inverter-based generation ○ Short circuit duty contribution criteria for repower projects • Section 3.4 Meter Services Agreement for Scheduling Coordinators • Minor clerical corrections
23	1073	10/1/18	Add new Section 11, clarifying as-built submission requirements in the Generator Interconnection Agreement
22	1056	7/5/18	Clarifications to existing generator retirement processes after the decision to not move forward with the Temporary Shut Down of Resource Operations stakeholder initiative, the inclusion of the public information posting on the CAISO website, and the change to effective date to retain Deliverability.
21	996, 1000	9/8/17	Changes to incorporate: • PRR 996 Additional Transmission-Project In-Service Date Revision Clarifications • PRR 1000 Commercial operation date extensions for Independent Study Process (ISP) projects
20	994	8/7/17	Clarifications to existing generator retirement processes
19	976	4/27/17	Changes to incorporate PRR 976 Generating Facility project phases sharing transformers
18	962/ 965	4/6/17	Changes to incorporate: • PRR 962 clarify existing generator retirement processes • PRR 965 Moving project naming guidelines to the Generator Interconnection and Deliverability Allocation Procedures BPM

Version	PRR	Date	Description
17	932	9/28/16	Change to incorporate PRR 932 implementing IPE 2015 Topic 6 – allowable modifications between Phase I and Phase II interconnection studies
16	915	8/26/16	Change to incorporate PRR 915 – Clarification that fuel type change guidance is only an example
15	912/913	8/5/16	Changes to incorporate: • PRR 912 Implementing IPE 2015 Topic 3, Topic 4, and Topic 7 • PRR 913 Distributed energy resource provider agreement updates
14	903	6/30/16	Changes to incorporate PRR 903 Implementing time in queue commercial viability criteria (IPE 2015 Topic 2)
13	902	6/7/2016	Changes to incorporate PRR 902 Distributed energy resource provider agreements
12	893	5/13/2016	Changes to incorporate PRR 893 Minor clarifications on existing processes (add phasing flexibility, gen-tie material modification assessment, add retirement flowchart)
11	875/876	12/2/2015	Changes to incorporate: • PRR 875 Station power service for generators • PRR 876 Treatment of suspension • Edits to correct page numbers update graphic in Section 2. Generator Management Overview to include new sections were not included in the redline
10	863	11/6/2015	Changes to incorporate: • PRR 863 Modifying projects to include energy storage • PRR 864 Update BPM for generator management overview
9	851	9/4/2015	Changes to incorporate PRR 851 Modify the request window for Limited Operation Studies
8	840/841	6/30/2015	Changes to incorporate:

Version	PRR	Date	Description
			• PRR 840 Process and requirements for regulatory contracts • PRR 841 Process for Retiring a Generating Unit
7	837	6/1/2015	Changes to incorporate: • PRR 837 Process for generating unit conversions to California ISO Markets • Moved Section 4 *Multiple Phases of Generating Facilities* up in the order of sections (these changes are denoted in green-line, and no changes were made to the content) • Created placeholders to avoid frequent re-numbering as the CAISO develops and publishes additional sections
6	825	4/30/2015	Changes to incorporate: • PRR 825 inverter changes that result in a capacity increase • Instances of "Queue Management" that should have changed to "Generator Management" in the 12/1/2014 update
5	779/784	12/1/2014	Changes to incorporate: • PRR 779 - Limited Operation Study procedures • PRR 784 - Generating Unit Repowering Overview and Timeline, Change BPM Name to Generator Management
4	765	9/29/2014	Changes to incorporate: • PRR 765 - Annual Generator Downsizing Process and De Minimis Reductions • Changed two references of "ISO" to "CAISO" to be consistent

Version	PRR	Date	Description
3	744	9/4/2014	Changes to incorporate PRR 744 - Addition of Section 4, Multiple Phases of Generating Facilities and revisions to Section 3 to capture the Commercial Operation for Markets ("COM") process
2	730/731	6/27/2014	Changes to incorporate: • PRR 730 - Clarifications on Modification Requests Submitted by PTOs, and • PRR 731 - Clarifications on Modification Requests During the Project's Interconnection Studies • Update Section 1.1 to be consistent with other BPMs
1	700	3/4/2014	Create BPM

TABLE OF CONTENTS

1. Introduction

Welcome to the CAISO ***BPM for Generator Management.*** In this Introduction you will find the following information:

- The purpose of California Independent System Operator Corporation (CAISO) Business Practice Manuals (BPMs);
- What you can expect from this CAISO BPM; and
- Other CAISO BPMs or documents that provide related or additional information.

1.1 Purpose of CAISO Business Practice Manuals

The Business Practice Manuals (BPMs) developed by CAISO are intended to contain implementation detail, consistent with and supported by the CAISO Tariff, including: instructions, rules, procedures, examples, and guidelines for the administration, operation, planning, and accounting requirements of CAISO and the markets. Each Business Practice Manual is posted in the BPM Library at: http://bpmcm.caiso.com/Pages/BPMLibrary.aspx Updates to all BPMs are managed in accordance with the change management procedures included in the BPM for Change Management.

1.2 Purpose of This Business Practice Manual

This BPM for Generator Management covers the rules, and procedures for implementation of new generating units interconnecting to the CAISO Controlled Grid. This BPM covers serial, cluster, GIDAP, independent, fast track, and 10KW or less inverter Interconnection Study processes for Large Generating Facilities (LGF) and Small Generating Facilities (SGF). The BPM is intended for those entities that have completed the interconnection study process to interconnect with the CAISO and have executed or are negotiating a Generator Interconnection Agreement (GIA) and may participate in the CAISO Markets, as well as those entities that expect to exchange Power with the CAISO Balancing Authority Area ("BAA").

This BPM benefits readers who want answers to the following questions:

- What are the roles of CAISO, Participating TOs and the Interconnection Customer during the development of projects?
- What are the concepts that an entity needs to understand to engage in the CAISO's queue management process?

Although this BPM is primarily concerned with management of the CAISO interconnection queue, there is some overlap with other BPMs. Where appropriate, the reader is directed to the other BPMs for additional information.

If a Market Participant detects an inconsistency between BPMs, it should report the inconsistency to CAISO before relying on either provision.

The provisions of this BPM are intended to be consistent with the CAISO Tariff. If the provisions of this BPM nevertheless conflict with the CAISO Tariff, the CAISO is bound to operate in accordance with the CAISO Tariff. Any provision of the CAISO Tariff that may have been summarized or repeated in this BPM is only to aid understanding. Even though every effort will be made by the CAISO to update the information contained in this BPM and to notify Market Participants of changes, it is the responsibility of each Market Participant to ensure that he or she is using the most recent version of this BPM and to comply with all applicable provisions of the CAISO Tariff.

A reference in this BPM to the CAISO Tariff, a given agreement, any other BPM or instrument, is intended to refer to the CAISO Tariff, that agreement, BPM or instrument as modified, amended, supplemented or restated.

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

1.3 References

The definition of acronyms and words beginning with capitalized letters are given in the BPM for Definitions & Acronyms.

Other reference information related to this BPM includes:

- Other CAISO BPMs
- CAISO Tariff

The CAISO Website posts current versions of these documents.

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

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

1.4 Definitions

1.4.1 Master Definitions Supplement

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

1.4.2 Highlighted Definitions Applicable to This BPM

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

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

"Dispute Resolution" shall mean the procedure set forth in the executed interconnection agreement, or Appendix U, Section 13.5; Appendix Y, Section 13.5 and GIP BPM, Section 17; or Appendix DD, Section 15.5 and in GIDAP BPM, Section 15, as applicable for resolution of a dispute between the Parties.

“Material Modification” is defined in CAISO Tariff Appendix A as “modification that has a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.”

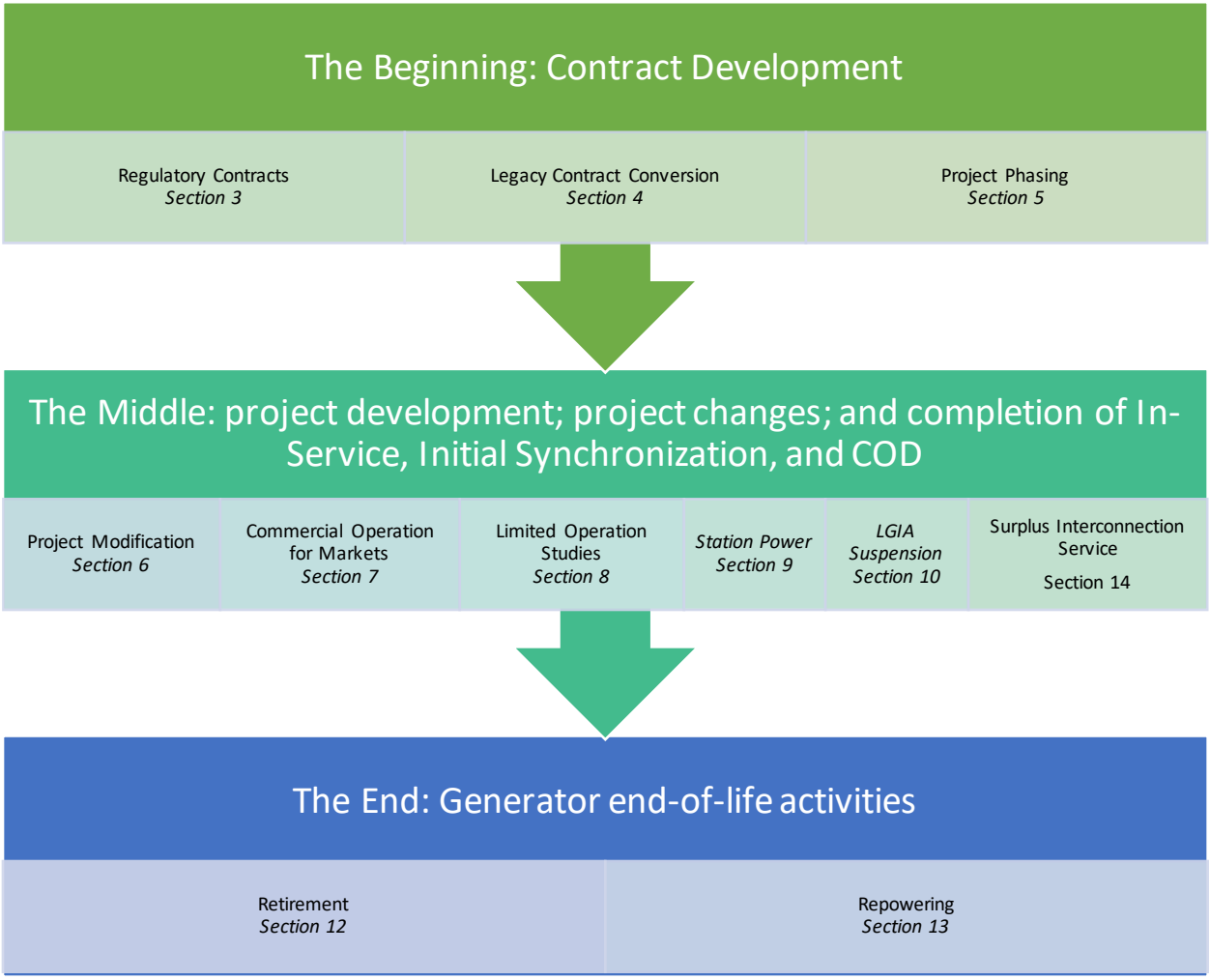
"Party" or "Parties" shall mean the CAISO, Participating TO(s), Interconnection Customer or the applicable combination of the above.

2. Generator Management Overview

Welcome to the *Overview* section of the CAISO *BPM for Generator Management*.

In this BPM, you will find the information that covers a range of topics applicable to new and existing generator interconnections to the CAISO Controlled Grid. This BPM picks up where the BPM for Generator Interconnection Procedures and the BPM for Generator Interconnection and Deliverability Allocation Procedures leave off.

The BPM for Generator Management is organized in a way that reflects the generator lifecycle:



The BPM for Generator Management does not cover market, metering, or transmission planning details. These rules and processes are discussed in other BPMs. A full list of BPMs is available on the CAISO website at http://www.caiso.com/rules/Pages/BusinessPracticeManuals/Default.aspx.

The BPM for Generator Management formerly was the BPM for Queue Management. The CAISO changed the name of the BPM to clarify that many processes discussed in this BPM apply to both new interconnections in the CAISO's Generator Interconnection Queue as well as generating units already connected to the CAISO Controlled Grid.

"Queue Management" is the CAISO's process (and business unit) aimed at advancing generation projects toward commercial operation. Queue Management also ensures that generation projects are in compliance with their executed Generator Interconnection Agreements ("GIA") and the CAISO tariff. If a project is not advancing towards commercial operation, it presents a detriment to CAISO ratepayers. Such projects hold valuable transmission capacity, points of interconnection, and substation bays that later queued projects could use. This, in turn, requires later-queued projects to build additional transmission that may never be needed.

The CAISO requires Interconnection Customers with executed GIAs to provide quarterly status reports through the power plant permitting process and monthly status reports once construction begins. The template for these status reports is available on the CAISO website at: http://www.caiso.com/Documents/QueueManagementQuarterlyStatusReportTemplate.docx.

Questions about the topics presented in this BPM may be directed to QueueManagement@caiso.com

2.1 Hybrid and Co-located Options

The CAISO allows mixed-fuel type projects (i.e., hybrid and co-located resources) to participate in the CAISO's markets. A hybrid resource is defined as a resource type comprised of two or more fuel-type projects, or a combination of multiple different generation technologies that are physically and electronically controlled by a single owner/operator and scheduling coordinator (SC) behind a single point of interconnection ("POI") that participates in the ISO markets as a single resource with a single market resource ID, is optimized by the CAISO in the market as a single resource, and is metered and telemetered at the high side of the interconnection transformer. Hybrid resources are not eligible to be variable energy resources.

Co-located resources are resources comprised of two or more-fuel type projects, or a combination of multiple different generation technologies behind a single point of interconnection that participate in the CAISO markets as different resources with different market resource IDs, are optimized by the Scheduling Coordinator's bids or self-schedules in the market. Each resource is individually metered and telemetered. Whether a co-located resource is a variable energy resource depends on that generating unit's characteristics alone; not the generating facility.

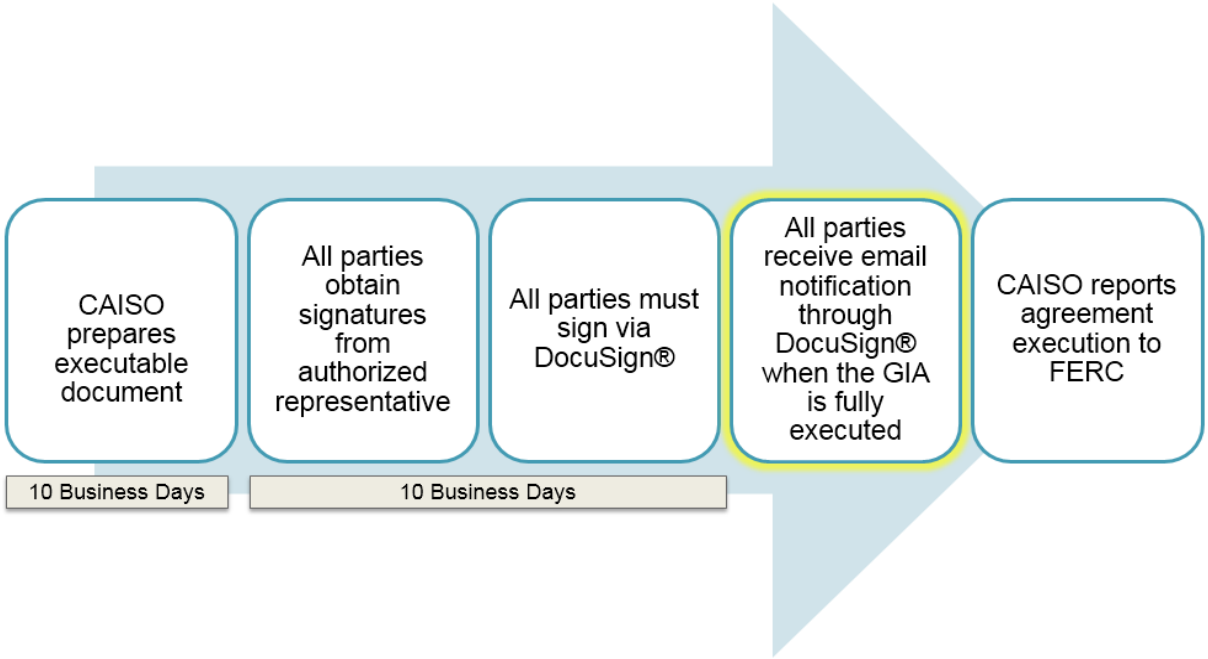
In the generator management process the CAISO will incorporate the election of hybrid versus co-located resource into the Generator Interconnection Agreement if the Interconnection Customer elects to do so. Alternatively, the Interconnection Customer must elect a model six (6) months prior to the project's synchronization date.

3. Regulatory Contracts

The terms of interconnection to the CAISO Controlled Grid and participation in CAISO markets are governed by more than 20 agreements. The body of these agreements generally contain pro-forma language approved by the Federal Energy Regulatory Commission, and the appendices and schedules (as applicable) contain specific customer and project details. A complete list of the CAISO's pro-forma agreements is available on the CAISO public website under Rules> Contracts and Agreements> http://www.caiso.com/rules/Pages/ContractsAgreements/Default.aspx. The process and schedule for drafting and developing agreements required for Generating Units connecting to the CAISO Control Grid is described in the sections below.

The process for agreement execution is the same for all conforming pro-forma agreements. When an agreement is released for execution, the CAISO prepares an executable document. The CAISO has

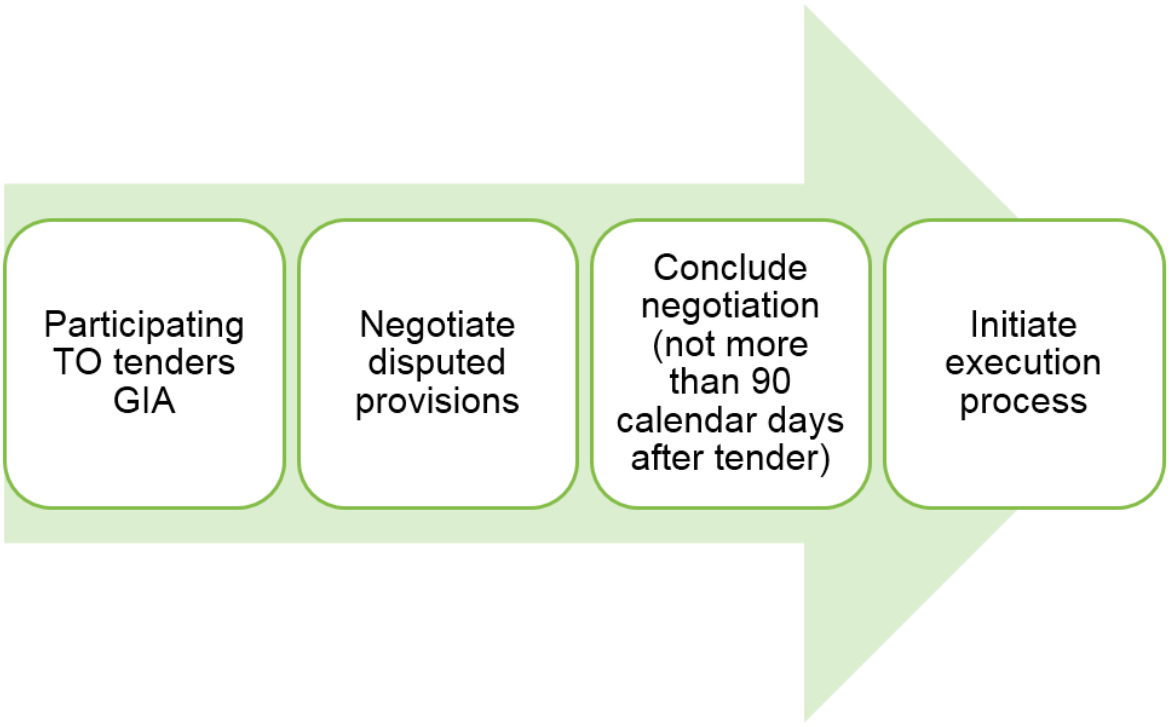
established a processing time of ten (10) Business Days for the execution of all conforming pro-forma agreements (and amendments) upon initiation of the execution process. The CAISO prepares the executable document and distributes it for execution via DocuSign®, an electronic signature technology. All parties receive email notification through DocuSign® when the document is fully executed. The CAISO reports the execution of all new agreements, as well as any subsequent assignments, name changes, and/or termination of the agreement to the Federal Energy Regulatory Commission on a quarterly basis through the Electronic Quarterly Report (EQR). [1]



3.1 Generator Interconnection Agreements

Generator Interconnection Agreements (GIAs) are three-party agreements among the Interconnection Customer, the CAISO, and the Participating TO. GIAs provide the terms and conditions for the provision of interconnection service to Interconnection Customer. GIAs are tendered by the Participating TO, and all three parties work together to develop the appendices. Details on the timing of GIA tendering are available in the BPM for GIP Section 15 and the BPM for GIDAP Section 10. The development of the appendices is expected to take no more than ninety (90) days. When development is complete and all parties agree, the CAISO initiates the execution process.

[1] http://www.ferc.gov/docs-filing/eqr.asp#.VTmHrSHBzRY



3.2 Participating Generator Agreements

Participating Generator Agreements (PGA) are agreements between the CAISO and a Participating Generator, a pro forma version of which is set forth in Appendix B.2 of the CAISO Tariff. PGAs may be requested by a Generator or other seller of Energy or Ancillary Services through a Scheduling Coordinator over the CAISO Controlled Grid (1) form a Generating Unit with a rated capacity of 1 MW or greater, (2) from a Generating Unit with a rated capacity of from 500 kW up to 1 MW for which the Generator elects to be a Participating Generator, or (3) from a Generating Unit providing Ancillary Services or submitting Energy Bids through an aggregation arrangement approved by the CAISO, which has undertaken to be bound by the terms of the CAISO Tariff.

To initiate a new PGA, download the Project Details Form from the CAISO Website under New Resource Implementation Process and Requirements, http://www.caiso.com/participate/Pages/NewResourceImplementation/Default.aspx and submit the form to NRI@caiso.com. The guide will provide detailed instructions and critical timelines, including if the Participating Generator is a hybrid or co-located resource.

3.3 Metered Entity Agreements for CAISO Metered Entities

Metered Entity Agreements for CAISO Metered Entities (MSACAISOME) are two party agreements between the CAISO and a CAISO Metered Entity consistent with the provisions

of Section 10 of the CAISO Tariff. A pro-forma version is set forth in Appendix B.6 of the CAISO Tariff. A Meter Service Agreement for CAISO Metered Entities may be requested by:

(a) any one of the following entities that is directly connected to the CAISO Controlled Grid:
   i. a Generator other than a Generator that sells all of its Energy and Ancillary Services to the Utility Distribution Company or Small Utility Distribution Company in whose Service Are it is located;
   ii. an MSS Operator; or
   iii. a Utility Distribution Company or Small Utility Distribution Company; and

(b) any one of the following entities:
   i. a Participating Generator, including a Pseudo-Tie Participating Generator;
   ii. a Participating TO in relation to its Tie Point Meters with other TOs or BAAs;
   iii. a Participating Load;
   iv. a Participating Intermittent Resource ("PIR"); or
   v. a utility that requests that Unaccounted for Energy for its Service Area be calculated separately, in relation to its meters at points of connection of its Service Area with the systems of other utilities.

To initiate a new MSACAISOME, download the Project Details Form from the CAISO Website under New Resource Implementation Process and Requirements, http://www.caiso.com/participate/Pages/NewResourceImplementation/Default.aspx and submit the form to NRI@caiso.com. The guide will provide detailed instructions and critical timelines.

3.4 Scheduling Coordinator Metered Entities

A Scheduling Coordinator for a Scheduling Coordinator Metered Entity must sign a Meter Service Agreement for Scheduling Coordinators (MSA SC) with the CAISO. The Scheduling Coordinator for a Scheduling Coordinator Metered Entity is responsible for providing SQMD for Scheduling Coordinator Metered Entities it represents. Such agreements specify that Scheduling Coordinators require their Scheduling Coordinator Metered Entities to adhere to the meter requirements of the CAISO Tariff applicable to Scheduling Coordinators for Scheduling Coordinator Metered Entities. A Meter Service Agreement entered into by a Scheduling Coordinator applies to the Scheduling Coordinator only in its capacity as Scheduling Coordinator for those Scheduling Coordinator Metered Entities. A *pro forma* version of the Meter Service Agreement for Scheduling Coordinators is set forth in Appendix B.7 of the CAISO Tariff and can be found on the CAISO website at: www.caiso.com.

3.5 Participating Load Agreements

Participating Load Agreements ("PLA") are agreements between the CAISO and a Participating Load, an entity with Pumping Load or Aggregated Participating Load, providing

Curtailable Demand, which has undertaken in writing by execution of a PLA to comply with all applicable provisions of the CAISO Tariff.

To initiate a new PLA, download the Project Details Form from the CAISO Website under New Resource Implementation Process and Requirements, http://www.caiso.com/participate/Pages/NewResourceImplementation/Default.aspx and submit the form to NRI@caiso.com. The guide will provide detailed instructions and critical timelines.

3.6 Distributed Energy Resource Provider Agreements

Distributed Energy Resource Provider Agreements are agreements between the CAISO and a Distributed Energy Resource Provider, an entity with a Distributed Energy Resource Aggregation(s) that consists of one (1) or more distributed energy resources. By executing a Distributed Energy Resource Provider Agreement, a Distributed Energy Resource Provider commits to comply with all applicable provisions of the CAISO Tariff.

To initiate a new Distributed Energy Resource Provider Agreement, the Distributed Energy Resource Provider must first download the Distributed Energy Resource Provider Agreement Information Request Sheet and Distributed Energy Resource Provider UDC/MSS Concurrence letter template at the following website, http://www.caiso.com/rules/Pages/ContractsAgreements/Default.aspx. The UDC/MSS Concurrence letter template Attachment A is used to identify the distributed energy resources comprising an aggregation to be inserted by the CAISO into the Schedule 1 of the Distributed Energy Resource Provider Agreement. The Distributed Energy Resource Provider must then submit the Concurrence letter template and Attachment A to the Utility Distribution Company (UDC) or Metered Subsystem (MSS) to provide them the opportunity to review the distributed energy resources for accuracy of the information listed in the Attachment A or raise one of the following concerns:

(1) the Distributed Energy Resource is participating in another Distributed Energy Resource Aggregation;
(2) the Distributed Energy Resource is participating as a Proxy Demand Response resource or a Reliability Demand Response Resource;
(3) the Distributed Energy Resource is participating in a retail net energy metering program that does not expressly permit wholesale market participation;
(4) the Distributed Energy Resource is not in compliance with applicable UDC or MSS tariffs or applicable requirements of the applicable Local Regulatory Authority; or
(5) the Distributed Energy Resource may pose a threat to the safe and reliable operation of the distribution system, if operated as part of a Distributed Energy Resource Aggregation.

