

Submitted by	Company	Date Submitted
<i>Fernando E. Cornejo</i> <a href="mailto:fernando.cornejo@sce.com">fernando.cornejo@sce.com</a>  <i>Selene Sánchez</i> <i>selene.sanchez@sce.com</i>	<i>Southern California Edison</i>	<i>December 9, 2013</i>

**Southern California Edison (SCE) appreciates the opportunity to comment on the IPE Draft BPM Language Topic 15 – Material Modification Review. SCE has inserted its proposed edits and comments (in red font) directly below in the draft BPM language document posted by the CAISO on November 18, 2013.**

---

# Interconnection Process Enhancements

## Draft BPM Language Topic 15 - Material Modification Review

**November 18, 2013**

## Table of Contents

9. Overview of Modification Provisions.....	4
9.1. Timing of Modification Requests .....	5
9.1.1. Requests During the Project's Interconnection Studies.....	5
9.1.2. Requests Submitted Between the Phase I and Phase 2 Interconnection Studies .	5
9.1.3. Requests Submitted After Phase II Interconnection Studies .....	6
9.2. Scope of Modifications .....	6
9.2.1. Modifications That Are Approved Without Material Modification Assessment .....	6
9.2.1.1. After Phase I study results meeting .....	7
9.2.1.2. 5% safe harbor .....	7
9.2.1.3. RNU-based In-Service date extension .....	7
9.2.1.4. Construction sequencing .....	7
9.2.1.5. Inverter changes.....	7
9.3. Modification Assessment Deposit .....	8
9.3.1. Modification Assessment Deposit Amount .....	8
9.3.2. Use of Modification Assessment Deposit .....	8
9.3.3. Obligation for Study Costs.....	9
9.4. Assessment Process and Timeline .....	9
9.4.1. Obligation for Assessment.....	9
9.4.2. How and what to submit .....	10
9.4.3. High-level overview of assessment process .....	10
9.4.4. Timeline.....	12
9.4.5. Engineering Analysis.....	12
9.4.6. Business Assessment .....	12
9.4.7. Results and Next Steps .....	12
9.4.7.1. Approved .....	12
9.4.7.2. Approved with Mitigation .....	13
9.4.7.3. Denied .....	13
9.5. Types of Modifications .....	13
9.5.1. Point of Interconnection (POI) .....	13
9.5.2. COD Changes .....	13
9.5.2.1. Time in Queue .....	13
9.5.2.2. COD Extensions as they Relate to Financial Obligations .....	14
9.5.2.3. Phased Implementation for Market Participation .....	14

9.5.2.4. COD accelerations .....	14
9.5.3. Changes to the Fuel Type of the Proposed Project .....	14
9.5.4. Project Technology Changes .....	14
9.5.4.1. Inverter Changes .....	14
9.5.4.2. Equipment and Transformer Changes .....	15
9.5.5. Changes to Gen-Tie Path .....	15
9.5.6. Site Location .....	15
9.5.7. Changes to Point of Change of Ownership Location .....	15
9.5.8. Decreases in Electrical Output (MW) of the Proposed Project .....	15
9.5.8.1. Between Phase 1 and Phase 2 Interconnection Studies .....	15
9.5.8.2. Downsizing Due to Permitting or Land Issues .....	16
9.5.9. Changes from Full or Partial Deliverability Status to Partial Capacity or Energy- Only Deliverability Status .....	16

## 9. Overview of Modification Provisions

The Interconnection Customer (“IC”) must submit to the ISO, in writing, a request to modify any information provided in the Interconnection Request except an increase in MW capacity (unless such modifications are expressly permitted by the relevant interconnection procedures) and must have the request approved before the IC will be permitted to make the change. The IC shall retain its Queue Position if an approved modification is determined not to be a Material Modification but shall not be permitted to retain its Queue Position and make the modification if the modification is determined to be a Material Modification. Except in specific circumstances where the ISO Tariff dictates that the IC’s generation project is entitled to different treatment, the ISO 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 ISO 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.” A modification request may be considered a request for Material Modification if it adversely impacts:

- the timeline of the Queue Cluster’s Interconnection Study Cycle;
- the Participating Transmission Owner (“PTO”) (such as shifting costs from the IC to the PTO); and
- the timing for the construction of Reliability Network Upgrades which are intended to be utilized by multiple ICs.

A Modification will be approved if the criteria set forth below are met, and the IC is in good standing from a business perspective. An IC is in good standing if the IC is in full compliance with its obligations under its interconnection agreement (GIA), if it has one, and the terms of the applicable interconnection procedures. An IC’s obligations under the GIA include milestones and required payments. . With respect to modifications where ISO consent is required,<sup>1</sup>

In response to the modification request, the ISO, in coordination with the affected PTO(s) and, **if applicable, any Affected System Operator**, will evaluate the proposed modification. In addition to determining if requested modifications are Material Modifications, the ISO will assess modification requests to ensure that transmission and generation schedules are inline. **Although the ISO may perform a thorough analysis, the PTO must perform its own review of the request and concur with the ISO’s findings before the results may be communicated to the IC.**

The ISO shall inform the IC in writing of whether its requested modification constitutes a Material Modification.<sup>2</sup> In the event that the proposed modification does not constitute a Material Modification, the modification will be approved and the ISO 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 IC shall then provide the results to any Affected System Operator, if applicable. The ISO will not perform informational analysis or “what-if” studies regarding proposed modifications to generation facilities.

The PTO may request a Material Modification Assessment if changes are proposed to the scope of, or schedule for, planned Network Upgrades or Interconnection Facilities. When the

---

<sup>1</sup> See Appendix S, Section 1.3.4, Appendix T, Section 3.4.5, Appendix Y, Section 6.9.2.1, Appendix DD, Section 6.7.2.1.

<sup>2</sup> GIP section 6.9.2.2.

PTO initiates a modification request, the ISO will make reasonable efforts to inform the IC and obtain its concurrence with the proposed change. Although the PTO may perform thorough research before submitting a modification request, the ISO will perform its own review of the request in order to create documentation for the decision and to ensure a complete and independent analysis of the request.

## **9.1. Timing of Modification Requests**

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

### **9.1.1. Requests During the Project's Interconnection Studies**

The ISO will not process modification assessment requests from projects while the project is being studied during the Phase I Interconnection Study or Phase II Interconnection, or other studies. 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. In addition, it would not be possible for the ISO to evaluate the potential impacts of the proposed modification on other projects during the pendency of one of these studies. Modification requests received during this time will be logged and reviewed for completeness and, when the study process is complete, the modification requests will be evaluated.

### **9.1.2. Requests Submitted Between the Phase I and Phase 2 Interconnection Studies<sup>3</sup>**

ICs have an opportunity to undertake certain modifications that are specifically enumerated in the GIP following the Phase I Interconnection Study Results Meeting.<sup>4</sup> Such modifications are not considered material at this point in the process, and therefore do not require a Material Modification Assessment. These modifications are:

- a decrease in the MW capacity of the proposed Generating Facility;
- modifying the technical parameters associated with the Generating Facility technology or Generating Facility step-up transformer impedance characteristics; and
- modifying the interconnection configuration, while not changing the Point of Interconnection.
- change of deliverability status from **Full Capacity Deliverability Status to Partial Capacity Deliverability Status**, or **Full Capacity Deliverability Status** or **Partial