The UDC or MSS will have a 30 calendar day period to disclose any concerns. This review process will also be required for any Schedule 1 revisions initiated by the Distributed Energy Resource Provider. At the end of the 30 calendar day period, or earlier if the UDC or MSS have completed their review, the Distributed Energy Resource Provider should obtain written confirmation of any concerns raised by the UDC or MSS. If there are no concerns,

the Distributed Energy Resource Provider must obtain written confirmation from the UDC or MSS before it may proceed to the New Resource Implementation (NRI) process as outlined below. Once the Distributed Energy Resource Provider has received written confirmation that there are no UDC or MSS concerns with the aggregation(s) listed in Attachment A of the Concurrence letter, the Distributed Energy Resource Provider must follow the New Resource Implementation process by completing the Project Details Form and submitting it and the Concurrence letter from the UDC or MSS to NewResourceImplementation@caiso.com. The Project Details Form can be found on the CAISO Website under New Resource Implementation Process and Requirements webpage located at: http://www.caiso.com/participate/Pages/NewResourceImplementation/Default.aspx

In addition, this webpage provides a link to the New Resource Implementation Guide which will provide the Distributed Energy Resource Provider with detailed instructions and critical timelines for completing this process.

3.7 Submitting Requests for Revisions to Existing Contracts

The ten (10) Business Day processing time extends to the completion of all requests related to contract management once the appropriate documentation has been received by the CAISO. Such requests include, but are not limited to schedule revisions, assignments, name changes, project name changes, and change of ownership requests. Failure to submit any of the required documentation as outlined below may result in a delay in processing.

All requests for revisions to existing contracts should be submitted in writing to the CAISO at RegulatoryContracts@caiso.com. To expedite the processing of all requests, please include the following information:

- Agreement holder's name;
- Agreement(s) affected;
- Queue number (if applicable);
- Project name (if applicable);
- Revision requested;
- Requested effective date of revision; and
- Required documents (as outlined).

3.8 Assignment

Assignments are generally permitted unless there is an express prohibition against it. Generally such prohibitions are created contractually. Under the CAISO Tariff Section 22.2, any party to a regulatory contract may assign or transfer any or all of its rights and/or

obligations under a regulatory contract with the other parties' prior written consent. Moreover, the CAISO Tariff provides that consent should not be unreasonably withheld by the CAISO. Any such transfer or assignment is conditioned upon the successor in interest accepting the rights, conditions, and obligations under the regulatory contract as if the successor in interest was an original party to the regulatory contract, namely, having the operational and financial ability to satisfy the original party's obligations and liabilities. As described below, submittal of a completed CAISO Consent to Assignment form is not required to assign to an affiliate.

3.8.1 Assignment to Affiliates

To request an assignment to an affiliate, the following documentation must be submitted to the CAISO prior to the requested effective date of the assignment:

- Written confirmation from the Participating TO that the intended Assignee meets the credit-worthiness requirements to fulfill any financial obligations that may be assumed under the assignment. The credit of the Assignee must be greater than or equal to the credit of the Assignor at the time the obligation was originally granted. For information regarding the credit-worthiness requirements, please contact the Participating TO's Project Manager. Email confirmation from the Participating TO will be sufficient to meet this requirement.
- Company documentation showing the affiliate relationship (i.e., membership agreement, operating agreement); and
- A fully executed Assignment Agreement or Assignment and Assumption Agreement between the Assignee and Assignor to confirm the transfer and effective date. The CAISO does not have a required format for an Assignment Agreement or Assignment and Assumption Agreement. The form and content of the agreement is at the discretion of the Assignee and Assignor; however, the final agreement must contain the following information:
    - The full and correct legal names of both the Assignor and Assignee;
    - The effective date of the assignment; and
    - Updated contact information for notifications.

3.8.2 Assignment to Non-Affiliates

To request a consent to assignment to a non-affiliate entity, the following documentation must be submitted to the CAISO prior to the requested effective date of the assignment:

- CAISO's consent prior to assignment. The CAISO Consent to Assignment template will be provided upon written request. This request may be made by contacting RegulatoryContracts@caiso.com.

- Written confirmation from the Participating TO that the intended Assignee meets the credit-worthiness requirements to fulfill any financial obligations that may be assumed under the assignment. The credit of the Assignee must be greater than or equal to the credit of the Assignor at the time the obligation was originally granted. For information regarding the credit-worthiness requirements, please contact the Participating TO's Project Manager. Email confirmation from the Participating TO will be sufficient to meet this requirement.

- A fully executed Assignment Agreement or Assignment and Assumption Agreement between the Assignee and Assignor to confirm the transfer and effective date. The CAISO does not have a required format for an Assignment Agreement or Assignment and Assumption Agreement. The form and content of the agreement is at the discretion of the Assignee and Assignor; however, the final agreement must contain the following information:

    - The full and correct legal names of both the Assignor and Assignee;
    - The effective date of the assignment; and
    - Updated contact information for notifications.

3.9 Entity Name Changes

To request an entity/agreement holder name change, the following documentation must be submitted to the CAISO:

- Copy of the Secretary of State document to confirm the effective date of the name change and the correct legal spelling of the new company name.

3.10 Change of Ownership

In the event of a change of ownership, in which the existing entity/agreement holder name does not change, the following documentation must be submitted to the CAISO:

- Copy of the ownership agreement for CAISO records; and
- Updated contact information, if changes were made within the company where such changes to the contacts may be necessary.

3.11 Project and Resource Name Changes

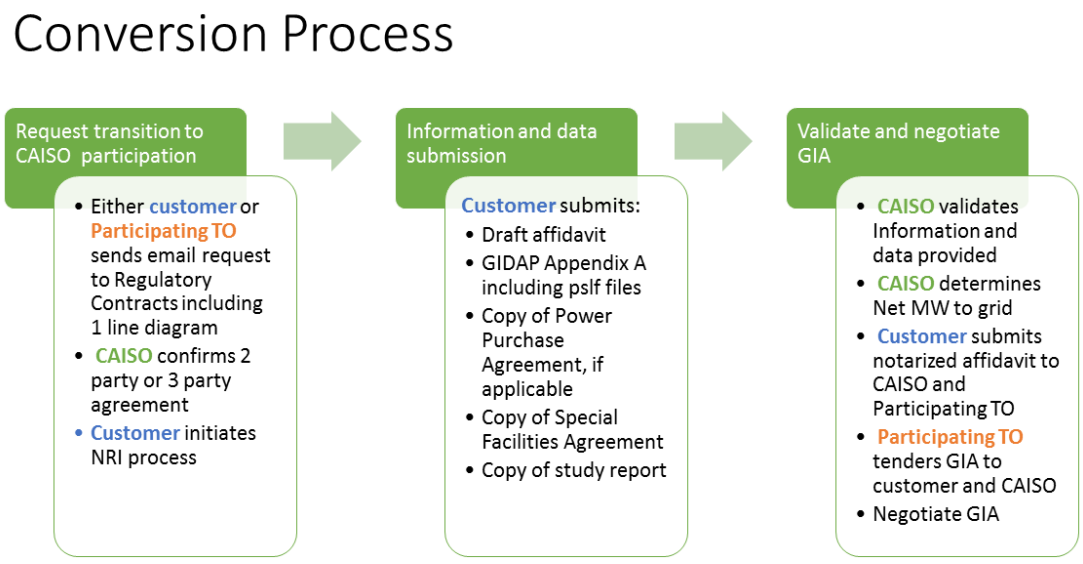
Project names are established when the Interconnection Request is submitted. Request for project name changes must be approved by the CAISO and Participating TO prior to implementation of the name change. Approval of a project name change depends on reasonable justification for the change and the proposed name must meet the naming convention guidelines outlined in Section 5.2 of the BPM for Generator Interconnection and

Deliverability Allocation Procedures (GIDAP). Any proposed name changes will be denied without reasonable justification. Ownership changes are not considered reasonable justification. The CAISO reserves the right to impose additional restrictions on project and resource naming conventions, if necessary, to significantly reduce confusion and increase the ease of reliable operations, especially during stress conditions on the grid.

4. Generating Unit Conversions to CAISO Markets

Section 25.1.2 of the CAISO Tariff applies to existing Generating Units that are CAISO Controlled Grid connected that must or desire to transition from existing two party interconnection agreements (between the owner or operator of the Generating Unit and the applicable Participating TO) directly to a three-party CAISO interconnection agreement, if the Interconnection Customer can demonstrate to the CAISO and the Participating TO's satisfaction that the Generating Unit total generating capability, and electrical characteristics are substantially unchanged.

This BPM and specifically this section, focuses on the process for transitioning to a three party GIA among the customer, the Participating TO, and the CAISO. All such existing Generating Units must complete the New Resource Implementation process in accordance with CAISO Tariff Section 25.1.2.1. This BPM does not provide explicit detail about the requirements for the New Resource Implementation process, which includes all of the steps for a Generating Unit to become a CAISO participating resource. Information on those requirements is available at http://www.caiso.com/participate/Pages/NewResourceImplementation/Default.aspx.



4.1 Request

Generating Unit owners or Participating TOs request a GIA and transition to CAISO participation by submitting an email request to RegulatoryContracts@caiso.com and NRI@caiso.com. That request must include the most recent one-line diagram of the Generating Unit depicting the interconnection to the Participating TO's system. The CAISO will review the request and confirm that a three party GIA among the customer, the Participating TO and the CAISO is appropriate.

4.2 Submit Information and Data

Once a three party agreement is determined to be appropriate, the customer will submit the following information and data to the CAISO:

- Draft affidavit http://www.caiso.com/planning/Pages/GeneratorInterconnection/Default.aspx
- GIDAP Appendix 1 Interconnection Request http://www.caiso.com/Documents/GIDAPAppendix1-AttachmentA-Appendix1-InterconnectionRequest-GeneratingFacilityData.doc, including both Power System Load Flow ("PSLF") and dynamic models. The load flow model should be provided in GE PSLF .epc format. The dynamic model should be provided using GE PSLF library models in .dyd format. In case the GE PSLF library does not contain the model for the technology of the Generating Facility, a user written *.p EPCL file should be submitted. Because of a limitation on the number of user-defined models that can be used, it is recommended that the best available WECC-approved dynamics model be used.
- Copy of the power purchase agreement, if applicable
- Copy of the special facilities agreement

4.3 Validate and Negotiate GIA

The CAISO and the Participating TO will review the submitted information and data to verify that the Generating Unit's total generating capability and electrical characteristics are substantially unchanged. If the CAISO identifies changes and has any concern as to whether the changes are substantial, the CAISO will perform an assessment under Section 13.4 of this BPM to determine whether the changes are substantial (in which case the owner must go through the interconnection queue), or are not substantial (in which case the parties may proceed directly to the three party GIA).

5. Multiple Phases of Generating Facilities

5.1 Overview

Any Interconnection Customer is allowed to develop its Generating Facilities in phases. A Phased Generating Facility is defined as a Generating Facility that is structured to be completed and to achieve Commercial Operation in two or more successive phases that are specified in a GIA, such that each phase comprises a portion of the total MW generation capacity of the entire Generating Facility. A Phased Generating Facility does not necessarily mean that each phase is a discrete Generating Unit that can be scheduled and bid into the CAISO's markets. The Interconnection Customer must comply with the metering standards for each Phase of the Generating Facility in accordance with the BPM for Metering, and may obtain a separate Resource ID for each phase, if desired. Different Phases of a Phased Generating Facility may share a single transformer if the Parties agree.

All Generating Facilities, whether a Phased Generating Facility or not, achieving Commercial Operation are subject to the Reliability Network Upgrades ("RNU") and Interconnection Facilities required for each phase being placed in service. Requests for phasing can be made in the Interconnection Request, Appendix B revisions to the Interconnection Request, or through a Material Modification Assessment ("MMA") request. As outlined in Section 6.5.2 of this BPM, whether the request involves moving the CODs of the Generating Facility phases so that they occur before or after the COD specified in the Interconnection Request for the overall Generating Facility, a review must be undertaken to ensure that other generating facilities are not negatively impacted by the requested phasing of the Generating Facility or by the construction schedule for Network Upgrades and Interconnection Facilities.

A request for phasing after Appendix B is submitted between the Phase I and Phase II studies will be via the MMA. Similar to a modification request for COD extension, a request for phasing will not typically require a study. If the request is approved and the Generating Facility is then phased, the last phase must achieve commercial operation by the already approved COD specified for the entire Generating Facility. If the final phase of the Generating Facility is not going to achieve the currently approved COD (including any modifications allowed for through construction sequencing), then the Interconnection Customer must submit an MMA request for a new COD. A single MMA request can be submitted for both phasing and a COD extension if it is known that the Generating Facility is not going to achieve the currently approved COD at the time the MMA request for phasing is submitted and the delay in COD cannot be accommodated through construction sequencing. The phases and CODs, once determined, will be memorialized in the GIA.

5.2 Applicability

Each Interconnection Request can result in not more than one GIA; however multiple Interconnection Requests by the same owner at the same point of interconnection can be incorporated into one GIA. The CAISO will allow an Interconnection Customer to develop its

Generating Facility in phases under a single GIA and allow the GIA to have co-tenants. All of the co-tenants to the GIA must agree to assume joint and several liability for all of the obligations relating to the Interconnection Request and specified in the GIA, i.e., all of the owners are both individually and collectively responsible for all of the interconnection obligations specified in the GIA. The CAISO does not require that all of the owners be affiliates of the Interconnection Customer.

The CAISO has found that there is a significant amount of setup and integration work required for the start of commercial operation on the CAISO controlled grid and has implemented the following limits on phasing:

- A minimum of 5 MW for each phase of a Generating Facility and a maximum number of 5 phases allowed for a Generating Facility. [2]
- Because phasing may involve different CODs for each phase, the CAISO will require that no more than one phase can reach COD in a given month unless the phases have separate Resource IDs. The CAISO will coordinate with the Participating TOs on the timing of the phases to ensure reliability of the grid. The CAISO may make an exception to this policy on a case-by-case basis, depending on the project-specific facts. Please send an email to QueueManagement@caiso.com to make this request.
- Separate phases of a Generating Facility are not necessarily discrete generating units with separate Resource IDs that can be scheduled and bid into the CAISO's markets. If the Interconnection Customer wants separate Resource IDs, they would need to meet the metering standards for each phase of the Generating Facility. Metering information is contained in the CAISO BPM for Metering, and questions about metering standards can be directed to meterengineering@caiso.com.

5.3 Process

Request for Generating Facility phasing can be initiated at any time. The request should always contain an updated Attachment 1 to the Generating Facility's Interconnection Request. The form requires information including Generating Facility size, Commercial Operation Date ("COD"), deliverability status, and other interconnection information. The Interconnection Customer requesting phasing would reflect the phasing in the schedule section of the form as follows, as an example:

Begin Construction Date:	*Phase A – January 1, 2014;* *Phase B – July 1, 2015*

[2] Customers requesting more than five phases will be considered on a case-by-case basis, and require special approval from the CAISO metering department

Generator step-up transformer receives back feed power Date:	*Phase A – January 1, 2014; Phase B – July 1, 2015*
Generation Testing Date:	*Phase A – July 1, 2014; Phase B – January 1, 2016*
Commercial Operation Date:	*Phase A – January 1, 2015; Phase B – July 1, 2016*

Phasing requests will be processed as follows:

1. Interconnection Request: An Interconnection Customer can request phasing when it submits its initial Interconnection Request in Attachment 1 to the GIDAP Interconnection Request.

2. During the Phase I study process: An Interconnection Customer may submit a request for phasing during the Phase I study process, however, CAISO Interconnection Studies assume a single COD and a single MW capacity based on the last COD requested and total MW for the Generating Facility, and thus the CAISO would not make any changes to the Phase I study assumptions or reflect the phasing in the study report. The first time the CAISO will reflect the phasing request in a study report is in the Phase II studies.

3. Between Phase I and Phase II Studies: The Interconnection Customer may request phasing during this period by including the phasing request when submitting GIDAP Appendix 3, Appendix B. Appendix B is a data form that revises the Interconnection Request that the Interconnection Customer must submit after the Phase I study to update the Interconnection Request for the Phase II study.

4. During the Phase II study process: Any phasing request made during the Phase II study process, will require an MMA to determine if the requested change would impact other generating facilities. As noted above, CAISO Interconnection Studies assume a single COD and a single MW capacity based on the last COD requested and total MW for the Generating Facility in that study process and, similar to changes for phasing requested in the Phase I process, that assumption would not change for the Phase II Study or be reflected in the study report. The Interconnection Customer must submit a request for phasing and the phasing dates to QueueManagement@caiso.com. If the phasing request is determined to be a Material Modification, then the Interconnection Customer will not be permitted to implement its phasing proposal but the Interconnection Request may be withdrawn and a new Interconnection Request could be submitted in

the next cluster study window if the Interconnection Customer would still like to pursue phasing. If the request for phasing is approved, the first time the CAISO will incorporate the phasing request is in the negotiation of the GIA.

5. After Phase II Study Results are published: Any phasing request made after the Phase II study results are published will require an MMA to determine if the requested change would impact other Generating Facilities. The Interconnection Customer must submit a request for phasing and the phasing dates to QueueManagement@caiso.com. If the phasing request is determined to be a Material Modification, then the Interconnection Customer will not be permitted to implement its phasing proposal but the Interconnection Request may be withdrawn and a new Interconnection Request could be submitted in the next cluster study window if the Interconnection Customer would still like to pursue phasing. If the request for phasing is approved, the first time the CAISO will incorporate the phasing request is in the negotiation of the GIA. The Interconnection Customer's GIA will include discrete milestones for each phase of the Generating Facility in Appendix B to the GIA to provide a mechanism to track and enforce obligations for each phase. Once a Generating Facility is approved for phasing and the phasing is incorporated into the customer's GIA, any request to modify the phasing plan will require a new MMA request.

6. After execution of the GIA: Any phasing request made after execution of the GIA will require an MMA to determine if the requested change would impact other Generating Facilities. The Interconnection Customer must submit a request for phasing and the phasing dates to QueueManagement@caiso.com. If the phasing request is determined to be a Material Modification, then the Interconnection Customer will not be permitted to implement its phasing proposal but the Interconnection Request may be withdrawn and a new Interconnection Request could be submitted in the next cluster study window if the Interconnection Customer would still like to pursue phasing. If the request for phasing is approved, the first time the CAISO will incorporate the phasing request is in an amendment to the GIA. The Interconnection Customer's GIA will include discrete milestones for each phase of the Generating Facility in Appendix B to the GIA to provide a mechanism to track and enforce obligations for each phase. Once a Generating Facility is approved for phasing and the phasing is incorporated into the Interconnection Customer's GIA, any request to modify the phasing plan will require a new MMA request.

More detailed information on the requirements for the MMA process, including timeline, deposit information, and technical data requirements, is available in Section 6 of this BPM. In each instance, the requested phasing structure must be agreed to by the CAISO and applicable Participating TO.

6. Overview of Modification Provisions

The Interconnection Customer must submit to the CAISO, in writing, a request to modify any information provided in the Interconnection Request and must have the request approved before the Interconnection Customer will be permitted to make the change. Requests to decrease the MW capacity are not permitted except to the extent permitted by the relevant interconnection procedures, as discussed further below in Sections 6.1.2 and 6.1.3. Any request to increase maximum output of a project must be approved through the submission of a new Interconnection Request. Requests to modify projects that have achieved COD are processed as described in Section 13 of this BPM.

The request to modify will be approved, and the Interconnection Customer shall retain its Queue Position, if a modification is determined not to be a Material Modification. A request to modify will be denied, and the Interconnection Customer shall not be permitted to make the modification while retaining its Queue Position, if the modification is determined to be a Material Modification.

The CAISO will use the same process and criteria to review modification requests for a generation project studied under the cluster study process as it does to review projects studied under the serial study process.

A Material Modification is defined in CAISO Tariff Appendix A as "modification that has a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date." Once a request is received, the CAISO will perform a Material Modification Assessment ("MMA"). The following are examples of modifications which may be considered a Material Modification if, upon review in the MMA, it is deemed to adversely impact:

- the timeline of the Queue Cluster's Interconnection Study Cycle by requesting the MMA in advance of other existing tariff opportunities to modify the project (i.e. between Phase I and Phase II Interconnection Studies);
- the Participating Transmission Owner ("Participating TO") (such as by shifting costs from the Interconnection Customer to the Participating TO);
- the costs assigned to other Interconnection Customers;
- the timing or cost for the construction of Network Upgrades (reliability and/or delivery) which are intended to be utilized by multiple Interconnection Customers unless the Interconnection Customer requesting the modification is willing to mitigate its impact, e.g., by continuing to meet its security and payment obligations on the schedule in its Generator Interconnection Agreement with respect to those Network Upgrades; or
- the timing or cost of other Interconnection Customers' Interconnection Facilities that are dependent on the Network Upgrades or Interconnection Facilities of the Interconnection Customer requesting the change, unless the Interconnection Customer requesting the modification is willing to mitigate its impact, e.g., by continuing to meet its security and payment obligations on the schedule in its Generator Interconnection Agreement with respect to those Network Upgrades or Interconnection Facilities.

A modification request will be approved if the criteria set forth below are met, and the Interconnection Customer is in good standing. An Interconnection Customer is in good standing if it is in full compliance with its obligations under its GIA, if it has one, and the terms of the applicable interconnection procedures in accordance with the CAISO Tariff. An Interconnection Customer's obligations under the GIA and interconnection procedures include milestones, postings and required payments. With respect to modifications where CAISO consent is required, the CAISO will not unreasonably withhold consent for timely modification requests which are determined to not be Material Modifications. [3]

In response to the modification request, the CAISO, in coordination with the Participating TO(s) and, if applicable, any Affected System Operator, will evaluate the proposed modification. In addition to determining if requested modifications are Material Modifications, the CAISO will assess modification requests to ensure that transmission and generation schedules are consistent with each other and, if the request is for a COD extension, the length of time the project has been in the Interconnection Queue.

If a modification request is determined to be non-material, the CAISO, in coordination with the Participating TO(s), will further evaluate if the proposed modification would result in any changes to the Interconnection Facilities and Network Upgrades for the generator requesting the modification. An example of the changes could be different protection relays are required at the Generating Facility and at the Participating TO's substation due to change of the interconnection configuration. If such changes are identified, the CAISO, in coordination with the Participating TO(s), will complete a facility reassessment to update the scope, as well as the estimated cost and duration, of the Interconnection Facilities and Network Upgrades. The facility reassessment report will be issued by the CAISO when the CAISO approves the modification request.

The CAISO shall inform the Interconnection Customer in writing of whether its requested modification constitutes a Material Modification. In the event that the proposed modification does not constitute a Material Modification, and the Project has not been in the Interconnection Queue longer than the limits described in the Tariff, [4] the modification will be approved and the CAISO will consider the change to the project to be final (*i.e.*, once the modification is approved, a new modification request and approval would be needed to undo the approved modification). The Interconnection Customer shall then provide the results to any Affected System Operator, if applicable. The CAISO will not perform informational analysis or "what-if" studies regarding proposed modifications to generation facilities. However, as noted in Section 6.4.8.2 below, if the modification is approved subject to certain conditions, the Interconnection Customer will be given the opportunity to review those conditions and notify the CAISO if it still wants to proceed with the modification.

The CAISO believes the Participating TO should submit a modification request to the CAISO if the Participating TO proposes changes to the scope of, or schedule for, planned Network Upgrades or Participating TO's Interconnection Facilities. The Participating TO should include in the request a description of the proposed changes, the Interconnection Customers that they believe will be impacted,

[3] See Appendix S, Section 1.3.4; Appendix T, Section 3.4.5; Appendix U, Section 4.4.3; Appendix Y, Section 6.9.2.2; or Appendix DD, Article 6.7.2.2 as applicable.

[4] See Appendix U, Section 3.5.1; Appendix Y, Section 3.5.1.4; Appendix DD, Section 3.5.1.4; as applicable.

the impacts on those Interconnection Customers, a description of potential alternatives considered, if applicable, and the reason for selecting the proposed modification.

If the Participating TO fails to submit a modification request to the CAISO when changes are needed to the scope of, or schedule for, planned Network Upgrades or Participating TO's Interconnection Facilities, then an impacted Interconnection Customer may submit a Material Modification Request for such modifications. Upon CAISO verification that the requested modification(s) are solely or primarily due to such scope or schedule changes, the Interconnection Customer will not be charged further for the assessment and the $10,000 deposit will be returned to the Interconnection Customer.

For example, if the proposed modifications are due to a six-month delay in completion of the Participating TO's Interconnection Facilities or RNUs and the modification request proposes six-month delay in the In-Service Date and COD of the project, then the Interconnection Customer will not be charged further for the assessment and the $10,000 deposit will be returned to the Interconnection Customer.

The CAISO will review the information submitted to assess the Participating TO's request and evaluate whether any other projects are affected by the proposed modification. When the Participating TO initiates a modification request, the CAISO will create a work order number and make reasonable efforts to inform the Interconnection Customer and make reasonable efforts to obtain its concurrence with the proposed change. Although the Participating TO may perform thorough research before submitting a modification request, the CAISO will perform its own review of the request in order to create documentation for the CAISO's conclusion and to ensure a complete and independent analysis of the request.

Projects studied in the serial study process may have the ability in accordance with Appendix U, Section 7.5 or 8.5 to request a re-study if a modification request is rejected, provided the request meets the criteria of the applicable section.

For Interconnection Customers proposing to transfer Surplus Interconnection Service Capacity (SISVC) please review the requirements in Section 14 of this BPM before submitting a modification request.

6.1 Timing of Modification Requests

Modifications can be requested at any time, but the CAISO will only process requests at certain times, as discussed further below.

6.1.1 Requests During the Project's Interconnection Studies

The CAISO will accept modification requests from projects at any time. However, the CAISO may not be able to process some modification requests, depending upon the type of the request, while the project is being studied during the Phase I process or Phase II Interconnection Study process for that project, or other studies applicable to that project. An example of projects whose modifications the CAISO may not be able to consider at certain times in 2014 are Cluster 6 projects during the Phase II and Reassessment study processes, and Cluster 7 projects during the Phase I study process, where the requested

modification could affect the study results. The reason for this is that once a study commences, the study assumptions cannot be changed. Otherwise, the study would need to be re-started with the updated information based on the modification requests. Additionally, the CAISO will defer evaluation of any modification requested pursuant to this section by an Interconnection Customer participating in the Generator Downsizing Process until the completion of that Generator Downsizing Process.

In the event that a project submits a modification request that cannot be completed in the 45 calendar day assessment period outlined in Section 6.4.1 of this BPM, the CAISO will notify the Interconnection Customer and provide an estimated completion date with an explanation of the reason why additional time is required.

Information about study timeframes is available on the CAISO website under Planning> Generator Interconnection > GIDAP Customer guidelines (http://www.caiso.com/Documents/GIDAPCustomerGuidelines.xls).

6.1.2 Requests Submitted Between the Phase I and Phase II Interconnection Studies[5]

Interconnection Customers have an opportunity to undertake certain modifications that are specifically enumerated in the GIDAP following the Phase I Interconnection Study Results Meeting. Such modifications are not considered material at this point in the process, and therefore do not require an MMA. These modifications are:

- a decrease in the MW capacity of the proposed Generating Facility;
- a modification to the technical parameters associated with the Generating Facility technology or Generating Facility step-up transformer impedance characteristics;
- a modification to the interconnection configuration, while not changing the Point of Interconnection ("POI");
- a modification to the In-Service Date, Initial Synchronization Date, Trial Operation Date, and/or COD that meets the criteria set forth in Section 6.5.2.1 of this BPM and is acceptable to the applicable Participating TO(s) and the CAISO, such acceptance not to be unreasonably withheld;
- change in Point of Interconnection as set forth in Section 6.5.1 of this BPM; and
- a change of deliverability status (1) from Full Capacity Deliverability Status or Partial Capacity Deliverability status to Energy-Only Deliverability Status; (2) from Full Capacity Deliverability Status to Partial Deliverability Status; (3) to a lower level of Partial Capacity Deliverability Status; or (4) Off-Peak Deliverability Status to Off-Peak Energy Only Status.

[5] See Appendix U, Section 4.4.1 or 4.4.2; Appendix Y, Section 6.9.2.2; or Appendix DD, Section 6.7.2.2, as applicable.

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

For any modification other than these, the Interconnection Customer must first request that the CAISO evaluate whether such a 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 modification prior to approving it and the CAISO shall inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the POI, except than that specified by the CAISO in an Interconnection Study or otherwise allowed under the CAISO Tariff or BPMs (e.g., as provided in Section 6.1.5 below), shall constitute a Material Modification.

The Interconnection Customer shall remain eligible for the Phase II Interconnection Study if the modification is reviewed and it is determined not to be a Material Modification. If the modification is determined to be a Material Modification and the Interconnection Customer nevertheless intends to implement the change, then the current Interconnection Request must be withdrawn from the applicable study process and the Interconnection Customer may submit a new Interconnection Request in a subsequent Queue Cluster or, if it qualifies, under one of the other study tracks (Independent Study Process or Fast Track Process).

If a modification is approved for an IR between its Phase I and Phase II interconnection studies, no facility reassessment is needed. The Interconnection Facilities and Network Upgrades will be evaluated in the Phase II Interconnection Study.

6.1.3 Requests Submitted After Phase II Interconnection Studies

For any requested modification after Phase II Interconnection Study results have been issued, the Interconnection Customer must first request that the CAISO evaluate whether such a modification is a Material Modification. The CAISO must be able to evaluate the change and find it acceptable without the need to undertake a re-study.[6] If the CAISO determines, pursuant to prudent engineering judgment, that a re-study is necessary, then

[6] A re-study would be needed if the requested modification requires the CAISO or Participating TO to perform a dynamic stability study, post-transient governor power flow study or other similar complex engineering study.

the requested change shall be considered a Material Modification and, thus, is not permissible within the scope of the existing Interconnection Request.

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 modification prior to approving it and the CAISO shall inform the Interconnection Customer in writing of whether the modification would constitute a Material Modification. Any change to the POI, except that allowed under the CAISO Tariff or BPMs, shall constitute a Material Modification.

If a modification is determined to be a Material Modification and the Interconnection Customer nevertheless intends to implement the change, then the current Interconnection Request must be withdrawn from the applicable study process and the Interconnection Customer may submit a new Interconnection Request in a subsequent Queue Cluster or, if it qualifies, under one of the other study tracks.

6.1.4 Requests for Changes after Allowable Time in Queue

For projects studied in the *serial* study process, the In-Service Date shall not exceed ten (10) years from the date the Interconnection Request is received by the CAISO. For projects studied in the *cluster* study process the COD shall not exceed seven (7) years from the date the Interconnection Request is received by the CAISO.[7]

Interconnection Customers whose projects have Full Capacity Deliverability Status (FCDS), Partial Capacity Deliverability Status (PCDS) or Off-Peak Deliverability Status (OPDS) that request COD extensions beyond the allowable time in queue, or request changes to the project when the COD is already beyond the allowable time in queue, must demonstrate that the Generating Facility is commercially viable, as defined by the CAISO Tariff and discussed further below, in order to make those changes and retain the project's deliverability status. Insubstantial changes, including type, number, or manufacturer of inverters, insubstantial changes to the Generating Facility, or energy storage additions, are not included in this requirement.

Fuel type changes are prohibited after the allowable time in queue, including when the fuel type change is submitted with a request to extend the COD.[8] Interconnection Customers seeking to change the project fuel type (e.g., natural gas, solar, wind, biomass, geothermal) after they already have or will exceed the allowable time in queue must submit a new Interconnection Request.

Energy storage is not considered a fuel type change and is not subject to this prohibition. De minimis fuel type changes are allowed after the allowable time in queue has been

[7] See Appendix U, Section 3.5.1; Appendix Y, Section 3.5.1.4; Appendix DD, Section 3.5.1.4; as applicable.

[8] See Appendix S, Section 1.3.4; Appendix U, Section 4.4.9; Appendix Y, Section 6.9.2.4; Appendix DD, Section 6.7.2.4 as applicable.

exceeded. This includes additions or replacements of no more than the greater of five percent or 10 MW, but no more than twenty-five percent of the capacity specified in the project GIA. [9]

6.1.4.1 Commercial Viability

To demonstrate commercial viability when applicable, the Interconnection Customer must meet all of the following criteria for the project:

a. the Interconnection Customer must have applied for the necessary governmental permits or authorizations appropriate at the time of the request considering the proposed construction schedule of the project, and the permitting authority must have deemed such provided documentation to be data adequate for the authority to initiate its review process. The CAISO, in consultation with the Participating TO, will determine what permits are appropriate for the project based on the project's specific facts;

b. the Interconnection Customer has an executed and regulator-approved power purchase agreement (PPA), and the PPA must have the following in common with the proposed Generating Facility in the GIA:

1. the Point of Interconnection;

2. MW capacity (allowing differences in utility defined project size before transformation and line losses);

3. fuel type and technology; and

4. site location;

c. the Interconnection Customer must demonstrate Site Exclusivity for 100% of the property necessary to construct the Generating Facility through the COD requested in the modification request. A Site Exclusivity Deposit does not satisfy this criterion;

d. the Interconnection Customer has an executed GIA; and

e. the GIA for the Generating Facility must be in good standing such that: (1) neither the Participating TO nor the CAISO has provided a Notice of Breach; or (2) if such Notice has been issued, the breach has either been cured or the Interconnection Customer has commenced sufficient curative actions consistent with the relevant terms of the GIA.

[9] Energy storage additions and de minimis fuel type changes may require installation of equipment to ensure that their output at the point of interconnection does not exceed the interconnection service capacity amount the Interconnection Customer requested and which was studied.

6.1.4.2 Exceptions to Commercial Viability Criteria

Limited Exception for Interconnection Customers who do not have a PPA

If an Interconnection Customer satisfies all commercial viability criteria except criterion (b) above, the CAISO will postpone converting the Generating Facility to Energy-Only Deliverability Status for one year from the day the Interconnection Customer submits the modification request, or eight years after the CAISO received the Interconnection Request, whichever is later. Interconnection Customers exercising this provision must continue to meet all other commercial viability criteria during this period.

One-time Exception for Customers with Recently Published Phase II Study Results

Interconnection Customers in Queue Cluster 7 and beyond whose Phase II Interconnection Study reports identify a Network Upgrade required for the project that is beyond the 7-year threshold are exempt from the commercial viability criteria provided that they modify their project dates, including the COD within six (6) months of the CAISO's publishing the Phase II Interconnection Study report. Such change should be enacted by the Interconnection Customer providing an MMA in accordance with Section 6 of this BPM. This exemption is inapplicable to report addenda or revisions required by a request from an Interconnection Customer to modify its project for any reason. In other words, if, at the time the Phase II study results are published, the earliest achievable In-Service and CODs for the project are beyond 7 years, the Generating Facility will not be subject to the commercial viability criteria if they request to extend the project milestones to the earliest achievable In-Service Date and COD.

If the Interconnection Customer desires In-Service and CODs beyond these earliest-achievable dates, such a request will be subject to the commercial viability criteria.

6.1.4.3 Examples of Time in Queue

To better understand the CAISO's usage of the commercial viability criteria, the CAISO offers the following examples:

Example 1: modification is requested for a project with a COD that is beyond 7/10 years

Modification requests for a project that has a COD beyond the 7/10 year threshold will be required to meet commercial viability criteria. Interconnection Customers must submit documentation in accordance with Section 6.1.4.1 above.

Example 2: GIA is not yet executed, and earliest achievable In-Service Date is beyond 7/10 years

There is no exception available to Generating Facilities Cluster 6 and earlier-queued projects where the Interconnection Customer had not yet executed a GIA at the time that the CAISO received approval to implement commercial viability criteria from the Federal Energy Regulatory Commission. Generating Facilities in Cluster 6 and earlier-queued clusters had ample notice and time to execute GIAs before the commercial viability criteria took effect.

However, if the earliest achievable In-Service Date is delayed because the Participating TO's Network Upgrade construction is delayed, and the delay was caused by reasons other than the GIA not being executed, the Participating TO must submit a Participating TO delay notice as described in Section 6.2.1.3 of this BPM If the delay was caused by the GIA not being executed, an MMA is required and the commercial viability criteria will still apply.

Example 3: GIA is executed, but Interconnection Customer believes historical delays prior to GIA execution created cascading delays, "using up" the pre-7/10 year threshold time

Interconnection Customers have inquired if the Generating Facility is eligible for an exception to commercial viability criteria because, for whatever reason, it took a number of years to execute the GIA, and thus some of the pre-7/10 year threshold time was used for the project prior to GIA execution. There is no exception for this reason because GIAs are executed with an achievable COD date. The CAISO will only consider the events that occurred since GIA execution when reviewing post GIA-execution COD extension requests.

Example 4: project suspended the GIA for 3 years, and is now beyond the 7/10 year threshold

Suspension pursuant to Section 5.16 of the LGIA does not exempt a project from meeting the commercial viability criteria; nor does it change the calculation of time from Interconnection Request submission date to COD. Suspension only allows an Interconnection Customer "to suspend at any time all work associated with the construction and installation of the Participating TO's Interconnection Facilities, Network Upgrades, and/or Distribution Upgrades required under the LGIA other than Network Upgrades identified in the Phase II Interconnection Study as common to multiple Generating Facilities." A suspension pursuant to Section 5.16 of the LGIA does not automatically provide for a corresponding extension to the COD or any other timeline. As discussed in Section 10 of this BPM, if a requested suspension will require a corresponding extension to the COD, the Interconnection Customer must submit an MMA request, and if the MMA request would extend the COD beyond the 7/10 year threshold, the request will be subject to the commercial viability criteria.

Example 5: Commercial viability criteria was previously met using balance sheet financing and now the Interconnection Customer wants to make modifications other than a COD change to the project

Modifications for projects where the COD is beyond the 7/10 year threshold are subject to current commercial viability criteria as described in Section 6.1.4 of this BPM. Current criteria require a PPA, as balance sheet financing is no longer accepted for meeting this criteria.

If commercial viability criteria for a previous COD change had been met using balance sheet financing but a new modification other than a COD change is being requested, then a PPA will now be required to meet commercial viability. If the project does not have a PPA but all other commercial viability criteria is met, then the Interconnection Customer would qualify for the limited exception as described in Section 6.1.4.2 of this BPM where conversion to

Energy-Only Deliverability Status is postponed for one year from the day the modification request was submitted, or eight years after the Interconnection Request was submitted, whichever is later.

6.1.4.4 Annual Review to Confirm that Commercial Viability Criteria is Maintained

In order to ensure that Generating Facilities maintain the level of commercial viability presented at the time of the modification request, the CAISO will perform an annual review of the Generating Facility's commercial viability during the TP Deliverability allocation process. Interconnection Customers are required to submit a notarized TP Deliverability affidavit confirming that they continue to meet the commercial viability criteria. A separate commercial viability affidavit is not required, as the CAISO will review information provided in the TP Deliverability affidavits to confirm commercial viability levels are maintained.

If any Interconnection Customer subject to the commercial viability criteria fails to meet the criteria, the Deliverability Status of the Generating Facility corresponding to the Interconnection Request will convert to Energy-Only Deliverability Status. The due date for TP Deliverability affidavits is announced annually via CAISO market notice. The CAISO provides a template for the TP Deliverability affidavit on its website. Failure to submit a TP Deliverability affidavit will result in the Deliverability Status of the Generating Facility (or relevant portion corresponding to the modification request) converting to Energy-Only Deliverability Status.

6.1.4.5 Projects with One or More Portions Online

If an Interconnection Customer has declared commercial operation for markets for a portion of a Generating Facility, or Commercial Operation for one or more Phases of a Phased Generating Facility, the CAISO will not convert the portion of the Generating Facility that is in service and operating in the CAISO markets to Energy-Only Deliverability Status.

Instead, the portion of the Generating Facility that has not been developed will be converted to Energy-Only Deliverability Status, resulting in Partial Capacity Deliverability Status for the Generating Facility. However, where the Generating Facility has multiple Resource IDs for different portions of the Generating Facility, each such portion will have its own Deliverability Status independent from the entire Generating Facility. The portion of the Generating Facility assigned to any individual Resource ID may have Full Capacity Deliverability Status where the portion assigned to another Resource ID may have Energy-Only Deliverability Status and the Generating Facility as a whole would have Partial Capacity Deliverability Status.

If the Generating Facility downsizes pursuant to CAISO Tariff Appendix DD Section 7.5 to the portion of the project in service and operating in the CAISO markets, and that portion of the Generating Facility has Full Capacity Deliverability Status, the whole Generating Facility will revert to Full Capacity Deliverability Status.

6.1.4.6 Energy-Only Conversions

A project that fails to meet or maintain commercial viability criteria will be converted to Energy-Only Deliverability Status. Interconnection Customers may not reduce their cost responsibility or Interconnection Financial Security for any assigned Delivery Network Upgrades ("DNUs") unless it is determined that the assigned DNUs are no longer needed for current Interconnection Customers. The Interconnection Customer will remain responsible to pay the project's assigned costs for Network Upgrades still needed by other Interconnection Customers. This evaluation will be performed as part of the reassessment study process described in Section 7.4 of Appendix DD to the CAISO Tariff.

6.1.5 Post-COD Modification Review Process

The Interconnection Customer or the Participating TO may undertake modifications to its facilities, subject to Section 25 of the CAISO Tariff, Article 5.19 of the LGIA, and Article 3.4.5 of the SGIA if the Interconnection Customer has achieved its COD. The post-COD modification review process is similar to the MMA process with the exception that any modification request submitted after the project achieves COD will be evaluated based on changes to the total MW capacity of the Generating Facility and changes to its electrical characteristics, while the MMA process evaluates the impact to the cost or timing of other Interconnection Requests.

6.2 Scope of Modifications

In general, the CAISO's business practice is to approve a requested modification that meets the following criteria:

- the modification will not impact the timeline of any Queue Cluster's Interconnection Study Cycle; however, a modification requested during the study cycle will be held until the study cycle is complete;
- the type of modification being requested is not already addressed in the CAISO Tariff or BPMs through a separate process (e.g., the forthcoming annual downsizing process);
- the modification will not adversely impact another Interconnection Customer's costs;
- the modification will not adversely impact the In-Service Date or COD of any other Interconnection Customer's project;
- the modification will not adversely impact the Participating TO (*e.g.*, by shifting costs from the Interconnection Customer to the Participating TO);
- the modification will not adversely impact the timing for or cost of the construction of Network Upgrades (reliability and delivery) that are intended to be utilized by multiple Interconnection Customers unless the Interconnection Customer

requesting the modification is willing to mitigate its impact, e.g., by continuing to meet its security and payment obligations on the schedule in its Generator Interconnection Agreement with respect to those Network Upgrades;

- the modification will not adversely impact the timing or cost of other Interconnection Customers' Interconnection Facilities that are dependent on the Network Upgrades or Interconnection Facilities of the Interconnection Customer requesting the change unless the Interconnection Customer requesting the modification is willing to mitigate its impact, e.g., by continuing to meet its security and payment obligations on the schedule in its Generator Interconnection Agreement with respect to those Interconnection Facilities or Network Upgrades;
- the transmission will be in place for the Interconnection Customer's proposed In-Service Date of the project;
- the project for which the request is being made is in good standing;
- the modification will not cause the length of time in the Interconnection Queue to exceed the maximum time in queue per Section 6.5.2.1 of this BPM; and
- the requested modification is compliant with other CAISO Tariff requirements.

This BPM goes into greater detail on the considerations as they apply to specific types of requested changes in Section 6.5 of this BPM. ~~In addition, the CAISO has added the following modifications as Permissable Technological Advancements that will be under a separate timeline and fee as discussed further in Section 6.6 below:~~

- ~~removing equipment;~~
- ~~aligning the Commercial Operation Date with an executed power purchase agreement;~~
- ~~adding less than 5 MW of energy storage once without increasing the net output at the Point of Interconnection; and~~
- ~~other changes that have little or no potential to affect other Interconnection Customers or Affected Systems, require a new Interconnection Request, or otherwise require a re-study or evaluation.~~

6.2.1 Modifications That Are Approved Without Material Modification Assessment

The CAISO will assess the following types of requested modifications to confirm that they meet the criteria below. The customer must provide the CAISO and Participating TO with notice of the modification. The CAISO shall confirm that such modification is approved within five (5) Business Days of receiving the Interconnection Customer's notice.

6.2.1.1 After Phase I Study Results Meeting

Modifications timely submitted after the Phase I Study results are issued as outlined in Section 6.1.2 of this BPM.

6.2.1.2 De Minimis Reductions in Generating Facility Capacity[10]

If the final MW capacity of the proposed Generating Facility that is completed and achieves COD is reduced by no more than the greater of five percent (5%) of its MW capacity or 10 MW, but by no more than twenty-five percent (25%) of the MW capacity as specified in the GIA, then the project is deemed to have met the substantial performance obligations of the GIA. Such a reduction shall be considered a de minimis reduction and shall not constitute a breach of the Interconnection Customer's obligations under the CAISO Tariff or its GIA.

When its generation project achieves Commercial Operation, and that generation project has a de minimis reduction, the Interconnection Customer shall provide notice to QueueManagement@caiso.com. Such notice shall include the previous MW capacity and the new final MW capacity. De Minimis reductions shall not diminish the Interconnection Customer's responsibility for any costs or other obligations set forth in its GIA or the CAISO Tariff.

Interconnection Customers must request reductions in Generating Facility capacity that exceed the de minimis threshold must do so through the annual Generating Downsizing Process in Section 6.2.6.3 of the BPM for Generator Interconnection and Deliverability Allocation Procedures (GIDAP).

With respect to a Generating Facility with an executed GIA derived from either Appendix CC or Appendix EE to the CAISO Tariff, as they existed prior to the effective date of the Tariff amendment adopting the CAISO's annual Generator Downsizing Process[11], any capacity reduction permitted under Article 5.19.4 shall be performed in accordance with and be subject to Section 7.5.13 of Appendix DD.[12]

6.2.1.3 Milestone Extension When Network Upgrades Are Delayed

In the event that the Participating TO determines that construction of a Network Upgrade, required pre-cursor Network Upgrade, or Participating TO's Interconnection Facilities are delayed and that any project milestones must be modified due to that schedule change, the Participating TO shall provide a notice to the CAISO and the Interconnection Customer(s) it believes are impacted by the delay that includes the previous In-Service Date and the new In-Service Date as well as any other required modifications. With respect to Network Upgrades, this provision shall apply regardless of the type of Network Upgrades (i.e., to

[10] Appendix S, Section 1.4.1, Appendix U, Section 3.9.1, Appendix Y, Section 3.10.1, Appendix DD Section 7.5.13.1

[11] The tariff language was approved on July 31, 2014 effective August 1, 2014 by FERC in ER14-2063.

[12] Appendix DD Section 5.19.4

both: RNUs, or DNUs needed to provide the Interconnection Customer(s) with the requested level of delivery for their affected Generating Facilities.)

The Participating TO notice to the CAISO should include a description of the proposed changes, the Interconnection Customer(s) and Generating Facilities that it believes will be impacted, the impacts on those Interconnection Customer(s) and Generating Facilities, a description of potential alternatives considered, if applicable, and the reason for selecting the proposed modification. The Participating TO notice to the Interconnection Customer should include a description of the proposed changes, a description of potential alternatives considered, if applicable, and the reason for selecting the proposed modification.

The CAISO will review the information submitted to assess the Participating TO's request and evaluate whether any other projects are affected by the date change. The CAISO will review its conclusions and alternatives to the milestone delay considered, if applicable, with all impacted Interconnection Customers and the Participating TO before making a decision on the request. Finally, the CAISO will provide Interconnection Customers with notice of the required milestone delay and the specific Network Upgrade(s) or transmission project is the cause of the delay.

The COD extensions associated with a Participating TO's delay in construction of upgrades should be commensurate. For example, the new In-Service Date of the project should be within approximately 6 months of the new in-service date for the RNUs (*i.e.*, just because the upgrade is delayed does not give the Interconnection Customer an ability to further delay its project). In addition, the timeframes between the In-Service Date, Initial Synchronization Date, and COD should be similar to the number of days between these dates that were previously agreed to in the executed GIA, unless there is a valid reason to change those time periods which the Interconnection Customer must demonstrate to the CAISO. Thus if the Initial Synchronization Date was 30 days after the In-Service Date in the executed GIA, and the new In-Service Date is March 1, 2015, then the new Initial Synchronization Date should be March 31, 2015.

6.2.1.4 Construction Sequencing[13]

If the COD of a proposed Generating Facility is changed by approximately 6 months (either before or after the COD set forth in the GIA), then the requested change in dates for the In-Service Date, Initial Synchronization Date, and COD may be approved without going through the MMA process. Interconnection Customers with executed GIAs will communicate this information in their monthly status reports. Construction sequencing extensions may be exercised for up to a cumulative six (6) months before triggering the need for an MMA. A COD may only be extended pursuant to this section of the BPM if the required RNUs are completed. If a COD needs to be extended because both Network Upgrades are delayed, and because of a construction sequencing issue, the Network Upgrade delay will be

[13] See Appendix U, Section 12.2; Appendix Y, Section 12.2; or Appendix DD, Section 14.2; as applicable.

considered first, and then the clock will start on 6 months of allowable construction sequencing.

6.2.1.5 Inverter Changes

If the Interconnection Customer requests an inverter change for the project that is only a change in manufacturer (i.e., the technology and electrical characteristics are unchanged, including the number and size of inverters), the change may be made without going through the MMA process provided the Participating TO concurs that dynamic analysis is not required. The Interconnection Customer shall include in its notice the current and proposed inverter manufacturer, the number of inverters, their respective MW capabilities, the maximum fault currents, and the power factor regulation range. The Interconnection Customer shall complete and provide the CAISO with the Inverter Data Information Sheet, containing the new inverters' information and characteristics.

Changes that do not qualify under this section may be evaluated under Section 6.5.4.1 of this BPM.

6.2.1.6 Changes to Deliverability

Interconnection Customers electing to convert to Energy Only, Partial Capacity Deliverability Status, or a lower fraction of Partial Capacity Deliverability Status after the Phase II Interconnection Study and options available under the TP Deliverability allocation process have been exhausted can do so by submitting a written request to the CAISO. The requested deliverability status will become effective immediately upon submittal of the request, however changes to Network Upgrades and associated cost responsibility and financial security posting amounts will be assessed as part of the reassessment study process as described in Section 7.4 of Appendix DD to the CAISO Tariff. The Interconnection Customer will remain responsible to pay the project's assigned costs for Network Upgrades still needed by other Interconnection Customers.

Interconnection Customers electing to transfer deliverability can do so by submitting a written request to the CAISO. Options for transferring deliverability are described in more detail in Section 6.5.4 of this BPM.

Interconnection Customers seeking additional deliverability for their project can do so through the annual Transmission Plan Deliverability Allocation process which is described in

Section 6.2.9.1 of the BPM for Generator Interconnection and Deliverabilty Allocation Procedures

6.3 Modification Assessment Deposit[14]

The Interconnection Customer must include a modification assessment deposit at the time the Interconnection Customer requests modification. The CAISO will not commence a modification assessment without the deposit. The Interconnection Customer must specify the purpose of the funds within eighty (80) days of submittal (e.g. restudy, MMA, ISP, LOS etc). After eighty (80) days, the CAISO will contact the bank in order to return funds to the Interconnection Customer.

6.3.1 Modification Assessment Deposit Amount

The modification assessment deposit is $10,000. The modification assessment deposit will be applied against actual assessment costs and the Interconnection Customer will pay the actual costs of the assessment, which are initially drawn from the modification assessment deposit. The Interconnection Customer will pay by direct invoice any actual costs exceeding the modification assessment deposit.

6.3.2 Use of Modification Assessment Deposit

The CAISO deposits all modification assessment deposits into an interest-bearing account at a bank or financial institution designated by the CAISO. The modification assessment deposit is applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties working at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the modification assessment and to meet and otherwise communicate with Interconnection Customers with respect to their projects. The CAISO will create a separate work order number for each modification assessment in order to correctly track the actual costs.

The CAISO shall issue to the Interconnection Customer one or more invoices for the modification assessment that includes a detailed and itemized accounting of each assessment expense incurred (including those incurred by the CAISO, the Participating TOs, and/or third parties) and corresponding amounts due, and that provide at least the same level of detail included in invoices for interconnection studies. The Participating TO and any third parties performing work on the assessment must invoice the CAISO for such work no later than seventy-five (75) calendar days after the completion of the assessment. The CAISO shall refund the modification assessment deposit any undisputed costs by the Interconnection Customer within thirty (30) calendar days of issuance of an MMA invoice. Refunds will be processed in accordance with the CAISO's established business practice

[14] See Appendix S, Section 1.3.4.2; Appendix U, Section 4.4.6; Appendix Y, Section 6.9.2.3; or Appendix DD, Article 6.7.2.3 as applicable.

whereby interconnection deposit refunds are processed in batches and payments are disbursed monthly. This thirty (30) calendar day period will be tolled if the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate a refund or if the Interconnection Customer has any outstanding invoice balance due the CAISO on another project owned by the same Interconnection Customer.

Whenever the actual cost of performing the modification assessment exceeds the modification assessment deposit, the invoice will direct the Interconnection Customer to pay the excess amount, and the Interconnection Customer shall pay the undisputed amount in accordance with the invoice within thirty (30) calendar days. If the Interconnection Customer fails to timely pay the actual costs exceeding the deposit and such costs have not been disputed, the Project will no longer be considered to be in good standing by the CAISO. The CAISO is not obligated to continue to conduct the assessment unless and until the Interconnection Customer has paid all undisputed amounts.

The Interconnection Customer shall be refunded any portion of its modification assessment deposit, (including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of completion of the assessment) that exceeds the costs the CAISO, Participating TOs, and/or third parties, as applicable, have already incurred on the Interconnection Customer's behalf to perform the assessment. In the event that the Interconnection Customer withdraws its modification request prior to completion of the assessment, the Interconnection Customer shall be refunded any portion of its modification assessment deposit (including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of the Interconnection Customer's withdrawal) that exceeds the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.

The CAISO will publish aggregated cost data regarding modification assessments. The data report will be published annually and will include the types of modification requests assessed and the cost for the assessment. The data will be aggregated to a level such that individual projects cannot be identified.

6.4 Assessment Process and Timeline[15]

6.4.1 Obligation for Assessment

Each modification assessment will be performed under the direction and oversight of the CAISO, although the Participating TO or third parties engaged by the Participating TO may perform certain parts of the assessment work pursuant to agreement between the CAISO and the Participating TO as to their allocation of responsibilities.[16] During the 45 calendar

[15] See Appendix S, Section 1.3.4.2; Appendix U, Section 4.4.6; Appendix Y, Section 6.9.2.3; or Appendix DD, Section 6.7.2.3; as applicable..

[16] See Appendix U, Section 13.2, 13.3 and 13.4; Appendix Y, Appendix 4; and Appendix DD, Appendix 4; as applicable.

days, the CAISO and the Participating TO shall also determine whether a facility reassessment is required if the modification is deemed non-material. In case a facility reassessment is required to update the Interconnection Facilities or Network Upgrades for the generator that is requesting the modification, the CAISO and the Participating TO shall use reasonable efforts to complete the modification assessment within 90 calendar days. The CAISO shall notify the Interconnection Customer that the assessment will take an additional 45 calendar days. The CAISO will conduct or cause to be performed the required modification assessment and any additional assessment the CAISO determines to be reasonably necessary, and will direct the applicable Participating TO to perform portions of the assessment where the Participating TO has specific and non-transferable expertise or data and can conduct the assessment more efficiently and cost-effectively than the CAISO.

The CAISO shall use reasonable efforts to commence and complete modification assessments within 45 calendar days.[17] For any portion of an assessment performed at the direction of the CAISO by the Participating TOs or by a third party, the CAISO shall require that this work also be completed within the timelines set forth in this BPM. If an assessment cannot be completed within those timelines, the CAISO will notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

The CAISO will also coordinate with Affected System Operators under Appendix Y, Section 3.7 and GIP BPM Section 18.1; and Appendix DD, Section 14.4 and GIDAP BPM Section 12.4. However, the Interconnection Customer is responsible for contracting with any applicable Affected System for construction of Affected System Network Upgrades which are necessary to safely and reliably connect the proposed Generating Facility to the CAISO Controlled Grid. The CAISO will provide Affected System Operators with information regarding any modification that has been approved.

6.4.2 How and What to Submit

The Interconnection Customer or Participating TO should submit all modification requests to QueueManagement@caiso.com for review. The subject of this email should include the project name, queue position, and study process (i.e., serial, SGIP, C4, etc.). In addition to the modification assessment deposit, all requests should include:

- a description of the proposed changes to the Interconnection Request;
- applicable technical information and diagrams (except for changes to Appendix B milestones, all change requests should be accompanied by a complete revised Attachment A to the Interconnection Request, including both PSLF load flow and dynamic models. The load flow model should be provided in GE PSLF .epc format. The dynamic model should be provided using GE PSLF library models in .dyd format. In case the GE PSLF library does not contain the model for the technology of the

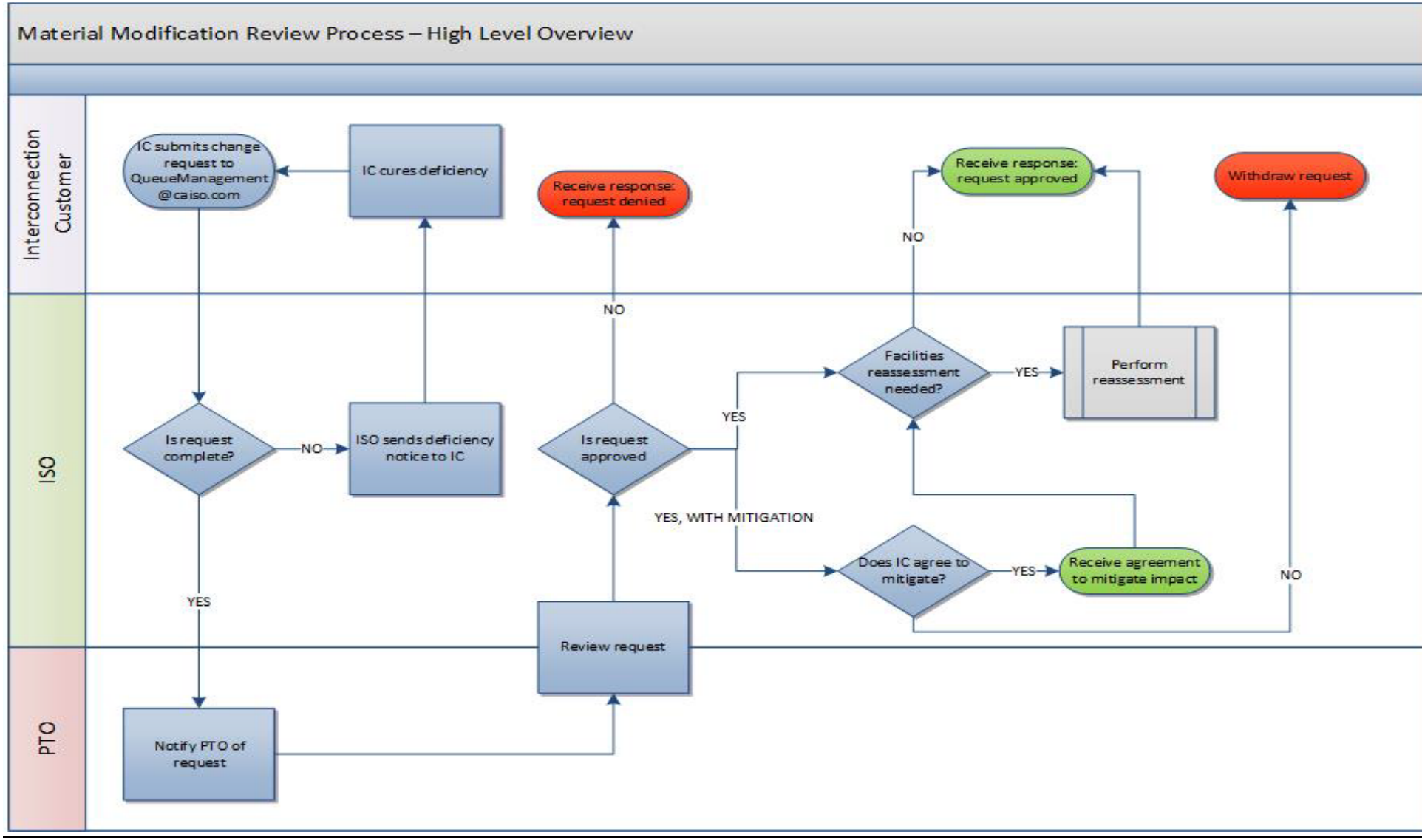
[17] See Appendix S, Section 1.3.4.2; Appendix U, Section 4.4.6; Appendix Y, Section 6.9.2.3; Appendix DD, Section 6.7.2.3 and this BPM Section 6.4.

Generating Facility, a user written *.p EPCL file should be submitted. Because of a limitation on the number of user-defined models that can be used, it is recommended that the best available WECC-approved dynamics model be used);

- proposed updates to the project milestones;
- a description of project status including the reason for the requested change (the description of the reason for the change is the starting point for the CAISO business assessment described in Section 6.4.6 of this BPM); and
- changes after the allowable time in queue must be accompanied by evidence that the Generating Facility meets the commercial viability criteria described in Section 6.1.4.1 of this BPM, including the following:
    - Proof that necessary governmental permits or authorizations have been applied for
    - A copy of the Power Purchase Agreement(s) (PPA) and evidence of its regulatory approval. The CAISO will review the PPA(s) to confirm the PPA(s) align with the Point of Interconnection, MW capacity, fuel type and technology, and site location listed in the GIA. Please see Section 6.5.2.3 of this BPM for more details on aligning the PPA COD with the COD in the Generator Interconnection Agreement (GIA). The Interconnection Customer may be asked to clarify differences between the PPA(s) and GIA, should they exist, and an MMA may be required to reconcile any date differences.
    - Proof of site exclusivity for 100% of the property necessary to construct

6.4.3 High-level Overview of Assessment Process

A graphical representation of the review process is presented on the next page.


Material Modification Review Process – High Level Overview
Interconnection Customer
ISO
PTO
IC submits change request to QueueManagement @caiso.com
IC cures deficiency
Receive response: request denied
Receive response: request approved
Withdraw request
NO
NO
Facilities reassessment needed?
YES
Perform reassessment
Is request complete?
NO
ISO sends deficiency notice to IC
Is request approved
YES
YES, WITH MITIGATION
Does IC agree to mitigate?
YES
Receive agreement to mitigate impact
NO
YES
Review request
Notify PTO of request

6.4.4 Timeline

The modification assessment will not commence until a completed modification request (including all of the necessary technical documents) has been deemed valid and data complete by the CAISO and the Interconnection Customer's modification assessment deposit have been received. Each modification assessment will be completed, and a response will be provided to the Interconnection Customer in writing, within 45 calendar days after the CAISO receives a completed modification request and modification assessment deposit, unless the modification request is submitted during the Reassessment process, the Phase I or Phase II study or any other exception provided for under the Tariff (see BPM Section 6.1.1 above). If the modification request results in a change to the Interconnection Facilities or Network Upgrades, the modification assessment could take up to ninety (90) calendar days. If the modification assessment cannot be completed within that time period, the CAISO shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

6.4.5 Engineering Analysis

In the event that the Interconnection Customer or the Participating TO was not copied on the modification request, the CAISO will forward the request to the appropriate party. The CAISO will work in coordination with the Participating TO for modifications requested by the Interconnection Customer. For modifications requested by the Participating TO, the CAISO will coordinate with the impacted Interconnection Customer(s).

6.4.6 Business Assessment

For modification requests from Interconnection Customers or the Participating TO, the CAISO will perform a business assessment of the project. The purpose of the business assessment is to:

- ensure compliance with applicable CAISO Tariff provisions;
- ensure compliance with the executed IA or study results, as applicable;
- verify whether substantially similar modification requests have been received previously and ensure that, where appropriate given the nature of the modification request and consistent with applicable CAISO Tariff provisions, the modification is treated comparably to previous modification requests; and
- consider the length of time the project has been in the queue. [18]

[18] See Appendix U, Section 3.5.1; Appendix Y, Section 3.5.1.4; Appendix DD, Section 3.5.1.4; as applicable.

Consistent with these principles, the CAISO will consider each modification request review on its own merits.

6.4.7 Facilities Reassessment

If any requested non-material modification after the Phase II Interconnection Study Report would change the scope, schedule, or cost of the Interconnection Facilities or Network Upgrades, the CAISO, in coordination with the Participating TO(s), will perform a facilities reassessment. The reassessment includes necessary technical and engineering analyses to determine the scopes of the Interconnection Facilities or Network Upgrades. The cost and duration of the updated facility scopes are estimated with the same approach as in the Phase II Interconnection Study. Potential adjustments to the maximum cost responsibility and current cost responsibility for Network Upgrades for the Interconnection Customer shall be made if additional Network Upgrades are required for the modification to remain non-material.

6.4.8 Results and Next Steps

The CAISO will draft a response letter to the Interconnection Customer based on the engineering analysis and the business assessment. The CAISO will coordinate with the Participating TO to address any issues and/or concerns raised by the Participating TO. A final letter will then be issued by the CAISO.

For a modification request received from a Participating TO, based on the assessment, the CAISO will coordinate with the impacted Interconnection Customer to address any issues and/or concerns raised by the Interconnection Customer. A final letter will then be issued by the CAISO.

The CAISO will issue a letter stating that the modification request is either approved, approved with mitigation, or denied:

6.4.8.1 Approved

A modification request that is determined not to be a request for Material Modification is considered approved when the CAISO issues a final letter approving it. The letter acts as an amendment to the GIA until the approved modification can be incorporated into the GIA by amending its terms.

6.4.8.2 Approved with Mitigation

A modification request that is approved under specific conditions outlined in the CAISO response to the Interconnection Customer is approved with mitigation. The Interconnection Customer must explicitly agree to the mitigation for the request to be considered final and approved. If the Interconnection Customer does not provide its concurrence within the timeframe specified in the letter, the requested modification will deemed to be denied.

6.4.8.3 Denied

A modification request that is determined to be a Material Modification or otherwise not permitted under the Tariff will be denied. If the Interconnection Customer nevertheless informs the CAISO that it intends to implement the change, then the Interconnection Request must be withdrawn. The Interconnection Customer may re-submit the modified Interconnection Request as a wholly new and separate request in a subsequent Queue Cluster or if it qualifies, under one of the other study tracks (Independent Study Process or Fast Track Process).

6.5 Types of Modifications

6.5.1 Point of Interconnection (POI)

During the course of the Interconnection Studies, the Interconnection Customer, Participating TO or the CAISO may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection. To the extent the identified changes are acceptable to the applicable Participating TO(s), the CAISO and the Interconnection Customer, such acceptances not to be unreasonably withheld, the CAISO shall modify the POI.

As noted in Section 6.1.2 above, after completion of the study process, the CAISO will review POI change requests through the modification assessment process. However, the engineering scope of these reviews is limited, and if the CAISO and Participating TO cannot conclusively determine that the proposed POI change improves the costs and benefits without a re-study, the CAISO cannot approve the POI change. In other words, in order to approve the POI change the improved costs and benefits must be obvious to the Interconnection Customer, the Participating TO, and the CAISO without a re-study.

6.5.2 COD Changes

6.5.2.1 Time in Queue

As noted in Section 6.1.4, projects studied in the *serial* study process, the In-Service Date shall not exceed ten (10) years from the date the Interconnection Request is received by the CAISO and projects studied in the *cluster* study process the COD shall not exceed seven (7) years from the date the Interconnection Request is received by the CAISO.

Interconnection Customers requesting to remain in the queue beyond the allowable time in queue must clearly demonstrate that engineering, permitting, and construction will take longer than the applicable maximum period and that circumstances that caused the delay were beyond the control of the Interconnection Customer. In addition, the Interconnection Customer must demonstrate how the requested COD is achievable in light of any engineering, permitting and/or construction impediments. The CAISO and Participating TO will not unreasonably withhold agreement to this extension, but the Interconnection

Customer must provide sufficient documentation to support the request in its modification request.

Additionally, Interconnection Customers requesting COD extensions beyond the allowable time in queue for projects with FCDS or PCDS must demonstrate that the Generating Facility meets the commercial viability criteria as described in Section 6.1.4 of this BPM.

If the Interconnection Customer fails to meet all of the commercial viability criteria but informs the CAISO that it intends to proceed with the modification and does not qualify for the limited exemptions described in Section 6.1.4 of this BPM, the Generating Facility's Deliverability Status will become Energy-Only Deliverability Status for both on-peak and off-peak. In order to ensure that Generating Facilities maintain the level of commercial viability upon which the modification was conditioned, the CAISO will perform an annual review of the Generating Facility's commercial viability during the TP Deliverability allocation process. This is described in further detail in Section 6.1.4 of this BPM.

6.5.2.2 Serial Projects and the Need for Restudy

Some Interconnection Studies performed under CAISO Tariff Appendix U ("serial projects") were completed prior to implementation of the CAISO distinction between RNUs and DNUs. Thus, serial projects seeking any modifications that fail to meet commercial viability criteria may also be required to undergo re-studies in accordance with Sections 7.6 and/or 8.5 of Appendix U of the CAISO Tariff to determine what Network Upgrades and corresponding GIA amendments will be required to interconnect their proposed Generating Facility as Energy-Only. In that situation:

- Such projects will be allowed to adjust the requested milestone dates in the COD extension request to account for the time to perform such studies; and
- Network Upgrades identified as DNUs in such re-studies, and the associated cost responsibility, will be removed from the GIAs of such serial projects.

6.5.2.3 COD Alignment with PPA(s)

An Interconnection Customer with an executed GIA and an executed, regulator-approved PPA(s) may request to ~~automatically~~ extend the GIA COD, ~~i~~In-S~~s~~ervice, or other GIA milestones to align with the PPA(s) for that Generating Facility, including any extension or amendment to the PPA(s). For projects requesting only a COD or other milestone adjustments (without technology or gen-tie change requests), the project may proceed with a Permissible Technological Advancement request ~~following in accordance~~consistent with Section 6.6 of this BPM.

Interconnection Customers requesting alignment of the PPA and GIA must (1) provide a copy of the PPA(s) and evidence of regulatory approval, and (2) confirm the PPA(s) standing in the annual TP Deliverability affidavit process described above. Requests to align the COD with PPA(s) are not exempt from the commercial viability criteria provisions where the Generating Facility COD would extend beyond 7 or 10 years from the Interconnection Request submission date, as applicable.

~~Please note COD alignment with PPA(s) change CODs only; requests to move in service date or other GIA milestones will require an MMA.~~

For PPAs to modify the COD in a GIA, the PPA must have the following in common with the proposed Generating Facility in the GIA:

- the Point of Interconnection;
- MW capacity (allowing differences in utility defined project size before transformation and line losses);
- fuel type and technology; and
- site location.

The PPA-to-GIA relationship may be many-to-one. However, a PPA cannot be used to support deliverability for more than the capacity specified in the PPA. For example, a 40 MW PPA:

- Can be used to support: (1) COD extensions for a 20 MW Cluster 4 project and a 20 MW Cluster 9 project; or (2) a COD extension for a 20 MW Cluster 4 project and a deliverability allocation for a new 20 MW project in the GIDAP deliverability allocation process; but
- Cannot be used to support: (1) COD extensions for both a 40 MW Cluster 4 project and a 40 MW Cluster 9 project; or (2) a COD extension for a 40 MW Cluster 4 project and a deliverability allocation for a new 40 MW project in the GIDAP deliverability allocation process.

The Interconnection Customer may be asked to clarify any differences between the PPA and the GIA. Modifications to one or both contracts may be required to reconcile any differences.

6.5.2.4 COD Extensions as They Relate to Financial Obligations

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

The CAISO will not permit a COD extension as a vehicle for delaying security postings or other milestones.

6.5.2.5 COD Extensions for Interconnection Requests in the Independent Study Process

Extensions of the COD for Interconnection Requests under the Independent Study Process will not be granted except for circumstances beyond the control of the Interconnection Customer. The reason for this is that the relatively near term COD was an underpinning qualification for the Interconnection Customer to use this shortened process in the first place. Note also the timing of Deliverability Delivery Upgrades does not qualify as a reason

for an extension in the COD. Deliverability Delivery Upgrades are not considered, since the Independent Study Process is initially for an Energy-Only Deliverability Status interconnection. Any deliverability study analysis (if requested) would be done in the next available cluster study. The generator would need to go on-line as energy-only by the requested COD. This is consistent with Section 6.3.6 of the BPM for Generator Interconnection Deliverability and Allocation Procedure (GIDAP), and Section 4.7 of Appendix DD of the CAISO Tariff.

6.5.2.6 Phased Implementation for Market Participation

The CAISO has created a block testing and implementation pre-commercial process during Trial Operation for Generating Facilities. The process provides the ability to declare Commercial Operation for Markets ("COM") in advance of the Generating Facility's COD (or COD for a generation-project phase) and gives Interconnection Customers the opportunity to bid into the CAISO markets, provide Resource Adequacy ("RA") capacity, and obtain PIR certification for a designated portion ("block") of their Generating Facility. Section 7 of this BPM provides a more detailed description of the process for requesting block testing and implementation.

6.5.2.7 COD Accelerations

The CAISO and Participating TO review requests for COD acceleration in the same way that COD delays are reviewed, but with an increased focus on the construction schedule for Network Upgrades and Interconnection Facilities. If the construction schedule for Network Upgrades or Interconnection Facilities to support the proposed COD acceleration is not achievable, the Interconnection Customer will not be permitted to accelerate its COD. Additionally, if the CAISO and Participating TO do not have sufficient information to make a determination within the modification review process that the proposed COD acceleration would not constitute a material modification, and the proposed accelerated COD is not within 6 months of the approved COD, the Interconnection Customer will not be permitted to accelerate its COD. Alternatively, the Interconnection Customer can request and fund a Limited Operation Study in accordance with Article 5.9 of the GIA.

6.5.3 Changes to the Fuel Type of the Proposed Project

Generally, a change in the project's fuel type absent a reduction in total MW capacity cannot be evaluated without a re-study, because the energy output profile of various fuel-types is different. In the deliverability study performed by the CAISO, the CAISO establishes an on-peak exceedance factor for each resource type as discussed in the table below. As outlined in Section 6.1.3 of this BPM, where the CAISO has granted modifications after the conclusion of an Interconnection Customer's Phase II Interconnection Study phase, the CAISO must be able to evaluate the change and find it acceptable without the need to undertake a re-study (Phase I and Phase II) in order to approve it as non-material.

As detailed in Section 6.1.4 of this BPM, fuel type changes are prohibited after a project has exceeded the allowable time in queue with the exceptions for *de minimis* changes and energy storage additions. The CAISO will consider a change in fuel type before the allowable

time in queue has been exceeded if the Interconnection Customer is willing to retain the maximum deliverability allowed by the deliverability transfer as described in Section 6.5.4.

6.5.4 Deliverability Transfer

Deliverability for Resource Adequacy purposes may not be assigned or otherwise transferred except as expressly provided by the CAISO Tariff. An Interconnection Customer may reallocate its Generating Facility's Deliverability among its own Generating Units or Resource IDs at the Generating Facility. The Generating Units must be located at the same Point of Interconnection. The Generating Facility's aggregate output as evaluated in the Deliverability Assessment cannot increase as the result of any transfer, but may decrease based on the assignee's Generating Unit characteristics and capacity. The CAISO will inform the Interconnection Customer of each Generating Unit's Deliverability Status and associated capacity as the result of any transfer. The results will be based on the current Deliverability Assessment methodology.

Deliverability transfer may be requrested through a deliverability transfer request, as part of a modification request, or as a part of a repowering request. For example, an Interconnection Customer could request that deliverability be transferred from the original solar photovoltaic Generating Facility to an energy storage Generating Facility when requesting modification to add energy storage component to the solar PV generation project. Alternatively, the Interconnection Customer could first request a modification to add an energy storage Generating Facility, and request a deliverability transfer after the approval of the modification.

6.5.4.1 Deliverability Transfer Methodology

The principle of a deliverability transfer is that the transfer results in the same or lower maximum output tested in the on-peak deliverability assessment, based on the methodology effective at the time of the transfer request evaluation. The study amount of the transfer-from Generating Facility is equal or higher than the total study amount of the FCDS or PCDS Generating Facilities after the transfer in each scenario evaluated in the on-peak deliverability assessment.

Below are examples illustrating the deliverability transfer. Table 6.1 provides the study amount used in the examples. These are for illustration purposes only and do not represent the actual study amount in the deliverability assessment methodology because the actual amounts vary among different study areas and could change. For actual study amounts of Generating Facilities in different areas, please refer to the deliverability assessment methodology. As shown in Table 6.1, the on-peak deliverability assessment evaluates deliverability under multiple scenarios (Scenario 1 and Scenario 2 for illustration purposes) with different generation output assumptions. A Generating Facility must pass the deliverability test in both scenarios to be deliverable.

Table 6.1: Deliverability Assessment Study Amount Assumptions

	Scenario 1	Scenario 2
Wind	60% of Pmax*	15% of Pmax
Solar	10 % of Pmax	50% of Pmax
Energy Storage	Pmax	Pmax
Other (gas, hydro, etc.)	Pmax	Pmax

* Pmax is the maximum net output to the grid of the Generating Facility at the Point of Interconnection.

Table 6.2: Examples of Deliverability Transfer

Example 1: Full transfer from solar to battery		
Transfer From	100 MW Solar	
	Scenario 1	Scenario 2
Study Amount of Transfer-From	10	50
Transfer To	100 MW Battery	
Deliverability Supported by the Study Amount[19]	10	50
Transfer-To Deliverability[20]	10 MW of PCDS[21]	
Example 2: Full transfer from battery to solar		
Transfer From	100 MW Battery	
	Scenario 1	Scenario 2
Study Amount of Transfer-From	100	100
Transfer To	100 MW Solar	
Deliverability Supported by the Study Amount	100	200
Deliverability Limited by MW at POI	100	100
Transfer-To Deliverability	100% FCDS	
Example 3: Transfer from solar to solar & battery hybrid		
Transfer From	100 MW Solar	
	Scenario 1	Scenario 2
Study Amount of Transfer-From	10	50
Transfer To	100 MW Solar plus 100 MW battery with total MW limited at POI to 100 MW	
Deliverability Supported by the Study Amount	10	50
Transfer-To Deliverability	10 MW of PCDS	
Example 4: Full transfer from solar to wind		
Transfer From	100 MW Solar	
	Scenario 1	Scenario 2
Study Amount of Transfer-From	10	50
Transfer To	100 MW Wind	
Deliverability Supported by the Study Amount	16.67	333.33
Deliverability Limited by MW at POI	16.67	100
Transfer-To Deliverability	16.67% PCDS	

[19] The Deliverability Supported by the Study Amount equals the study amount divided by the study amount assumptions for the "transfer to" technology.

[20] The Transfer to Deliverability amount is the smaller of the Deliverability Supported by the Study Amount of the various scenarios.

[21] PCDS of a non-intermittent resource is in MW. PCDS of an intermittent resource is in %.

Example 5: Full transfer from wind to solar		
Transfer From	100 MW Wind	
	Scenario 1	Scenario 2
Study Amount of Transfer-From	60	15
Transfer To	100 MW Solar	
Deliverability Supported by the Study Amount	600	30
Deliverability Limited by MW at POI	100	30
Transfer-To Deliverability	30% PCDS	

6.5.4.2 Deliverability Transfer Implementation Process

After a deliverability transfer is approved through the MMA process, the Net Qualifying Capacity ("NQC") is transferred between the Generating Facilities accordingly.

If the deliverability is transferred from one resource to another with a different Resource ID(s), the CAISO allows the first resource(s) achieving commercial operation earlier to acquire the entire deliverability of both resources, before the remaining resource achieves commercial operation, *i.e.*, the NQC transfer occurs when the last Resource ID achieves COD. Since the CAISO does not allow for NQC reduction during the year, Interconnection Customers' transfer results may not be apparent for some time. Interconnection Customers should consider this when transferring deliverability. The Generator or Scheduling Coordinator, as applicable, shall follow the procedure below to request an NQC transfer between resources with different CODs.

If one resource is already operational and shown in the NQC listing, the Generator or Scheduling Coordinator, as applicable, may choose to transfer NQC in the year-ahead NQC process or during the year for the other resources. If none of the resources involved in the transfer are operational in August when the year-ahead NQC list is being processed, the Generator or Scheduling Coordinator, as applicable, could only use the during-the-year process.

For year-ahead requests, (if one resource is already operational and in CIRA), during the annual NQC comment period immediately after the publication of the DRAFT NQC for the next Resource Adequacy ("RA") year, the Generator or Scheduling Coordinator, as applicable, would notify the CAISO when the new resource is expected to achieve COD during the annual NQC comment period immediately after the publication of the DRAFT NQC for the next Resource Adequacy ("RA") year when the new resource is expected to achieve COD. The Generator or Scheduling Coordinator, as applicable, can request the CAISO to transfer the deliverability from the operational resource to the new resource starting in a specific month (the transfer start month). The CAISO will show pre-transfer NQC for the month before the transfer start month and post-transfer NQC from the transfer start month to December. When the new resource achieves COD, the Generator or Scheduling Coordinator, as applicable, can request NQC for the new resource and get the full transferred value for the new resource starting in the latter of the transfer start month

and the actual COD month of the new resource. If the new resource COD gets delayed, the Scheduling Coordinator for the resource can request through CIRA an increase in NQC for the already operational resource for the respective months of delay.

During-the-year request:

a) With one resource already operational and in CIRA: if the Generator or Scheduling Coordinator, as applicable, does not want to provide the year-ahead notification described above and the operational resource already received full NQC year-ahead, the Generator or Scheduling Coordinator, as applicable, would request NQC upon the new resource's COD, and the CAISO will approve the NQC for the new resource as the remainder of the combined deliverability.

b) Without any resource being operational or in CIRA: the resource's Scheduling Coordinator must request the CAISO to transfer the deliverability from one resource to the other (for example, solar resource to BESS) starting in a specific month (the transfer start month) when the first Resource ID becomes COD or COM. The CAISO will show pre-transfer NQC for the month before the transfer start month and post-transfer NQC from the transfer start month to December. When the second resource achieves COD, the Generator or Scheduling Coordinator, as applicable, can request NQC for the second resource starting in the latter of the transfer start month and the actual COD month of the second resource. If the second resource COD is delayed, the Scheduling Coordinator for the resource can request through CIRA an increase in NQC for the first (already operational) resource for the respective months of delay. Otherwise, the request will be treated like (a) above.

6.5.5 Project Technology Changes

6.5.5.1 Inverter Changes

Changes that do not qualify under Section 6.2.1.5 of this BPM must be reviewed in the MMA process.

As part of the MMA process, the CAISO will consider inverter changes that would result in a capacity increase greater than the project net capacity listed in the Interconnection Customer's interconnection request subject to the limits set forth below. The CAISO will approve such inverter changes only where the Interconnection Customer either (a) installs an automatic generator tripping scheme, or (b) provides specific design information regarding a mechanism that the Generating Facility's controller will use, to ensure that the total output of the Generating Facility never exceeds the project's net capacity before the inverter changes.

At no time may the Generating Facility's inverter configuration increase the project's net capacity by more than the greater of:

- ten percent (10%); or

- three (3) MW

For example:

Generating Facility net-to-grid MW	Proposed Configuration	Resulting Increase	Outcome
10 MW	12 inverters @ 1 MW each	+2 MW	Approved, less than 3 MW
10 MW	9 inverters @ 1.5 MW each	+3.5 MW	Denied, greater than 3 MW and 10%
200 MW	100 MW @ 2.2 MW	+20 MW	Approved, not greater than 10%

After the new inverter configuration is approved, the Interconnection Customer will provide the CAISO with the detailed specifications on limiting the Generating Facility's capacity to its approved net capacity. Once the CAISO has approved the specifications to limit the Generating Facility's capacity, the Interconnection Customer must install this approved control mechanism before the additional inverters are energized for testing.

In addition, the CAISO will review the inverters' voltage and frequency ride-through capabilities in order to accomplish the following reliability objectives:

- Eliminating unnecessary momentary cessation for inverters during the clearing of a transmission line fault;
- Eliminating inverter tripping for momentary losses of synchronism; and
- Requiring coordination of the central plant controller with the individual inverter control systems to facilitate reconnection of the inverters following a fault on the transmission system.

The CAISO and the Participating TO will review the Interconnection Customer's submitted Inverter Data Information Sheet, a complete revised Attachment A to the Interconnection Request, dynamic model, PSLF load flow model, and the revised single-line and three-line diagrams to ensure that inverters meet the following ride-through criteria:

1) The project remains online for the voltage disturbance caused by any fault on the transmission grid having a duration of less than the normal three-phase fault clearing time (4-9 cycles) or one-hundred fifty (150) milliseconds;
2) The project remains online for any voltage disturbance caused by a single-phase fault on the transmission grid with delayed clearing; and
3) The project eliminates momentary cessation during transient low-voltage conditions on the transmission grid.

6.5.5.2 Equipment and Transformer Changes

The CAISO will consider changes to project equipment and transformers to be non-material if the new equipment is substantially similar and does not cause significant electrical changes, including changes to short circuit duty or reactive support.

6.5.6 Changes to Gen-Tie Path

Changes to the gen-tie path are acceptable to the extent that there are no significant electrical changes or a POI change, and the change does not adversely impact other generation projects. For example, the CAISO will consider site location changes that might impact the length of the gen-tie.

Changes to incorporate a shared Gen-Tie path between two or more facilities require separate requests and deposits for each facility, unless the projects are the subject of one executed GIA. Separate MMAs for each Interconnection Request are required regardless of whether the Interconnection Requests are owned by the same parent company.

6.5.7 Site Location

The CAISO and Participating TO will consider changes to the location of a proposed generating facility to the extent that the location change does not change the POI and will not cause other facets of the project to change that would require a re-study of the project.

6.5.8 Changes to Point of Change of Ownership Location

The CAISO and Participating TO will consider changes to the point of change in ownership (POCO) of a proposed generating facility to the extent that the location change does not change the POI and will not cause other facets of the project to change that would require a re-study of the project.

6.5.9 Decreases in Electrical Output (MW) of the Proposed Project[22]

6.5.9.1 Between Phase 1 and Phase 2 Interconnection Studies

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 the CAISO Tariff,[23] 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 Network

[22] See Appendix U, Section 4.4.1 or 4.4.2; Appendix Y, Section 6.9.2.2; GIP BPM Section 9.3.1; Appendix DD, Section 6.7.2.2 or 6.7.3; GIDAP BPM Section 7.3.1; as applicable.

[23] See Appendix Y, Section 6.9.3; GIP BPM, Section 9.3.3; or Appendix DD, Section 7; GIDAP BPM Section 7.3.2; as applicable.

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 Network Upgrades identified in the Phase I Interconnection Study are no longer needed, then, solely for purposes of calculating the amount of the Interconnection Customer's initial Financial Security posting under GIP Section 9.2, such 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 GIP Section 9.2. 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 Section 6.5.8.1 of this BPM 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.

6.5.9.2 Annual Generator Downsizing Process[24]

The CAISO has established an annual Generator Downsizing Process for Interconnection Customers requesting reduction in Generating Facility capacity above the de minimus thresholds described above. The details and timeline for that process contained in the BPM for Generator Interconnection and Deliverability Allocation Procedures (GIDAP), Section 6.2.6.3.

6.5.10 Energy Storage Capacity Conversions or Additions

Interconnection Customers may request to ~~incorporate~~add or convert projeict's technology to energy storage into an Interconnection Request in the queue. The request will be reviewed through the MMA process outlined in Section 6.4 of this BPM. These requests will either be (option 1) to replace ~~a portion~~up to 100% of an Interconnection Request with energy storage or (option 2) to add energy storage to an existing Interconnection Request.

Option 1 – ~~partial~~ MW capacity conversion

Interconnection Customers may request to replace a portion or all ~~up to 100%~~ of the requested MW interconnection capacity in their Interconnection Request with energy storage ~~but *not entirely replace* the Interconnection Request with energy storage~~. ~~While there is no bright-line test to determine how much capacity may be r~~Replaci~~nged~~ existing capacity with storage is allowed provided ~~without substantially changing~~ the electrical characteristics of the Generating Facility are substantially unchanged~~, whole replacement would~~ may ~~constitute such a change~~. Likewise, at any point in evaluating a fuel-type change, the CAISO may determine that the change is material such that it must

[24] See Appendix DD, Section 7.5 and the BPM for Generator Interconnection and Deliverability Allocation Procedures.

come in the form of a new Interconnection Request. The criteria the CAISO uses to evaluate such changes are specified in Section 12.2 of this BPM.

Requests cannot alter the approved Interconnection Request capacity at the POI. If the modification request will be to completely replace the Interconnection Request with energy storage, then the appropriate process is to withdraw the existing request and submit a new Interconnection Request in a subsequent Queue Cluster unless it qualifies, under Independent Study Process (ISP) or Fast Track Process.

Option 2 – energy storage capacity addition

Interconnection Customers may request to add energy storage to an Interconnection Request, but the energy storage addition may neither alter the approved Interconnection Request capacity at the POI nor substantially change the electrical characteristics of the Generating Facility, as described in Option 1. The Interconnection Customer must install an automatic generator tripping scheme sufficient to ensure that the total output of the Generating Facility, including the energy storage addition, does not at any time exceed the Interconnection Request maximum interconnection capacity at the POI. The CAISO will have the authority to trip the generating equipment subject to the automatic generator tripping scheme or take any other actions necessary to limit the output of the Generating Facility so that the total output of the Generating Facility does not exceed the approved Interconnection Request capacity at the POI.

The CAISO recognizes that the design of energy storage projects will be varied, and provides the following information on what is acceptable within the scope of the MMA process.

6.5.10.1 Metering

The energy storage portion of the project must meet the current metering and direct telemetry requirements in accordance with the BPM for Metering and the BPM for Direct Telemetry. The energy storage portion of the project must have the proper metering and telemetry to allow the CAISO to model and forecast the non-energy storage portion of the project versus the energy storage portion of the project.

6.5.10.2 Effect on Project Milestones

Approved MMA requests to add or convert to energy storage to a project are not a de-facto extension to project milestones. If desired, the Interconnection Customer may request an MMA to extend the project's COD or other dates as applicable, ~~(i.e. for~~ including those projects that received a~~n~~ deliverability allocation in Group 3, ~~proceeding with out at PPA)~~. The decision to add energy storage to an existing project is considered a choice that is solely the election of the Interconnection Customer. Any engineering, permitting and construction delays that may arise as a result of this elective change will not be considered "beyond the control of the Interconnection Customer" as such determination relates to Time in Queue (Section 6.5.2.1 of this BPM).

6.5.11 Transfer of Surplus Interconnection Service

Interconnection Customers may request to transfer Surplus Interconnection Service (SISVC) to a new Interconnection Customer. To be eligible to use the modification assessment process, the SISVC must be at the same POI and the electrical characteristics must be substantially unchanged. Otherwise the new Interconnection Customer will need to submit an Interconnection Request using the Independent Study Process. In any case, Interconnection Customers may be subject to additional control technologies, as well as testing and validation of those technologies consistent with Article 6 of the LGIA and Article 2 of the SGIA.[25] The necessary control technologies and protection systems as well as any potential penalties for exceeding the level of SISVC established in the executed, or requested to be filed unexecuted, GIA.

The transfer amount of Deliverability may not exceed the transfer amount of SISVC. In addition, the transfer amount of SISVC is not a basis to increase the Net Qualifying Capacity of the original Intrconnection Customer's Generating Facility combined with the new Intrconnection Customer's Generating Facility. In other words, the pre-existing NQC at the POI will not increase after the SISVC transfer.

6.5.11.1 Process

Both Interconnection Customers proposing to transfer and receive the SISVC are required to submit a modification assessment request. The original Interconnection Customer proposing to transfer SISVC must include the Interconnection Service Capacity amount and the Deliverability status of such capacity that it wishes to transfer. The transfer amount of Deliverability may not exceed the transfer amount of SISVC, regardless of technology. The modification assessment request will first be assessed to determine if the transfer is not a Material Modification. The costs for this portion of the modification assessment will be equally split between the two Interconnection Customers, unless either Interconnection Customer agrees to bear all costs.

If the transfer is determined not to be material, the new Interconnection Customer will be required to have a separate resource ID, meter, and telemetry for their project and potentially different controls. This would then change the scope, schedule, or costs for the new project. Therefore, pursuant to Section 6.4.7 of this BPM, the CAISO and Participating TO will need to perform a facilities reassessment. Any costs incurred for the facilities reassessment will be included as part of the costs for the MMA for the new Interconnection Customer.

Once all of the information is known and approved, the original Interconnection Customer's Appendix C of their LGIA or Attachment 2 of their SGIA will be amended to show the transfer in SISVC. The new Interconnection Customer will be required to execute a three-party GIA to obtain the transferred SISVC and Deliverability status, if applicable.

[25] Article 6 of the LGIA and Article 2 of the SGIA provide that pre-COD, the Participating TO will test the Interconnection Facilities to ensure safe and reliable operation. If the project is post-COD, then the Interconnection Customer has the obligation to test its facilities and equipment. In addition, any party to the LGIA has the right to observe and inspect the equipment. If the transfer of SISVC requires additional control technology and protection systems then the such testing and inspection will be required.

6.5.11.2 RNU Reimbursement

If additional RNUs are required, the reimbursement of such RNUs is limited to the original Interconnection Customer's constructed generating facility cost cap. As an example, if the original Interconnection Customer built a 100 MW generating facility, the reimbursement cap for reliability network upgrades would be $6 million. If the original Interconnection Customer spent $5.5 million on the original RNUs, the new Interconnection Customer, regardless of the transferred SISVC would only be eligible to receive up to $500,000 for any additional RNUs, regardless of the new Interconnection Customer's generating capacity. This effectively caps reimbursement to the original Interconnection Request.

6.5.11.3 Deliverability and interconnection serice Retention

If the original Interconnection Customer transfers some or all of its Deliverability to the new Interconnection Customer, and the original Interconnection Customer notifies the CAISO that its generating facility is permanently retiring, the new Interconnection Customer will be converted to Energy Only immediately when the original Generating Facility retires. Likewise, if the original Interconnection Customer's Generating Facility cannot operate for three years without actively reconstructing consistent with the requirements of Section 6.1.3.4 of the BPM for Reliability Requirement, the CAISO will convert the new Interconnection Customer's Generating Facility to Energy Only as well, proceed to terminate the interconnection agreement, and remove the generating facility from the CAISO's base case.

Importantly, at any point, the new Interconnection Customer may seek its own Deliverability allocation under the CAISO's existing procedures for online, Energy Only generating units to receive available Deliverability. If the new Interconnection Customer receives its own deliverability allocation, it will exist completely independent of the original Interconnection Customer's Deliverability and will not be converted to Energy Only due to the retirement or inoperability of the original Interconnection Customer.

6.5.11.4 Impact of Retirement on SISVC

The new Interconnection Customer's SICVC will survive the retirement of the original Interconnection Customer's Generating Facility. However, the deliverablity will be treated in accordance with Section 6.5.11.3 of this BPM.

6.6 Permissible Technological Advancements

6.6.1 Permissible Technological Advancements Overview

Interconnection Customers may submit requests for Permissible Technological Advancements. The CAISO in coordination with the Participating TO(s) willwill evaluate if the technological advancement is permissible. If CAISO and Participating TO(s) determine the technological advancement is not permissible under this process, then Interconnection Customer may submit the requested change through the modification assessment process.

6.6.2 Scope of Permissible Technological Advancements

The following, without exclusion, constitute Permissible Technological Advancements:

- removing equipment;
- aligning the Commercial Operation Date with an executed power purchase agreement~~;~~, including projects that received a deliverability allocation in Group 3 ~~(proceeding without a PPA),~~ that have subsequently executed a PPA and are seeking to align their COD with their PPA;
- adding less than 5 MW of energy storage once without increasing the net output at the Point of Interconnection; and
- other changes that have little or no potential to affect other Interconnection Customers or Affected Systems, do not require a new Interconnection Request, or otherwise require a re-study or evaluation.

The CAISO plans to update this list as additional criteria is requested that are continually accepted as Permissable Technological Advancements.

6.6.3 Permissable Technological Advancement Fee

The Interconnection Customer must include the technological advancement assessment fee at the time of the request. The CAISO will not commence an assessment without the deposit. The Interconnection Customer must specify the purpose of the funds within twenty (20) days of submittal. After twenty (20) days without notice, the CAISO will contact the bank to return funds to the Interconnection Customer.

The technological advancement assessment fee is $2,500. The technological advancement assessment fee will be split equally between the CAISO and Participating TO(s). The assessment fee is applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties working at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the technological advancement assessment and to meet and otherwise communicate with Interconnection Customers with respect to their projects.

6.6.4 Permissable Technological Advancement Process and Timeline

Each technological advancement assessment will be performed under the direction of the CAISO. The Participating TO or third parties engaged by the Participating TO may perform certain parts of the assessment work pursuant to agreement between the CAISO and the Participating TO as to their allocation of responsibilities.[26] The CAISO will conduct or cause to be performed the required technological advancement assessment, and will direct the

[26] See Appendix U, Section 13.2, 13.3 and 13.4; Appendix Y, Appendix 4; and Appendix DD, Appendix 4; as applicable.

applicable Participating TO to perform portions of the assessment where the Participating TO has specific and non-transferable expertise or data and can conduct the assessment more efficiently and cost-effectively than the CAISO.

The CAISO shall complete the assessments within thirty (30) calendar days.[27] For any portion of an assessment performed at the direction of the CAISO by the Participating TOs or by a third party, the CAISO shall require that this work also be completed within the timelines set forth in this BPM.

The Interconnection Customer requesting a technological advancement assessment will follow the requirements of "How and What to Submit" in Section 6.4.2 of this BPM, including stating in the subject line of the email that the Interconnection Customer is requesting a technology advancement assessment.

For a technological advancement assessment, the high-level overview in Section 6.4.3 of this BPM; the engineering analysis in Section 6.4.5 of this BPM; the business assessment in Section 6.4.6 of this BPM; and the results and next steps in Section 6.4.8 of this BPM will be used.

7. Commercial Operation for Markets

7.1 Overview

The CAISO has created a block testing and implementation process to facilitate the Trial Operation of Generating Facilities. Once the Interconnection Customer has determined that a discrete amount of MWs have completed commissioning, then that designated portion ("block") of their Generating Facility or a Phased Generating Unit can declare commercial operation for market purposes only, or Commercial Operation for Markets ("COM"). COM is defined as the status of a portion of an Electric Generating Unit that has synchronized to the CAISO controlled grid and has completed on-site test operations and commissioning that is allowed to Bid into the CAISO markets in advance of achieving COD for the entire Electric Generating Unit. COM gives Interconnection Customers the opportunity to bid in the CAISO markets, provide Resource Adequacy ("RA") MW, obtain PIR certification for that block of their Generating Facility or Phased Generating Unit, and receive market revenue. However, COM does not require the Participating TO to commence repayment of Network Upgrades. Such repayment is not required until the COD defined in the GIA has been achieved. This opportunity allows the project to continue to operate in the market with a portion of its MW capacity while also participating in Trial Operations with test energy for the Generating Facility's remaining MW capacity.

[27] See Appendix S, Section 1.3.4.2; Appendix U, Section 4.4.6; Appendix Y, Section 6.9.2.3; Appendix DD, Section 6.7.2.3 and this BPM Section 6.4.

The COM opportunity is available for both Generating Facilities with a single COD or, if the Generating Facility is a Phased Generating Facility, with one COD for multiple Phases, or different CODs per Phase. Each Phase could have the same or a different COD such that the MW capacities of the Phases add up to the total MW capacity of the entire project, as specified in the Interconnection Request.[28]

7.2 COM Process and Timeline

In order to declare COM for a block of MW, the Interconnection Customer must 1) be approved to synchronize a quantity of MWs to the CAISO controlled grid; 2) believe a block of the Generating Facility is ready for COM; and 3) execute a Block Implementation Plan which states the Interconnection Customer for the Generating Facility agrees that it will abide by the CAISO Tariff requirements for Bidding into the CAISO markets, including penalties if applicable. The CAISO's approval of the Generating Facility's synchronization and declaration of COM is contingent on the evaluation of the status of the RNUs, Participating TO Interconnection Facilities, precursor Network Upgrades, Interconnection Customer Interconnection Facilities, and GIA requirements, including coordination with Affected Systems. The purpose of the Block Implementation Plan is to clearly identify the testing schedule, PIR schedule, and maximum Bidding schedule for the Generating Facility.

The Interconnection Customer must ensure that New Resource Interconnection ("NRI") bucket pre-requisites have been met a minimum of thirty (30) calendar days prior to the first planned synchronization date of any Generating Facility capacity in order to pursue COM. Interconnection Customers that would like to pursue block implementation should submit a written request to NRI@caiso.com at least ten (10) business days prior to the COM date for the first block of capacity. A completed Block Implementation Plan must be included in the request. The process for synchronizing to the CAISO controlled grid and pursuing a block implementation through COM (including the template and guidelines for the Block Implementation Plan) is discussed in greater detail in the New Resource Implementation Guide on the CAISO website at http://www.caiso.com/Documents/NewResourceImplementationGuide.doc and CAISO Operating Procedure 5320.[29]

[28] A Phased Generating Facility is distinct from phased implementation of a Generating Facility. Regardless of whether an Interconnection Customer is proposing distinct phases or has distinct phases in its GIA, Interconnection Customers requesting to bring their Generating Facility on line in phases and use the commercial operation for market mechanism, the CAISO will work with the Interconnection

[29] Customer and the applicable Participating TO to allow phased implementation if other requirements have been met, including reliability network upgrades.

8. Limited Operation Study

In the event that a generation facility's associated RNU(s) are not reasonably expected to be In-Service prior to the COD, the Interconnection Customer can request and fund a Limited Operation Study ("LOS") in accordance with Article 5.9 of the GIA. The LOS will determine the extent to which the generating facility can generate without the RNU(s) being In-Service. The CAISO will accept requests for an LOS no earlier than 5 months prior to the Generating Facility's Initial Synchronization. If the Generating Facility is proposing to make other changes then an MMA will be required.

Interconnection Customers may request a LOS by emailing QueueManagement@caiso.com and will be responsible for the actual costs incurred for the LOS. A $10,000 study deposit is required. Upon receipt of the request, the CAISO will coordinate a discussion of the RNU(s) that are delayed among the Interconnection Customer, the Participating TO, and the CAISO to determine the correct assumptions for the study. The CAISO and Participating TO will develop a draft study plan that identifies the scope and assumptions including test schedule for the generating facility, and the schedule for the study. The study scope and assumptions will be mutually agreed upon by the Interconnection Customer, Participating TO, and CAISO prior to the start of work. The Interconnection Customer will receive invoices from the CAISO that list study expenses incurred and corresponding amounts due. The Interconnection Customer shall pay all invoices within thirty (30) calendar days.

In addition, if the testing of the generating facility is delayed due to delays in RNUs, the Interconnection Customer should notify the CAISO by emailing QueueManagement@caiso.com so that the CAISO can determine if an operating study similar to the LOS would be beneficial to establishing testing opportunities and limitations. If it is determined that an operating study would be informative, then the process described above for the LOS deposit and study plan will be used.

8.1 Use of the LOS Deposit

The CAISO deposits all LOS deposits into an interest-bearing account at a bank or financial institution designated by the CAISO. The LOS deposit is applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties working at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the LOS and to meet and otherwise communicate with Interconnection Customers with respect to their projects. The CAISO will create a separate work order number for each LOS in order to correctly track the actual costs. Each LOS will be performed under the direction and oversight of the CAISO, although the Participating TO or third parties engaged by the Participating TO may perform certain parts of the study work pursuant to agreement between the CAISO and the Participating TO as to their allocation of responsibilities. The CAISO will conduct or cause to be performed the required LOS and any additional assessment the CAISO determines to be reasonably necessary, and will direct the applicable Participating TO to perform portions of the assessment where the Participating TO has specific and non-transferable expertise or data and can conduct the study more efficiently and cost-effectively than the CAISO. The Interconnection Customer must specify the purpose of the funds within eighty (80) days of

submittal to the CAISO (e.g. restudy, MMA, ISP, LOS etc). After eighty (80) days the CAISO will contact the bank in order to return the funds to the Interconnection Customer.

The CAISO shall issue to the Interconnection Customer one or more invoices for the LOS that include a detailed and itemized accounting of each study expense incurred (including those incurred by the CAISO, the Participating TOs, and/or third parties) and corresponding amounts due, and that provide at least the same level of detail included in invoices for interconnection studies. The Participating TO and any third parties performing work on the assessment must invoice the CAISO for such work no later than seventy-five (75) calendar days after the completion of the study. The CAISO shall refund the LOS deposit any undisputed costs by the Interconnection Customer within thirty (30) calendar days of issuance of an LOS invoice. The refund will be processed in accordance with the CAISO's established business practice whereby interconnection deposit refunds are processed in batches and payments are disbursed monthly. This thirty (30) calendar day period will be tolled if the Interconnection Customer has not provided the CAISO with the appropriate documents to facilitate a refund or if the Interconnection Customer has any outstanding invoice balance due the CAISO on another project owned by the same Interconnection Customer.

Whenever the actual cost of performing the LOS exceeds the LOS deposit, the invoice will direct the Interconnection Customer to pay the excess amount, and the Interconnection Customer shall pay the undisputed amount in accordance with the invoice within thirty (30) calendar days. If the Interconnection Customer fails to timely pay the actual costs exceeding the deposit and such costs have not been disputed, the Project will no longer be considered to be in good standing by the CAISO. The CAISO is not obligated to continue to conduct the study unless and until the Interconnection Customer has paid all undisputed amounts.

The Interconnection Customer shall be refunded any portion of its LOS deposit (including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of completion of the assessment) that exceeds the costs the CAISO, Participating TOs, and/or third parties, as applicable, have already incurred on the Interconnection Customer's behalf to perform the study. In the event that the Interconnection Customer withdraws its LOS request prior to completion of the study, the Interconnection Customer shall be refunded any portion of its LOS deposit (including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of the Interconnection Customer's withdrawal) that exceeds the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.

9. Station Power Service for Generators

Station Power is the Energy used to operate auxiliary equipment and other Load that is directly related to the production of Energy and any useful thermal energy associated with the production of Energy by the Generating Unit.[30] Station Power consumption that exceeds the amount of power produced by the Generating Unit is considered an end-use load. Generating Units are allowed to net MWh values of Generating Unit output and auxiliary Load equipment electrically connected to that Generating Unit at the same point provided the Generating Unit is on-line and producing sufficient output to serve all of that auxiliary Load equipment in accordance with Section 10.1.3.1 of the CAISO Tariff as measure in five-minute intervals.

Generating Units that participate in the Station Power program are eligible to self-supply auxiliary Loads from a Station Power Portfolio and are eligible for monthly netting. Any consumption in excess of the applicable netting period is end-use consumption. Thus, all Interconnection Customers must have a retail provider to serve Station Power, including Interconnection Customers that elect to participate in the CAISO's Station Power Protocol.[31]

Interconnection Customers are required to provide verification of their retail provider of Station Power service in Bucket 3 of the New Resource Implementation ("NRI") process.[32]

If the local Utility Distribution Company or Meter Subsystem is not capable or is unwilling to provide retail service to support Station Power needs at the Generating Unit, there may be options available to Interconnection Customers. Any available options will depend on the Local Regulatory Authority that oversees retail service associated with the geographical location of Generating Unit.

If the local utility is not capable of or is unwilling to provide retail service to support your Station Power needs, please contact QueueManagement@caiso.com to explore potential options.

More information on the Station Power Protocol[33] is available at:

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[30] Station Power is a defined term under Appendix A of the CAISO Tariff: "Energy for operating electric equipment, or portions thereof, located on the Generating Unit site owned by the same entity that owns the Generating Unit, which electrical equipment is used exclusively for the production of Energy and any useful thermal energy associated with the production of Energy by the Generating Unit; and for the incidental heating, lighting, air conditioning and office equipment needs of buildings, or portions thereof, that are owned by the same entity that owns the Generating Unit; located on the Generating Unit site; and used exclusively in connection with the production of Energy and any useful thermal energy associated with the production of Energy by the Generating Unit. Station Power includes the Energy associated with motoring a hydroelectric Generating Unit to keep the unit synchronized at zero real power output to provide Regulation or Spinning Reserve. Station Power does not include any Energy used to power synchronous condensers; used for pumping at a pumped storage facility; or provided during a Black Start procedure. Station Power does not include Energy to serve loads outside the CAISO Balancing Authority Area."

[31] Appendix I of the Tariff

[32] New Resource Implementation Webpage

[33] Station Power Protocol netting may not be supported by your retail provider, in which case the benefits of monthly netting may not be available to you. Please consult your retail provider.

- Appendix I of the Tariff
- Business Practice Manual for Metering - Section 10
- Station Power Program Application Process and Portfolio Status

10. Suspension

10.1 Suspension Overview

The Interconnection Customer has the right under Article 5.16 of the Large Generator Interconnection Agreement (LGIA) to suspend work associated with the construction and installation of certain Participating TO's Interconnection Facilities, Network Upgrades, and/or Distribution Upgrades. Under the LGIA, suspension of work on Network Upgrades common to multiple generating facilities is subject to CAISO and Participating TO review. While suspension is a right under the LGIA, it is a limited right, as described in more detail below.

Suspension rights associated with the LGIA are for a period of up to three (3) years. This suspension period can be utilized all at once for a suspension of a consecutive three-year period, or it can be used at different times over a cumulative three-year period. In no case shall the suspension rights exceed the total three-year allowance.

Small Generator Interconnection Agreements (SGIA), which are applicable to projects up to 20 MW in size, do not provide for any suspension rights.

10.2 Suspension Notification

An Interconnection Customer must provide written notice to suspend work in accordance with the LGIA. This notice must be submitted to both the CAISO and the Participating TO. This written notice should be submitted on company letterhead and addressed to the parties as identified in Appendix F of the executed LGIA. An electronic copy also should be sent to QueueManagement@caiso.com.

The suspension notification should include the date that the Interconnection Customer would like the suspension to be effective. If no effective date is provided, the effective date will start as of the date of written notice. Importantly, the suspension notice must include the approximate date that the project plans to come out of suspension.

The Interconnection Customer will need to identify if any of the existing milestone dates in the executed LGIA will be impacted by the suspension. Suspension does not automatically result in day-for-day delays in milestone dates that have been agreed upon in the LGIA. An MMA, as described in Section 6 of this BPM, is required for the evaluation of changes to milestone dates in the LGIA.

10.3 Validation Criteria

Upon receipt of suspension notification, the CAISO and Participating TO will validate the suspension notification. Below are the validation factors that will be used to formulate a response to an Interconnection Customer's notification to suspend work:

- Is the LGIA currently effective?
- Does the current, effective LGIA have suspension language that is different from the current pro forma version?
- Does the project have shared RNUs, shared DNUs, or shared Interconnection Facilities?
- Are any of the upgrades considered precursor upgrades for later queued projects?
- Does the suspension push the project milestones beyond the 7 year period for Cluster projects, or the 10 year period for Serial projects as directed by the CAISO Tariff?[34]
- Has the project previously initiated its right to suspend, and if so, has it exhausted its 3-year allowance?
- Will an MMA be required to review impacts to milestone dates, including commercial operation?

  If an MMA will be required to review impacts to milestones, the CAISO will not validate the suspension, and the Interconnection Customer must request an MMA pursuant to Section 6 of this BPM (including the $10,000 deposit).

10.4 Response –Timeline and Results

Interconnection Customers will receive a written response within 45 days of receipt of the suspension notice. If the response cannot be completed within that time period, the CAISO will notify the Interconnection Customer and provide an estimated completion date with an explanation why additional time is required.

The CAISO will coordinate with the Participating TO to address any issues and/or concerns identified in the validation process. The CAISO will draft a response letter to the

[34] Per Appendix U, Section 3.5.1; Appendix Y, Section 3.5.1.4; Appendix DD, Section 3.5.1.4; as applicable – For Generating Facilities studied in the serial study process, the In-Service Date ("ISD") shall not exceed ten (10) years from the date the Interconnection Request is received by the CAISO. For Generating Facilities studied in the Cluster study process, the COD shall not exceed seven (7) years from the date the Interconnection Request is received by the CAISO.

Interconnection Customer based on the validation and this will include a review by the Participating TO. The written response will then be issued by the CAISO.

Results can fall under several different categories. The CAISO and Participating TO can:

- Validate the suspension notice as submitted.
- Conditionally validate the suspension notice subject to the Interconnection Customer's agreement to mitigate issues identified in the validation. Mitigation requirements can be associated with impacts the suspension will have on other queued customers, the Participating TO, or the CAISO. If the Interconnection Customer cannot mitigate these impacts, the suspension will be rejected.
- Deny the suspension because it would result in a Tariff violation (e.g., exceeding the 7/10 year window without an MMA and consent from the CAISO and Participating TO).

Ninety days before an approved suspension's anticipated end, the CAISO and the Participating TO will tender an amended draft LGIA with new construction milestones. The parties will negotiate in good faith such that the amended LGIA can be executed prior to the suspension's end.

10.5 Examples – Potential Outcomes

Example 1 – The Interconnection Customer for a Cluster project submits a suspension notification for a three-year suspension that would push the project's COD one year beyond the 7-year time-in-queue Tariff limit.

Expected Response – The CAISO and Participating TO would likely validate a suspension for two years and six months, and require the project come out of suspension in time to achieve COD within the 7-year time limit.

Example 2 – The Interconnection Customer for a serial project that submitted its Interconnection Request ten years ago sends a suspension notification.

Expected Response – The CAISO and Participating TO would likely deny this request because allowing any suspension would violate the Tariff provisions that require serial projects to have an In-Service Date within ten years of submitting the Interconnection Request. The Interconnection Customer would need to submit an MMA request and obtain consent from the CAISO and Participating TO to exceed the ten-year window.

Example 3 – The Interconnection Customer for a project with an executed SGIA submits a two-year suspension request.

Expected Response – This request would be denied because SGIAs do not provide suspension rights.

Example 4 – The Interconnection Customer for a Cluster project that has been in the queue for two years and has shared DNUs with three other projects submits a notification for a three-year suspension.

Expected Response - The CAISO and Participating TO would approve the suspension of requirements associated with RNUs and Interconnection Facilities. The Interconnection Customer would still be subject to all LGIA requirements and milestones associated with the development and construction of the shared DNUs so that the other Interconnection Customers are not impacted.

11. As-built Requirements

In accordance with Section 5.10.3 of the Generator Interconnection Agreement, the Interconnection Customer shall deliver to the Participating TO and CAISO "as-built" drawings, information and documents for the Interconnection Customer's Interconnection Facilities and the Electric Generating Unit(s), consisting of: a one-line diagram, a site plan showing the Large Generating Facility and the Interconnection Customer's Interconnection Facilities, plan and elevation drawings showing the layout of the Interconnection Customer's Interconnection Facilities, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Interconnection Customer's step-up transformers, the facilities connecting the Generating Facility to the step-up transformers and the Interconnection Customer's Interconnection Facilities, and the impedances (determined by factory tests) for the associated step-up transformers and the Electric Generating Units. The Interconnection Customer shall provide the Participating TO and the CAISO specifications for the excitation system, automatic voltage regulator, Generating Facility control and protection settings, transformer tap settings, and communications, if applicable. Any deviations from the relay settings, machine specifications, and other specifications originally submitted by the Interconnection Customer shall be assessed by the Participating TO and the CAISO pursuant to the appropriate provisions of this LGIA and the GIDAP. Such information shall be provided within 120 days of the COD of the Generating Facility.

If the Participating TO and CAISO do not receive the "as-built" drawings, information, and documents within the 120 days, the Interconnection Customer shall be subject to penalties in accordance with Section 37.6.1 of the CAISO Tariff.

12. Retirement

Participating Generators that wish to retire or mothball their entire Generating Unit(s), (make unavailable on a permanent or long term basis), must communicate their intent to the CAISO and Participating TO in writing to ensure that the CAISO will 1) consider and assess the request, which will be made public and posted under the Planning tab on the Reliability Requirements page of the CAISO

website,[35] and 2) assess that they are able to retain the Generating Unit's Full Capacity Deliverability Status (FCDS) or Partial Capacity Deliverability Status (PCDS) as elements of Resource Adequacy (RA) and CAISO Net Qualifying Capacity (NQC), when desired.[36] Generating Units that have expired or terminated Generator Interconnection Agreements (GIAs) by default will fall under Scenario 3 *(Permanent Retirement, release of Deliverability)*, described below. The scenarios for retiring or mothballing a Generating Unit are:

Scenario 1: Repowering / Entered Queue. Participating Generators that wish to retire a Generating Unit and retain the Generating Unit's Deliverability status and has either:

a. been approved for the affidavit repowering process pursuant to Section 25.1.2 of the CAISO Tariff or the appropriate Participating TO's tariff; or

b. entered the CAISO or Participating TO generator interconnection queue to be studied for repowering pursuant to the GIDAP.[37]

Scenario 2: Undecided and decommissioning Generating Unit. Participating Generators that wish to decommission and retire the Generating Unit and retain the Generating Unit's Deliverability status but has not yet:

a. committed to or completed the assessment for the repowering process; or

b. entered into the CAISO or Participating TO generator interconnection queue after a determination that it is ineligible for the affidavit repowering process.

Scenario 3: Permanent Retirement / Release of Deliverability. Participating Generators that wish to permanently retire the Generating Unit and will not repower, and has no need to retain the Generating Unit's Deliverability status.

Scenario 4: Mothball (make unavailable) / Generating Unit to remain intact. Participating Generators that wish to mothball the Generating Unit for the time being until its next steps have been determined which could be: restarting, decommissioning, permanent retirement, repowering or entering the generator interconnection queue. The Generating Unit and interconnection facilities must remain intact until a decision on next steps is made and reported to the CAISO for further direction.

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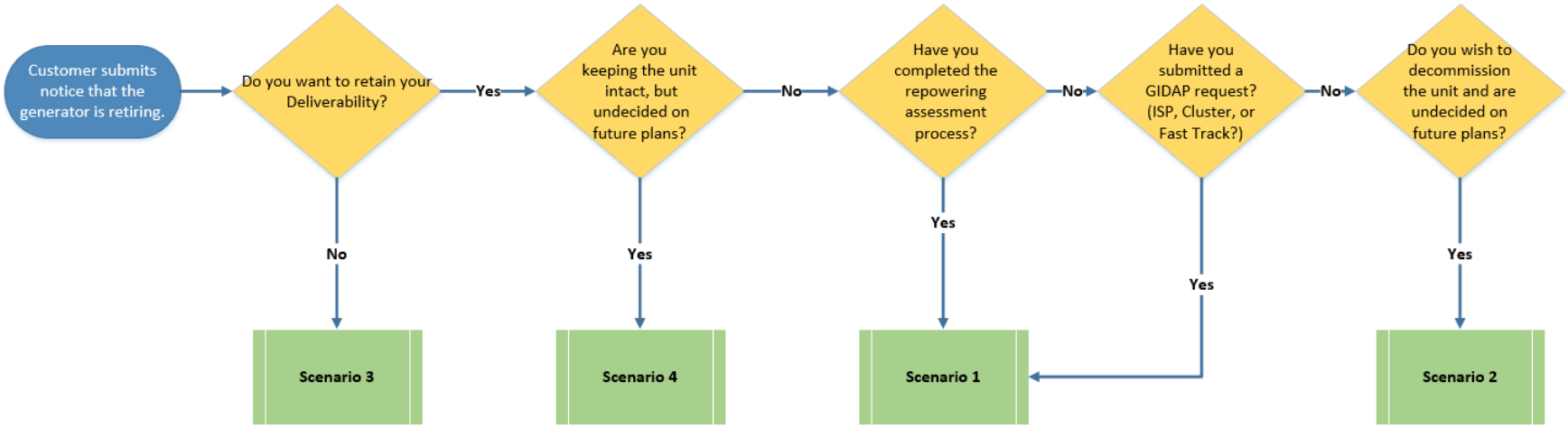
[35] URL: http://www.caiso.com/planning/Pages/ReliabilityRequirements/Default.aspx

[36] More information on Resource Adequacy and Net Qualifying Capacity is available in Section 6 of the BPM for Reliability Requirements, http://www.caiso.com/planning/Pages/ReliabilityRequirements/Default.aspx

[37] The CAISO's procedures for evaluating repower requests by an owner of an existing Generating Unit made pursuant to Section 25.1.2 of the CAISO Tariff allow such entities to obtain a CAISO three-party GIA without having to participate in the CAISO GIDAP study process if they demonstrate that the "total capability and electrical characteristics of the Generating Unit will remain substantially unchanged." The repowered Generating Unit must utilize the same fuel source and point of interconnection to the CAISO Controlled Grid as the existing Generating Unit. If the Generating Unit has not been approved (or knows that Section 25.1.2 will be inapplicable), the repowering applicant will need to submit the project into the CAISO generation interconnection queue in accordance with the GIDAP.

Participating Generators that are retiring a portion of a project under any scenario and want to continue to operate an energy storage unit that was added under the MMA or post-COD modification process will need to request an assessment as part of their notification of intent to retire. The CAISO will assess the impact of the system without the original generating unit and only the energy storage unit remaining in place. If there are no reliability issues identified in the assessment, then the energy storage unit will be allowed to stay interconnected and continue to operate. Any deliverability that is available could be transferred from the retiring generating unit to the energy storage unit. If there are any identified reliability issues, then the generator cannot retire unless a mitigation is determined, or the energy storage will need to be disconnected at the time the generating unit retires.


Customer submits notice that the generator is retiring.
Do you want to retain your Deliverability?
Yes
Are you keeping the unit intact, but undecided on future plans?
No
Have you completed the repowering assessment process?
No
Have you submitted a GIDAP request? (ISP, Cluster, or Fast Track?)
No
Do you wish to decommission the unit and are undecided on future plans?
No
Yes
Yes
Yes
Yes
Scenario 3
Scenario 4
Scenario 1
Scenario 2

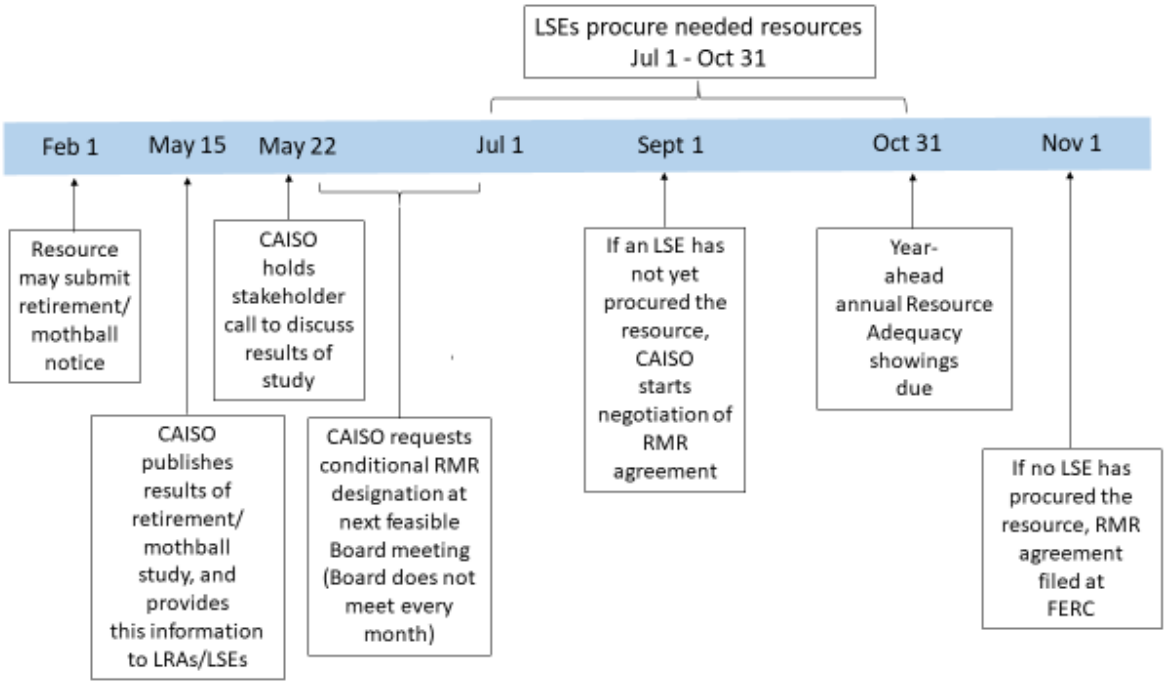
For Participating Generators under Scenarios 1, 2, 3 and 4, the CAISO's response to the retirement or mothball notice will be provided to the Participating Generator as described below. The amount of Deliverability being retained for the Generating Unit will be evaluated based on the MW amount listed in the Metered Subsystem Agreement, Participating Generator Agreement or Net-Scheduled Participating Generator Agreement, the interconnection capacity listed in the GIA with the CAISO or interconnection agreements with the Participating TO or UDC, if the Participating Generator is not connected to CAISO Controlled Grid, the Master File PMax amount, and the Deliverability amount assumed in the latest CAISO Deliverability Assessment transmission planning base case. Once determined, the amount of Deliverability being retained for the Generating Unit will be communicated to the Participating Generator in writing and this amount will be retained for the Participating Generator for three years from the scenario effective date which is the last day the Generating Unit was capable of operating. However, for each scenario there are various nuances that the Participating Generator should consider to retain their Deliverability which timelines are outlined below.

Path 1: If a Participating Generator is not a Resource Adequacy Resource in the current calendar year, it can submit a notice of retirement at any time during the current calendar year, but at least ninety (90) calendar days prior to the effective date of the retirement or mothball. For all Scenarios, the CAISO shall provide a response prior to the expiration of the ninety (90) calendar day period commencing from the date of receipt of the notice by CAISO.

Path 2(a): If the Participating Generator is not subject to Resource Adequacy conditions in the upcoming calendar year, and submits a notice of retirement by February 1 of the current calendar year, the CAISO shall publish the results of the retirement/mothball study by May 15 of the current calendar year. For example, if your Resource Adequacy contract expires March 31, 2021, then inform the CAISO by February 1, 2020 that the Participating Generator intends to retire the resource April 1, 2021. On the other hand, if the Resource Adequacy contract expires September 30, 2021, the notice to the CAISO should be received by February 1, 2021. If the Participating Generator is not required for reliability as determined in the retirement/mothball study, the CAISO shall approve the notice of retirement following such a determination, but at least thirty (30) calendar days prior to the effective date of the retirement or mothball. If the Participating Generator is determined to be required for reliability following the publication of the retirement/mothball results, the CAISO shall follow the process detailed under Path 2(a) Process Flow described below, and shall provide a final decision on the notice of retirement by November 15 of the current calendar year.

Path 2(b): If the Participating Generator is not subject to Resource Adequacy conditions in the upcoming calendar year and does not submit a retirement notice by February 1 of the current calendar year, the CAISO shall provide a response no later than sixty (60) calendar days prior to the expiration of the Resource Adequacy contract or ninety (90) calendar days from submission of notice, whichever is later. Under this process, the Participating Generator is required to submit a notice of retirement at least ninety (90) calendar days prior to the effective date of retirement or mothball.

Path 2(a) Process Flow



Option	Response to Participating Generator's notice	Deliverability and interconnection serice Retention Requirements	Deliverability and interconnection serice Retention Effective Date
Scenario 1: Repowering / Entered Queue	Path 1: Scenario response from the CAISO is within 90-days from receipt of customer's notice to Regulatory Contracts to retire the unit. Path 2(a): Scenario response from the CAISO is by November 15 of the current calendar year. Path 2(b): Scenario response from the CAISO is within 90 days from receipt of customer's notice to Regulatory Contracts to retire the unit or 60 days from expiry of the RA contract, whichever is later.	Retain Deliverability and interconnection service for a minimum of three (3) years. During the 3 years, the Participating Generator can try different avenues in pursuit of site repower as allowed under the CAISO Tariff. At the end of the 3 year period, the replacement project(s) must demonstrate that it is actively engaged in the construction of the replacement generation to be connected at the bus associated with the Deliverability priority and meets the commercial viability criteria to retain such priority. Under such circumstances, the Generator and the CAISO will identify specific milestones to retain the Deliverability priority. If at any time past the first 3 years, the CAISO determines that the replacement project(s) are not meeting the agreed upon milestones, the retained Deliverability will be terminated and the Generator will be notified in writing.	The effective date of Deliverability and interconnection service retention is the last day the Generating Unit was capable of operating. This date is the earliest: 1. the Generating Unit was forced out and not able to return to service, or 2. the Generating Unit was removed from service and not able to return to service, or 3. the SC disassociated from the Generating Unit in CAISO Masterfile, or 4. the Generating Unit requested retirement by notice to Regulatory Contracts. The Generating Unit MWs retention of Deliverability and interconnection service rights commensurate with the capacity level associated with its rated Deliverability as available the last day the Generating Unit was capable of operating.

Option	Response to Participating Generator's notice	Deliverability and interconnection serice Retention Requirements	Deliverability and interconnection serice Retention Effective Date
Scenario 2 to transition to Scenario 1	Accepted Interconnection Request application or approved Repowering Affidavit.	The first repower application or Interconnection Request must be received prior to the close of the last open Queue Cluster application window that falls within the three (3) years from Deliverability and interconnection service retention effective date.	Scenario 2 must transition to Scenario 1 prior to the close of the last Queue Cluster application window within the three (3) year timeline from effective date. Effective date is the same as noted under Scenario 1 above.
Scenario 3: Permanent Retirement/ release of Deliverability	Path 1: Scenario response from the CAISO is within 90-days from receipt of customer's notice to Regulatory Contracts to permanently retire the unit. Path 2(a): Scenario response from the CAISO is by November 15 of the current calendar year. Path 2(b): Scenario response from the CAISO is within 90 days from receipt of customer's notice to Regulatory Contracts to retire the unit or 60 days from expiry of the RA contract, whichever is later.	None	Deliverability and interconnection serice rights will be terminated 90-days from request and the resource removed from the Full Network Model.
Scenarios 1, 2 or 4 transition to Scenario 3	if approved and transitioning from another scenario which has already exceeded the 90-days from customer's original notice, the effective date for permanent retirement will be determined by the CAISO to either retire effective immediately or be subject to an additional 90-days from customer's request to transition to Scenario 3.	None	Deliverability and interconnection serice rights will be terminated and the resource removed from the Full Network Model.

<table>
<tr><th>Option</th><th>Response to Participating Generator's notice</th><th>Deliverability and interconnection serice Retention Requirements</th><th>Deliverability and interconnection serice Retention Effective Date</th></tr>
<tr><td>Scenario 4: Mothball</td><td>Path 1: Scenario response from the CAISO is within 90-days from receipt of customer's notice to Regulatory Contracts to mothball the unit.

Path 2(a): Scenario response from the CAISO is by November 15 of the current calendar year.

Path 2(b): Scenario response from the CAISO is within 90 days from receipt of customer's notice to Regulatory Contracts to retire the unit or 60 days from expiry of the RA contract, whichever is later.</td><td>a. If a decision is made by the Participating Generator to enter the generator interconnection queue process it must do so prior to the last open Queue Cluster application window within three (3) years from the Deliverability and interconnection serice retention effective date.

b. If the generating characteristics change at all, the Participating Generator must request approval for that change via the post-COD modification process in their GIA or switch to a repowering-retirement scenario (Scenario 1).

c. If the Participating Generator decides to return to service with no changes to the Generating Unit no study should be necessary. However, a certified Scheduling Coordinator ("SC") must be retained and the Generating Unit meters re-instated per metering inspection timelines shown in the next column.</td><td>a. Scenario 4 must transition to Scenario 1 before close of the last cluster application window within the three (3) year timeline from effective date. The effective date is the same as Scenario 1 above. For transitioning to Scenario 3, a 90 CD notice period is required prior to the effective date of Scenario 3.

b. Action must be taken within three (3) years from effective date.

c. Within three (3) years from effective date, the customer may reinstate the Generating Unit Note: metering inspection timelines as follows:
<table>
<tr><th>Current Status of meter</th><th>Process to re-instate</th><th>Timeline Approximate</th></tr>
<tr><td>Meter seal in tact</td><td>Send pictures for verification to RegulatoryContracts@caiso.com and EDAS@caiso.com</td><td>5 Business days</td></tr>
<tr><td>Meter seal broken</td><td>Same meter</td><td>≤ 40 days</td></tr>
<tr><td>Meter seal broken</td><td>Meter replacement
• Seal broken
• New meter
• Test & Validate</td><td>40 days</td></tr>
<tr><td>Meter removed</td><td>Meter replacement
• New meter
• Test & Validate</td><td>40 days

or

203 days, if there is telemetry</td></tr>
</table>
</td></tr>
</table>

In addition, this section of the BPM provides instructions for how Participating Generators and metered entities should communicate retirement plans to the CAISO to ensure that they are able and approved to retain their Deliverability status, if desired.[38] This section also explains how Participating Generators may revise or terminate the Generating Unit's Metered Subsystem Agreement (MSSA), Participating

[38] These processes are intended to ensure compliance with the requirements in Section 5 of the BPM for Reliability Requirements and CAISO Tariff Section 40 to retain deliverability.

Generator Agreement (PGA), Net Scheduled Participating Generator Agreement (NSPGA) — formerly known as the Qualifying Facilities Participating Generator Agreement (QFPGA) — pursuant to Sections 3.2.2 or 4.1.3 of the agreements, or how the CAISOME may revise or terminate the Meter Service Agreement for CAISO Metered Entities (MSACAISOME), or how the SC may revise and terminate the Meter Service Agreement for Scheduling Coordinators (MSASC) pursuant to Sections 2.2.2 or 3.2.2 of the MSACAISOME or Sections 2.2.2 or 3.3.1 of the MSASC, if applicable.

12.1 Instructions for Generating Units in Scenarios 1, 2 and 4

The Participating Generator's designated certified Scheduling Coordinator ("SC") must begin the process by submitting a letter to SCrequests@caiso.com to disassociate their Scheduling Coordinator ID code ("SCID") from the Resource ID(s)[39] on a specific date which will end-date their association to the resource(s) designating the resource(s) as inactive in Master File. The Participating Generator will provide notice to RegulatoryContracts@caiso.com, with a courtesy copy to the Participating TO and SC, in advance of retiring or mothballing its Generating Unit(s), in accordance with the Path 1 or Path 2 process. The Participating Generator shall include the affidavit listed under this BPM Section 12.3 along with the written notice described above. The CAISO will reject any incomplete submission.

12.1.1 Removing the Generating Unit(s) from the PGA, NSPGA, or QFPGA

The Participating Generator will request a revision to the applicable schedule of the PGA, NSPGA, or QFPGA by including with its retirement request an attachment in redline of the applicable schedule to the agreement. Please insert a strikethrough in redline to the technical information to indicate "removal" of the Generating Unit(s) from the applicable schedule. This will not terminate the PGA, NSPGA, or QFPGA, but will act as a mechanism for documentation of Deliverability and interconnection serice retention for that Generating Unit. After CAISO's assessment has been completed, CAISO will provide a letter by way of email communication to the Participating Generator with a copy to the Participating TO.

12.1.2 Removing the Metering Facilities and Generating Unit(s) from the MSACAISOME, or MSASC

The CAISO Metered Entity ("CAISOME") or Scheduling Coordinator ("SC") will request a revision to the Schedule 1 of its applicable meter service agreement by sending an email to RegulatoryContracts@caiso.com with a redline version of the Schedule 1. Please insert a strikethrough in redline to the technical information to indicate "removal" of the Metering Facilities and Generating Units from the schedule. In addition, the SC will need to submit a revised Settlement Quality Meter Data ("SQMD") plan, applicable to SC Metered Entities

[39] The CAISO requires specific letter notifications any time there are requested changes to SC identifications. http://www.caiso.com/Documents/Transfer-ResourceRelinquishingSchedulingCoordinator-LetterTemplate.doc

only. CAISO will provide a letter to the CAISOME acknowledging retirement or mothball of the meters associated to the Resource IDs.

Please note that typically the removal of a Generating Unit from a PGA, NSPGA, or QFPGA and requisite MSACAISOME would result in the automatic termination of the MSACAISOME. If a Generating Unit has been assessed and approved for retirement or mothball, the CAISO will not terminate the MSACAISOME even if the meters are disconnected. However, the CAISO reserves the right, at its discretion, to terminate the MSACAISOME.

12.1.3 Removing the Generating Unit(s) and Metering Facilities Information from the MSSA

The MSS Operator will request a revision to the MSSA Schedule 14: Generating Units and Schedule 15.1: Meter Information by sending an email to RegulatoryContracts@caiso.com with a redline version of Schedules 14 and 15.1. Please insert a strikethrough in redline to the technical information to indicate "removal" of the Generating Unit(s) from the Schedule 14 and the metering information from Schedule 15.1. This will act as a mechanism for documentation of requested Deliverability and interconnection serice retention for that Generating Unit. Once assessed, the CAISO will provide a letter to the MSS Operator.

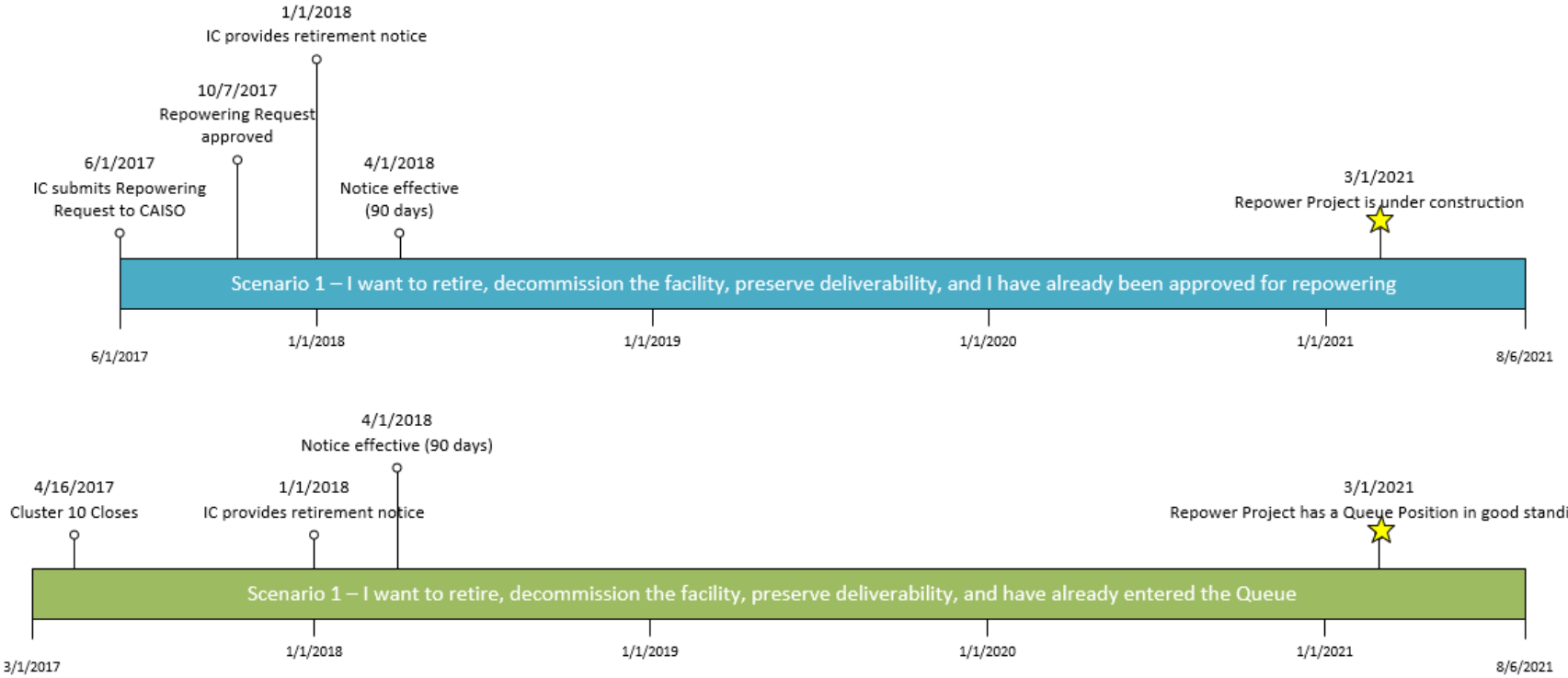
12.1.4 Scenario Notice Descriptions

Under Scenario 1, the Participating Generator must include in its notice that it has been approved for the affidavit repowering process or has entered the CAISO generator interconnection queue, or the intended future status of the Generating Unit(s).[40] The plan for retaining Deliverability generally will be captured in the affidavit for repowering, the repowering study results, or the executed 3-party GIA for the project, whichever was most recent.[41]

The sample timeline on the following page illustrates how this retirement scenario blends with retirement options:

[40] Generating Unit(s) that are ineligible for the affidavit repowering process but still wish to repower and retain their deliverability priority are required to enter the CAISO generator interconnection queue

[41] See BPM for Reliability Requirements Section 5, as applicable. http://www.caiso.com/planning/Pages/ReliabilityRequirements/Default.aspx


1/1/2018
IC provides retirement notice
10/7/2017
Repowering Request approved
6/1/2017
IC submits Repowering Request to CAISO
4/1/2018
Notice effective (90 days)
3/1/2021
Repower Project is under construction
Scenario 1 – I want to retire, decommission the facility, preserve deliverability, and I have already been approved for repowering
6/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
8/6/2021
4/1/2018
Notice effective (90 days)
4/16/2017
Cluster 10 Closes
1/1/2018
IC provides retirement notice
3/1/2021
Repower Project has a Queue Position in good standing
Scenario 1 – I want to retire, decommission the facility, preserve deliverability, and have already entered the Queue
3/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
8/6/2021

Under Scenario 2, the notice should indicate that the Participating Generator wishes to decommission the Generating Unit but is undecided whether to pursue the affidavit repowering process or enter the CAISO generator interconnection queue, or permanently retire. If approved under Scenario 2, the Deliverability Assessment Study will determine the amount of Deliverability to be retained.

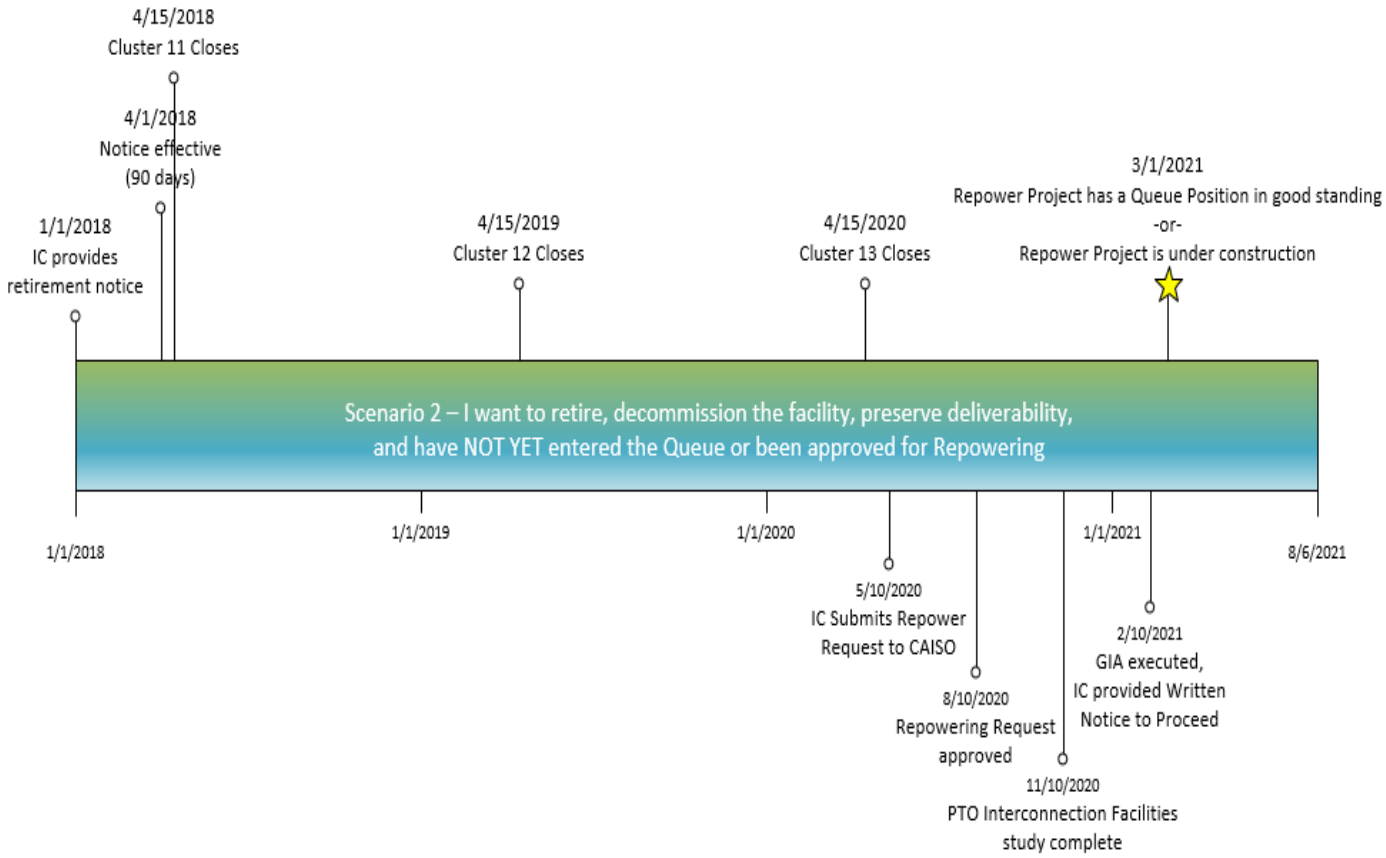
In order to retain Deliverability priority, no later than the last Queue Cluster application window within the three (3) year timeline after retiring its Generating Unit(s), the Participating Generator shall do one the following:

a. be accepted in the repower process and have a new executed GIA, or

b. enter the generation interconnection process.

Failure to do so may result in the loss of Deliverability status or repowering rights.

The sample timeline on the following page illustrates how this retirement scenario blends with retirement options:


4/15/2018
Cluster 11 Closes
4/1/2018
Notice effective
(90 days)
1/1/2018
IC provides
retirement notice
4/15/2019
Cluster 12 Closes
4/15/2020
Cluster 13 Closes
3/1/2021
Repower Project has a Queue Position in good standing
-or-
Repower Project is under construction
Scenario 2 – I want to retire, decommission the facility, preserve deliverability,
and have NOT YET entered the Queue or been approved for Repowering
1/1/2018
1/1/2019
1/1/2020
1/1/2021
8/6/2021
5/10/2020
IC Submits Repower
Request to CAISO
8/10/2020
Repowering Request
approved
11/10/2020
PTO Interconnection Facilities
study complete
2/10/2021
GIA executed,
IC provided Written
Notice to Proceed

Under Scenario 4, the Participating Generator has not committed to the CAISO's or Participating TO's repowering process or is ineligible for the repowering affidavit process, but wishes to mothball (make unavailable) their Generating Unit(s) and retain Deliverability while maintaining the Generating Unit(s) and interconnection facilities in order to potentially return to service, and must provide notice to RegulatoryContracts@caiso.com, with a courtesy copy to the Participating TO, ninety (90) calendar days in advance of retiring its Generating Unit(s). In order to retain Deliverability priority, no later than three (3) years from the last day the Generating Unit was capable of operating, the Participating Generator shall do one the following:

a. enter the generation interconnection process within the last open cluster application window prior to retirement expiration,

b. be accepted in the repower process and have a new executed GIA, or

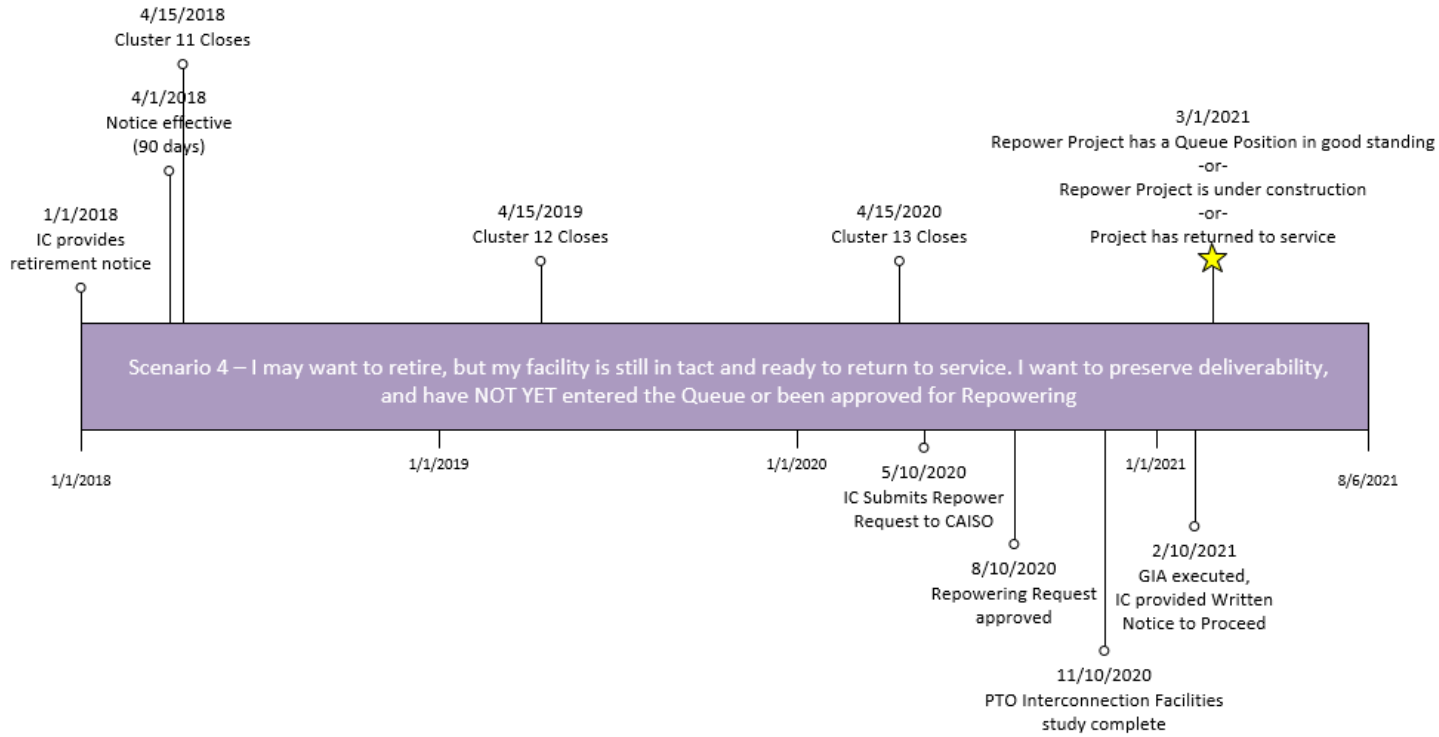
c. designate a certified SC[42] for the Resource ID(s) designating them as active in Master File, reinstate the meters associated to the Resource ID(s), and begin generating,

d. or expiration and transition to Scenario 3 with a retirement notice ninety (90) calendar days prior to effective date.

Failure to do so may result in the loss of Deliverability status or repowering rights.

The sample timeline on the following page illustrates how this retirement scenario blends with retirement options:

[42] The CAISO requires specific letter notifications any time resources are assigned to a SC. http://www.caiso.com/participate/Pages/BecomeSchedulingCoordinator/Default.aspx


4/15/2018
Cluster 11 Closes
4/1/2018
Notice effective
(90 days)
1/1/2018
IC provides
retirement notice
4/15/2019
Cluster 12 Closes
4/15/2020
Cluster 13 Closes
3/1/2021
Repower Project has a Queue Position in good standing
-or-
Repower Project is under construction
-or-
Project has returned to service
Scenario 4 – I may want to retire, but my facility is still in tact and ready to return to service. I want to preserve deliverability, and have NOT YET entered the Queue or been approved for Repowering
1/1/2018
1/1/2019
1/1/2020
5/10/2020
IC Submits Repower
Request to CAISO
8/10/2020
Repowering Request
approved
11/10/2020
PTO Interconnection Facilities
study complete
1/1/2021
2/10/2021
GIA executed,
IC provided Written
Notice to Proceed
8/6/2021

12.2 Instructions for Generating Units in Scenario 3

The Participating Generator's designated certified SC must begin the process by submitting a letter to SCrequests@caiso.com to disassociate their SCID from the Resource ID(s) on a specific date which will end-date their association to the resource(s) designating the resource(s) as inactive in Master File. The effective date of this request should coordinate with the Participating Generator's requested effective date for retirement. Participating Generators and CAISO Metered Entities that wish to retire their Generating Unit(s) and Metering Facilities permanently, with no plans to repower, should submit a notice of termination to RegulatoryContracts@caiso.com ninety (90) calendar days before retiring their Generating Unit(s) pursuant to Section 3.2.2 of the PGA, NSPGA, or QFPGA, and Section 2.2.2 of the MSACAISOME and the applicable MSSA section titled "Notification of Changes". The retired generation resource's interconnection, repowering, and Deliverability and interconnection serice rights will then be terminated. Any future restart or repower on the same site or interconnection point will require a new resource interconnection request.[43] CAISO will provide a confirmation letter to the CAISOME, Generator or MSS Operator for acknowledgment of retirement of the meters and Resource IDs after the SC has disassociated their SCID from the resource(s). The Participating Generator shall include the affidavit listed under this BPM Section 12.3 along with the written notice described above. The CAISO will reject any incomplete retirement notice.

If additional Generating Units are listed on the applicable schedules of the Metered Subsystem Agreement, Participating Generator Agreement or Net-Scheduled Participating Generator Agreement but are not retiring, only the approved, permanently retiring Generating Unit will be removed from the applicable schedule by way of revision in accordance with the Path 1 and Path 2 process or the last day the Generating Unit was operating; and the Metered Subsystem Agreement, Participating Generator Agreement or Net-Scheduled Participating Generator Agreement will remain active. If the retired Generating Unit(s) are the only units listed on the applicable schedule, please include in your retirement notice a request to terminate the applicable agreement and applicable meter service agreement which will occur in accordance with the Path 1 and Path 2 process or, if otherwise stated, per the termination provisions of the applicable agreement.

Additionally, prior to assessment and approval for permanent retirement, the CAISO requests that the Participating Generator include with their retirement notice, a letter from the Participating TO confirming permanent removal of the retired Generating Unit(s) from the Full Network Model ("FNM"). Concurrently, the Participating TO shall submit a transmission project to RIMS for removal of the Generating Unit(s) from the CAISO FNM with supporting documentation that depicts the transmission configuration without the Generating Unit(s).

[43] See Resource Interconnection Guide
http://www.caiso.com/participate/Pages/ResourceInterconnectionGuide/default.aspx

12.3 Submission of Affidavit for Scenarios 1, 2, 3, and 4

The following section provides instructions for submitting affidavit for retirement or recission of retirement notice for Scenarios 1, 2, 3, and 4. Samples of completed affidavits shall be posted on the CAISO website. [44] Affidavit template is provided in Appendix A of this BPM.

12.3.1 Submission of Affidavit for Retirement or Mothball Notice

The following affidavit shall be completed and submitted by the Participating Generator as part of the retirement notice sent to the CAISO. The affidavit shall be duly signed by an officer of the Participating Generator under penalty of perjury and notarized, and provided to the CAISO in both electronic format, and the original form containing the original signature with all attachments as hard copy. The officer shall have the legal authority to bind the Participating Generator to the retirement notice and affidavit.

12.3.2 Submission of Affidavit for Rescission of Retirement or Mothball Notice

A Participating Generator that wishes to rescind its notice of retirement prior to the effective date of retirement, or for Scenario 4 resources, rescind it after the effective date of mothball; shall complete and submit this affidavit, duly signed by an officer of the Participating Generator under penalty of perjury and notarized, as a rescission notice to the CAISO. The rescission notice should be received by the CAISO prior to the effective date of the retirement, under all Scenarios 1, 2, and 3, and failure to do so may result in rejection of the rescission notice. For Scenario 4, the Participating Generator can submit a rescission notice at any time, subject to the requirements in the affidavit and Section 12 of this BPM. The officer shall have the legal authority to bind the Participating Generator to the retirement notice and affidavit.

12.4 RMR Designation for Multiple Retirement Notices

If multiple Participating Generators file the requisite notice and attestation with the CAISO and can meet the reliability need identified by the CAISO; however the CAISO does not need all of the generating units to meet the reliability need; the CAISO will ask each owner to submit a proposed annual fixed revenue requirement for its resource plus the total cost for planned capital additions calculated in accordance with the schedules specified in the *pro forma* RMR Contract. The Participating Generators shall submit their cost information to regulatorycontracts@caiso.com no later than thirty (30) calendar days from the request. The CAISO shall review the information and shall make the RMR designation in accordance with CAISO Tariff Section 41.2.2(a) no later than thirty (30) calendar days from the date the information is received from all the Participating Generators.

[44] Affidavit template and sample completed Affidavits posted at the following link, under "Retiring and mothballed resources" section

http://www.caiso.com/planning/Pages/ReliabilityRequirements/Default.aspx

12.5 Effect on Negotiated Bid Components for Participating Generator Following Submission of Retirement Notice

A submission of a retirement notice by a Participating Generator in accordance with this Section 12 under Scenarios 1, 2 and 3 will trigger a termination of any negotiated bid components including, but not limited to, negotiated default energy bids, negotiated varable operations and maintenance values, negotiated frequently mitigated unit adders, negotiated greenhouse gas bid caps and negotiated opportunity costs. Notice of a change in status from Scenario 4 to Scenario 1, 2 or 3 will also require termination of any negotiated reference values. For Scenarios 1 and 2, if the Participating Generator repowers the Generating Unit, it may negotiate reference values in accordance with the CAISO Tariff.

The termination date of the negotiated value(s) will be the later of: 1) the effective date of the retirement; or 2) the date at which it was practicable for the CAISO to make the necessary system changes to terminate the negotiated value(s). Upon termination of the negotiated value(s), the CAISO will include this information in the monthly FERC filings for these terminated negotiated bid components in accordance with the CAISO Tariff.

13. Repowering

13.1 Overview of Generating Unit Repowering

The CAISO's procedures for evaluating repower requests by an owner of an existing Generating Unit made pursuant to Section 25.1.2 of the CAISO Tariff allows such entities to obtain a CAISO three-party GIA without having to participate in the CAISO Generator Interconnection and Deliverability Allocation Procedure (GIDAP) study process if they demonstrate that the "total capability and electrical characteristics of the Generating Unit will remain substantially unchanged."

An "existing" Generating Unit is defined for this BPM as a Generating Unit that is currently interconnected to the CAISO Controlled Grid, and has delivered energy, not necessarily continuously, to the CAISO Controlled Grid within the last three years prior to requesting to repower. This three-year period aligns with the ability of a Generator Unit to retain its deliverability status rights for up to three consecutive years if it becomes incapable of operating (BPM for Reliability Requirements Section 6.1.3.4).

This framework is also used to evaluate Post-COD modification requests. The CAISO allows generators to request changes to their existing generating facility, provided "total capability and electrical characteristics of the Generating Unit will remain substantially unchanged." Post-COD modification requests are processed in the same manner as MMA requests (Section 6.4 of this BPM), however the threshold for acceptability is governed by the repowering applicability criteria described below.

13.1.1 Fuel Source

The repowered Generating Unit must utilize the same fuel source and its existing point of interconnection to the CAISO Controlled Grid as the existing Generating Unit. Combustible fuel sources, such as coal, oil, bio-gas, and natural gas, will be considered the same for repowering purposes for thermal plants. Please see Section 6.5.3 for specific considerations for energy storage capacity conversions.[45]

13.1.2 Treatment of Deliverability

Repowering the facility cannot result in exceeding the existing Generating Unit's deliverability associated with the on-peak exceedance level used in the most recent Deliverability Assessment. Interconnection Customers seeking additional Deliverability for their project may either:

1) submit a new FCDS Interconnection Request in the next cluster study open window; or

2) submit an ISP interconnection request if the project can meet the ISP technical and business eligibility criteria

13.1.3 Treatment of Energy Storage

Energy storage will be considered the same fuel source as the repowering Generating Unit when the project repowers with energy storage. Existing Generating Units may use the repowering process for an energy storage capacity conversion to replace a portion of the project's MW capacity with energy storage but not wholly replace the existing Generating Units with energy storage and not increase approved existing project capacity at the POI. While there is no bright-line test to determine how much capacity may be replaced with storage without substantially changing the electrical characteristics of the Generating Facility, whole replacement would constitute such a change. Likewise, at any point in evaluating a fuel-type change, the CAISO may determine that the change is substantial such that it must come in the form of a new Interconnection Request. The criteria the CAISO uses to evaluate such changes are specified in Section 12.2 of this BPM. If the existing Generating Facility will be completely replaced with energy storage, then the appropriate process for submitting the request is in a subsequent cluster study window, the Independent Study Process, or the Fast Track Process.[46]

13.1.3.1 Metering

The energy storage portion of the project must meet the current metering and direct telemetry requirements in accordance with the BPM for Metering and the BPM for Direct

[45] Whether the project is a new project or a repowering of an existing project, the examples in Section 6.5.3 will apply for the addition of storage to an existing Generating Facility.

[46] All three are described in CAISO Tariff Appendix DD.

Telemetry. The energy storage portion of the project must have the proper metering and telemetry to allow the CAISO to model and forecast the non-energy-storage portion of the project versus the energy storage portion. Projects requiring bundled metering arrangements for their existing project and energy storage addition may request a Behind the Meter expansion via 1) a new Interconnection Request in the cluster study process; or 2) submit an the ISP interconnection request if the project can meet ISP technical and business eligibility criteria.

13.2 Applicability

Section 25.1.2 of the CAISO Tariff provides that owners of existing Generating Units can be exempted from the CAISO's interconnection study process if the "total capability and electrical characteristics of the Generating Unit will remain substantially unchanged."[47] Section 25.1.2 of the CAISO Tariff does not indicate what changes, if any, in transmission system performance would be considered by the CAISO and the applicable Participating TO to confirm the Generating Unit owner's representation that the existing Generating Unit's electrical characteristics are substantially unchanged. The two most common scenarios that arise in the context of Section 25.1.2 of the CAISO Tariff are:

1. existing Generating Units that have not, to date, been required to enter into a three-party GIA, such as previously grandfathered qualifying facilities that must now comply with the CAISO Tariff and enter into a three-party GIA; and

2. existing power plants that propose to repower one or more Generating Units.

Existing Generating Units that are not repowering (those falling into category (1) generally meet the "substantially unchanged" requirement and can move directly to a GIA without an assessment. For existing resources that are not seeking repowering see Section 4 of this BPM. This section focuses on the informational requirements and the assessments needed to determine whether a repowering request can be handled pursuant to Section 25.1.2 of the CAISO Tariff or if it needs to be studied in the same manner as a new project pursuant to the CAISO's GIDAP.

It is understood that any repower of a Generating Unit, unless replaced with identical equipment, will result in some changes to the total capability and electrical characteristics of

[47] Section 25.1.2 refers to existing Generating Units "whose total Generation was previously sold to a Participating TO or on-site customer." However, Section 25.1 of the CAISO Tariff provides that existing units connected to the CAISO Controlled Grid that will be modified without increasing the total capability of the power plant need not be studied (or re-studied) by the CAISO so long as their electrical characteristics do not change such that their re-energization may violate Applicable Reliability Criteria. The determination of whether a repowering "may violate Applicable Reliability Criteria" essentially is the same as whether a unit's "total capability and electrical characteristics . . . will remain substantially unchanged," and therefore the CAISO applies the "substantially unchanged" test to repowerings that involve units converting from grandfathered interconnection arrangements as well as repowerings that have, or had, CAISO interconnection agreements.

the Generating Unit, and therefore some degree of change to the performance of the transmission system. Most of these changes can be attributed to improvements in technology or the unavailability of original equipment. The CAISO will consider changes to be "substantial" if there is a proposed change in fuel source or they are found to have an adverse impact on the transmission system, either of which would require the project to be evaluated pursuant to the CAISO's GIDAP.

Adverse impacts to a transmission system include increasing the power flow during normal or contingency conditions, any increase in the short circuit duty impacts, or adverse angular or voltage stability impacts, as compared to the impacts associated with the original Generating Unit. These types of impacts are described in more detail as follows:

Adverse Flow Impact – If a repower of a Generating Unit results in the same MW capacity and Net Qualifying Capacity, or a decrease in MW capacity at the Point Of Interconnection and Net Qualifying Capacity, and all CAISO Tariff requirements regarding reactive power are met by the new Generating Unit, the repowering will not be considered to cause a substantial change to the total capability of the Generating Unit from a flow impact standpoint. In this case, there would be no adverse power flow impact on the CAISO Controlled Grid under normal and contingency conditions as compared with the original Generating Unit. Conversely, any increase in MW capacity or Net Qualifying Capacity would be considered a substantial change in total capability as this would increase the Generating Unit's power flow impacts.

Short Circuit Duty Impact – Any reduction in the short circuit duty of the repowered Generating Unit as compared with the original Generating Unit will not be considered an adverse impact and will not be considered a substantial change to the unit's electrical characteristics. Conversely, an increase in short circuit duty impact would be considered a substantial change to the electrical characteristics of the Generating Unit unless both of the following criteria are met:

- Increase of the short circuit duty at network breakers that require upgrades in the generation interconnection study is less than the amount that would be flagged by the Participating TO as meaningful contribution; and
- The total short circuit duty from the repowered Generating Unit and all the active generation projects in the queue at network breakers that do not require upgrades in the generation interconnection study does not exceed the breaker capacity.

Angular or Voltage Stability Impact - The angular and voltage stability impacts of a Generating Unit directly depends on the type of generator and the power system control functions that the Generating Unit encompasses. A technical assessment may be required to determine if the system performance with the repowered generator has substantially deteriorated.

13.3 Interconnection Facilities Study

Although the capability and electrical characteristics for a repowered Generating Unit may be determined to be substantially unchanged—and therefore the Generating Unit will not need to participate in the CAISO's GIDAP study process—it may still be necessary for the generator owner applicant and the Participating TO to enter into an interconnection facilities study agreement to assure that Interconnection Facilities and telemetry or protective relay equipment are compliant with the Participating TO's current interconnection requirements and standards, as well as any other relevant standards (e.g., NERC, WECC). Any additional interconnection facilities required as a result from this interconnection facility study will be incorporated into the GIA.

13.4 Entity Submission Requirements and Evaluation Process

In order to initiate a repowering review, the owner of the Generating Unit must submit an affidavit representing that the total capability and electrical characteristics of the Generating Unit will remain substantially unchanged. The affidavit also must outline if there has been or will be any changes to the Generating Unit and must include supporting information describing such changes.[48] Such affidavit shall be prepared using the standard affidavit template available on the CAISO website at: http://www.caiso.com/Documents/RepoweringAffidavitTemplate_20141002.doc. Additional information can be included as necessary to describe any changes.

A complete request for repowering must include the following items and information:

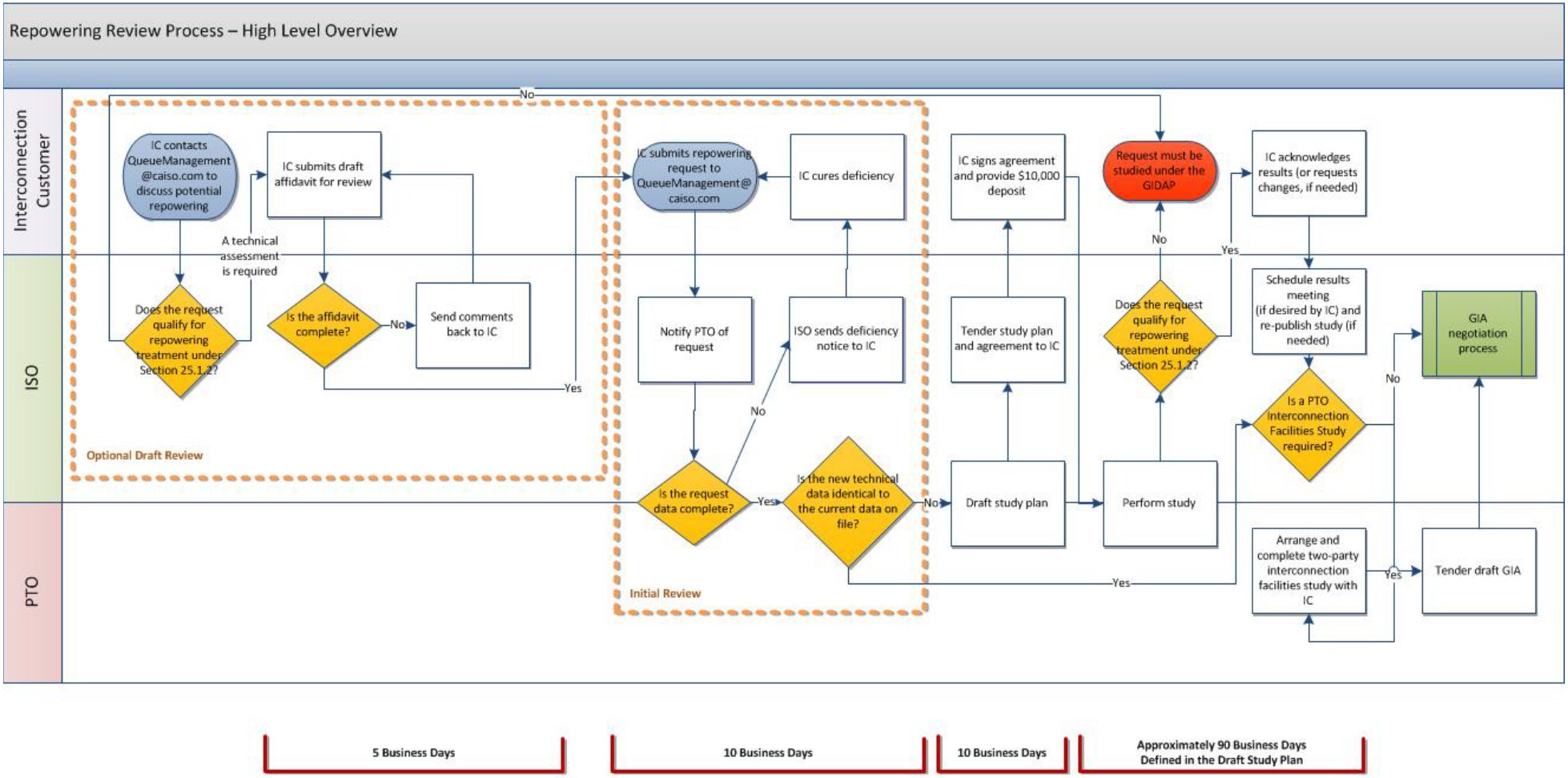
- The signed, dated, and notarized affidavit on entity's letterhead shall be provided to QueueManagement@caiso.com. The notarization must be in jurat form.
- A $50,000 deposit
- Fully completed Generation Facility Data form as contained in the CAISO's pro forma Interconnection Request (CAISO Tariff, Appendix DD, Attachment A to Appendix 1) including both PSLF load flow and dynamic models. The load flow model should be provided in GE PSLF .epc format. The dynamic model should be provided in .dyd format using GE PSLF library models that has been approved by WECC for the technology of the Generating Facility. If no WECC approved library model is available for the technology, the Interconnection Customer should use a GE PSLF library model to equivalently and sufficiently representing the Generating Facility. In case the GE PSLF library does not contain a suitable model for the technology of the Generating Facility, a user written *.p EPCL file may be accepted at the discretion of the CAISO and applicable Participating TO. However, the Interconnection Customer must replace the user written model with the GE library model before its synchronization to the grid or upon the CAISO's notification.

[48] Tariff Section 25.1.2.

- Supplemental requirements for energy storage requests are provided in http://www.caiso.com/Documents/EnergyStorageProjects-SupplementalInformation.pdf. The CAISO requests this supplemental information to ensure that the energy storage project is studied appropriately in consideration of the unique characteristics of the energy storage project. This information is required for any energy storage capacity conversion associated with the repowering application.

- Generator Characteristic and Scope of Work.
- Identification of the following:
  - The proposed timeline for the repowering.
  - If the project is currently out of service or disconnected, and if so, for how long.
  - Current controlling agreements for the project's transmission facilities.

A graphical representation of the review process is presented on the next page.


Repowering Review Process – High Level Overview
Interconnection Customer
ISO
PTO
IC contacts QueueManagement @caiso.com to discuss potential repowering
IC submits draft affidavit for review
A technical assessment is required
Does the request qualify for repowering treatment under Section 25.1.2?
Is the affidavit complete?
No
Send comments back to IC
Yes
Optional Draft Review
IC submits repowering request to QueueManagement@caiso.com
IC cures deficiency
Notify PTO of request
ISO sends deficiency notice to IC
No
is the request data complete?
Yes
Is the new technical data identical to the current data on file?
No
Yes
Initial Review
IC signs agreement and provide $10,000 deposit
Tender study plan and agreement to IC
Draft study plan
Request must be studied under the GIDAP
No
Does the request qualify for repowering treatment under Section 25.1.2?
Yes
Perform study
IC acknowledges results (or requests changes, if needed)
Schedule results meeting (if desired by IC) and re-publish study (if needed)
Is a PTO Interconnection Facilities Study required?
No
Yes
Arrange and complete two-party interconnection facilities study with IC
GIA negotiation process
Tender draft GIA
5 Business Days
10 Business Days
10 Business Days
Approximately 90 Business Days Defined in the Draft Study Plan

13.4.1 Use of Repowering Deposit

The CAISO deposits all Repowering deposits into an interest-bearing account at a bank or financial institution designated by the CAISO. The Repowering deposit is applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties working at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the Repowering assessment and to meet and otherwise communicate with Interconnection Customers with respect to their projects. The CAISO will create a separate work order number for each Repowering assessment in order to correctly track the actual costs. Each Repowering assessment will be performed under the direction and oversight of the CAISO, although the Participating TO or third parties engaged by the Participating TO may perform certain parts of the assessment work pursuant to agreement between the CAISO and the Participating TO as to their allocation of responsibilities. The CAISO will conduct or cause to be performed the required Repowering assessment and any additional assessment the CAISO determines to be reasonably necessary, and will direct the applicable Participating TO to perform portions of the assessment where the Participating TO has specific and non-transferable expertise or data and can conduct the assessment more efficiently and cost-effectively than the CAISO. The Interconnection Customer must specify the purpose of the funds within eighty (80) days of submittal (e.g. restudy, MMA, ISP, LOS etc). After eighty (80) days, the bank will be contacted in order to return funds to the Interconnection Customer.

The CAISO shall issue to the Interconnection Customer one or more invoices for the Repowering assessment that include a detailed and itemized accounting of each assessment expense incurred (including those incurred by the CAISO, the Participating TOs, and/or third parties) and corresponding amounts due, and that provide at least the same level of detail included in invoices for interconnection studies. The Participating TO and any third parties performing work on the assessment must invoice the CAISO for such work no later than 75 calendar days after the completion of the assessment. The CAISO shall draw from the Repowering assessment deposit any undisputed costs by the Interconnection Customer within thirty (30) calendar days of issuance of an Repowering invoice.

Whenever the actual cost of performing the Repowering assessment exceeds the Repowering assessment deposit, the invoice will direct the Interconnection Customer to pay the excess amount, and the Interconnection Customer shall pay the undisputed amount in accordance with the invoice within thirty (30) calendar days. If the Interconnection Customer fails to timely pay the actual costs exceeding the deposit and such costs have not been disputed, the Project will no longer be considered to be in good standing by the CAISO. The CAISO is not obligated to continue to conduct the assessment unless and until the Interconnection Customer has paid all undisputed amounts.

The Interconnection Customer shall be refunded any portion of its Repowering assessment deposit (including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of completion of the assessment) that exceeds the

costs the CAISO, Participating TOs, and/or third parties, as applicable, have already incurred on the Interconnection Customer's behalf to perform the assessment. In the event that the Interconnection Customer withdraws its Repowering request prior to completion of the assessment, the Interconnection Customer shall be refunded any portion of its Repowering assessment deposit (including interest earned at the rate provided for in the interest-bearing account from the date of deposit to the date of the Interconnection Customer's withdrawal) that exceeds the costs the CAISO, Participating TOs, and third parties have incurred on the Interconnection Customer's behalf.

13.4.2 Optional Draft Review of Affidavit

In order to facilitate the affidavit process, the CAISO encourages Repowering applicants to contact QueueManagement@caiso.com to discuss their repowering proposal to confirm that the Generating Unit's specific circumstances meet the basic threshold to be considered for repowering,[49] and to submit a draft of the affidavit to ensure that it is complete before it is notarized. Generating Facility dynamic data is not needed for review of the draft affidavit, but a one-line diagram is useful. The CAISO will provide comments back to the repowering applicant within five (5) Business Days after receipt of the draft affidavit.

13.4.3 Initial Review

Once the affidavit and the required technical data are received by the CAISO, they are reviewed for completeness. If the application or the affidavit is incomplete, they will be returned to the applicant with an explanation of the deficiencies. The CAISO and Participating TO will provide a list of deficiencies to the repowering applicant within ten (10) Business Days after receipt of the request. The repowering applicant must address these deficiencies and resubmit the application to the CAISO before the CAISO will begin the review and assessment process.

Upon receipt of the complete request for repowering (as defined in Section 13.4 of this BPM), the CAISO and Participating TO will review the technical data to see if it is different from the data already on file with the CAISO for the existing Generating Unit. This initial review will take no more than ten (10) Business Days.

If the CAISO and Participating TO determine that the technical data for the new Generating Unit is identical to the current data on file, the CAISO and Participating TO will consider that the repowering of the Generating Unit meets the criteria for Section 25.1.2 of the CAISO Tariff and therefore need not enter the CAISO generator interconnection queue. Even if the unit's total capability and electrical characteristics remain substantially unchanged, an interconnection facilities study performed by the Participating TO may still be required to determine whether the interconnection facilities meet current standards, and if not,

[49] As described in Section 13.1 of this BPM

whether additional interconnection facilities may be needed to support the interconnection, before the Participating TO can tender the draft GIA.

If the new technical data is different from the data on file with the CAISO, a technical assessment will be conducted to verify that the electrical characteristics of the Generating Unit are substantially unchanged. As discussed above, an interconnection facilities study agreement also may be necessary. Because most repowering proposals include a change to the Generating Unit's equipment, a technical assessment will need to be performed in most cases to confirm that total capability and electrical characteristics of the Generating Unit are substantially unchanged.

13.4.4 Technical Assessment

If a technical assessment is required to verify if the electrical characteristics of the Generating Unit are substantially unchanged, the CAISO will work with the Participating TO to draft a study plan for the technical assessment. The assessment plan will indicate:

- The assessment and studies that will need to be completed;
- Study cost estimates;
- Schedule;
- Project and interconnection information;
- Study assumptions; and
- Data provided by the repowering applicant to be used for assessment of the repowered Generating Unit.

The CAISO will forward this plan, along with an assessment (study) agreement to the repowering applicant within ~~ten~~ thirty (~~10~~30) business days of ~~receiving complete technical data~~the date in which the Interconnection Request package and data is deemed complete and valid. It is anticipated that the repowering assessment will take approximately ninety (90) calendar days to complete once the study plan has been ~~completed and agreed to~~executed. ~~CAISO has determined that all informational requirements have been satisfied.~~

13.4.5 Verification Assessment Analysis

To determine if the total capability and/or electrical characteristics of the repowered Generating Unit are substantially unchanged, such assessment may include, but is not limited to, the following analyses:

- Dynamic stability assessment under both no-disturbance and critical contingency conditions;
- Post transient governor power flow analyses under critical contingencies;
- Short circuit duty study;

- For asynchronous units, reactive requirements study;[50]
- An assessment to determine if an interconnection facilities study agreement is needed to determine if existing facilities meet current standards; and
- An examination of net qualifying capacity that will be modeled in the CAISO's generator deliverability assessment.

13.4.6 Results

Upon completion of the assessment, a report will be drafted by the CAISO and Participating TO and sent to the repowering applicant for review and discussion. Once the draft assessment report has been finalized, a final report will be prepared and sent to all parties. The CAISO will schedule a results meeting within five (5) business days if desired by the repowering applicant.

Request Meets Repowering Criteria, No Additional Study Needed - If the assessment concludes that the capability and electrical characteristics of the Generating Unit are substantially unchanged and the interconnection facilities meet current standards and no additional interconnection facilities or modifications to existing facilities are needed to support the interconnection, the Participating TO will tender the GIA to the repowering applicant for the new Generating Facility.

Request Meets Repowering Criteria, Participating TO Interconnection Facility Study Needed - If the assessment concludes that the capability and electrical characteristics of the Generating Unit are substantially unchanged but that an interconnection facilities study is required to determine if additional interconnection facilities are needed to meet current standards, the assessment report will identify such. However, the assessment report is not intended to develop mitigation plans to address any impacts identified, and the repowering applicant will need to enter into an interconnection facilities study agreement with the Participating TO. Once this interconnection facilities study is completed, the Participating TO will tender the GIA to the owner of the Generating Unit incorporating the results from the interconnection facilities study.

Request Does Not Meet Repowering Criteria - If the assessment concludes that the capability and electrical characteristics of the Generating Unit have substantially changed, the assessment report will identify such. The assessment report will not identify mitigation plans to address any impacts identified, and the repowering applicant will need to submit the project into the CAISO generation interconnection queue in accordance with the GIDAP set forth in the CAISO Tariff. Existing deliverability status may be grandfathered if the repowering applicant has been operating at the total capability requested during the previous three years and the CAISO can verify such operations.

[50] If the Generating Unit(s) owner agrees to include reactive power capability in the repowered unit then a separate study would not be required.

13.4.7 Generator Interconnection Agreement

The Participating TO will tender the draft GIA within thirty (30) calendar days of the results meeting or confirmation from the repowering applicant that the results meeting is not desired. The most recent Tariff appendices will be used as the template for the draft GIA.

13.5 Modification to Approved Repowering Requests

The CAISO and Participating TO will review the request pursuant to CAISO Tariff Section 25.1.2, and as with the initial repowering review, the Interconnection Customer will be billed the actual costs of the assessment. Interconnection Customers may request modification to their approved Repowering requests without jeopardizing that approval. However, the CAISO will not perform informational analysis or "what-if" studies regarding repowering generation facilities. If the modification is not considered a substantial change and the request is approved through this modification process, the CAISO will consider the change to the project to be final (i.e., once the modification is approved, a new modification request and approval would be needed to undo the approved modification). If the modification is approved subject to certain conditions, the Interconnection Customer will be given the opportunity to review those conditions and notify the CAISO if it still wants to proceed with the modification.

It is anticipated that the repowering modification assessment will take approximately ninety (90) calendar days to complete once the study plan has been executed~~completed and agreed to. CAISO has determined that all informational requirements have been satisfied~~. In order to initiate request to modify the approved repowering request, please submit the following items to queuemanagement@caiso.com:

- A redlined version of the final draft study plan for the approved repowering request.
- A $10,000 deposit (please see Section 13.4.1 of this BPM for details on the use of the repowering deposit.)
- Fully completed Generation Facility Data form as contained in the CAISO's pro forma Interconnection Request (CAISO Tariff, Appendix DD, Attachment A to Appendix 1) including both PSLF load flow and dynamic models. The load flow model should be provided in GE PSLF .epc format. The dynamic model should be provided in .dyd format using GE PSLF library models that has been approved by WECC for the technology of the Generating Facility. If no WECC approved library model is available for the technology, the Interconnection Customer should use a GE PSLF library model to equivalently and sufficiently representing the Generating Facility. In case the GE PSLF library does not contain a suitable model for the technology of the Generating Facility, a user written *.p EPCL file may be accepted at the discretion of the CAISO and applicable Participating TO. However, the Interconnection Customer must replace the user written model with the GE library

model before its synchronization to the CAISO controlled grid or upon the CAISO's notification.

- Supplemental requirements for energy storage requests are provided in http://www.caiso.com/Documents/EnergyStorageProjects-SupplementalInformation.pdf if the repowering will include an energy storage component. The CAISO requests this supplemental information to ensure that the energy storage project is studied appropriately in consideration of the unique characteristics of the energy storage project.

- Generator Characteristic and Scope of Work

13.6 Other Requirements

In the course of repowering the Generating Unit, the repowering applicant will be obliged to meet all current CAISO Tariff requirements including reactive power requirements and low voltage ride-through capabilities, as applicable. These requirements are not set aside by a determination that the characteristics of the new generators are substantially unchanged, regardless of whether the original units were meeting then current Tariff provisions.

14. Surplus Interconnection Service

Interconnection Customers may transfer surplus interconnection service ("SISVC") in accordance with Section 3.4 of Appendix DD. SISVC is defined as any unneeded portion of Interconnection Service Capacity established in a GIA, such that if SISVC is utilized the total amount of SISVC at the POI would remain the same. Interconnection Customers may request to transfer such capacity to another Interconnection Customer.

This transfer allows Interconnection Customers to utilize the unused portion of an existing Interconnection Customer's interconnection service. There are two types of transfers possible. First, for new generating facilities that would not otherwise require a new interconnection request (because they do not increase Interconnection Service Capacity or substantially alter electrical characteristics thus affecting reliability), the original Interconnection Customer can request to transfer SISVC through a material modification assessment. The process for this type of modification assessment can be found in Section 6.5.11 of this BPM. For all other new generating facilities, the surplus assignee will submit an interconnection request for a behind-the-meter capacity expansion under the independent study process. The behind-the-meter capacity expansion study process is an existing expedited process for installing additional generating capacity to existing generating facilities. The study also determines whether any necessary tripping schemes or equipment are necessary to limit the total output to what was originally studied. Behind-the-meter capacity expansion studies consist of a short-circuit test, transient stability test, and reactive support test. The process for a behind-the-meter capacity expansion cam be found in Appendix DD of the CAISO tariff and Section 6.3 of the BPM for GIDAP.

Appendix A

Notice of Generating Unit Retirement or Mothball

Including Rescission of Retirement or Mothball

This is a notification of the retirement or mothballing of a Generating Unit in accordance with Section 41of the CAISO Tariff and the CAISO BPM for Generator Management. An electronic copy of this completed form should be sent to the CAISO at RegulatoryContracts@caiso.com.

The CAISO may request additional information as reasonably necessary to support its review of planned non-operations.

Legal Owner of the Generating Unit: _____

Legal Owner's state of organization or incorporation: _____

Name of Scheduling Coordinator: _____

Identity of Generating Unit(s) Subject to Retirement/Mothball (Resource Name, Resource ID): __

_____

Category of Retirement: _____

Reason for retirement: _____

Pursuant to the terms of the CAISO Tariff, Legal Owner hereby certifies that:

☐ In accordance with the Business Practice Manual for Generator Management, it is retiring the Generating Unit effective _____ [month],_____ [day], _____ [year]. The Generating Unit does not have a contract for Resource Adequacy Capacity for [check one or both] ☐ the current year and/or ☐ the upcoming year, it is uneconomic for the Generating Unit to remain in service for such year(s), and the decision to retire is definite unless the CAISO procures the Generating Unit, the Generating Unit is sold to an unaffiliated third-party, a third-party contracts with the Generating Unit for Resource Adequacy purposes, or the Generating Unit obtains some other contract.

☐ In accordance with the Business Practice Manual for Generator Management, it is retiring the Generating Unit effective _____ [month], _____ [day], _____ [year]. The Generating Unit

does not have a contract for Resource Adequacy Capacity for [check one or both] ☐ the current year and/or ☐ the upcoming year, it is retiring the Generating Unit for reasons other than it is uneconomic for the unit to remain in service during such year(s).

Owner is retiring the Generating Unit for the following reason(s) (state with specificity the reason for retiring the unit):

The decision to retire the Generating Unit is definite. Note: The CAISO may designate the resource for RMR service if needed for reliability. State with specificity any legal, regulatory, or other reason(s) that might present an obstacle to providing RMR service:

☐ In accordance with the Business Practice Manual for Generator Management, it is mothballing the Generating Unit effective _____ [month], _____ [day], _____ [year]. The Generating Unit does not have a contract for Resource Adequacy Capacity for [check one and/or both] ☐ the current year and/or ☐ the upcoming year, it is uneconomic for the Generating Unit to remain in service for such year(s), and the decision to mothball is definite unless the CAISO procures the Generating Unit, the Generating Unit is sold to an unaffiliated third-party, a third-party contracts with the Generating Unit for Resource Adequacy purposes or the Generating Unit obtains some other contract.

☐ It is rescinding its prior notice to retire or mothball the Generating Unit before the effective date of the retirement or mothball, because the CAISO has procured the unit, the Generating Unit was sold to an unaffiliated third-party, a third-party contracted with the Generating Unit for Resource Adequacy purposes, or the Generating Unit obtained some other contract. State with specificity the reason(s) for rescinding the notice:

☐ It is terminating the Generating Unit's mothball status because the CAISO procured the Generating Unit, the Generating Unit was sold to an unaffiliated third-party, a third-party contracted with the Generating Unit for Resource Adequacy purposes, the Generating Unit

obtained some other contract, or it is economic for the Generating Unit to return to service. State with specificity the reason(s) for returning from mothball status:

_____

☐ As the Resource Owner I acknowledge that it is my responsibility to submit the Resource Owner letter (available at:

http://www.caiso.com/Documents/ResourceOwnerSchedulingCoordinator Selection-LetterTemplate.doc) to SCrequests@caiso.com to end my SC association.

Owner understands that it must comply with all applicable CAISO Tariff and BPM requirements for retiring a Generating Unit, or mothballing a Generating Unit, or returning a Generating Unit from retirement or mothball status.

Owner understands and agrees that this notification is provided in accordance with Section 41 of the CAISO's Tariff and the request will be noted in the publicly available spreadsheet located at: http://www.caiso.com/Documents/AnnouncedRetirementAndMothballList.xlsx

The undersigned certifies that he or she is an officer of the owner of the Generating Unit, that he or she is authorized to execute and submit this notification and has legal authority to bind the company, and that the statements contained herein are true and correct to the best of his or her knowledge and that this notice is executed under penalty of perjury.

_____

Signature

Name: _____

Contact Information

Title: _____

Email: _____

Date: _____

Phone: _____

STATE OF: _____

COUNTY OF: _____

Before me, the undersigned authority, this day appeared _____, known by me to be the person whose name is subscribed to the foregoing instrument, who, after first being sworn by me deposed and said:

"I am an officer of _____, I am authorized to execute and submit the foregoing notification on behalf of _____, and the statements contained in such application are true and correct."

SWORN TO AND SUBSCRIBED TO BEFORE ME, the undersigned authority on this the _____ day of _____, __.

_____

Notary Public, State of _____

My Commission expires _____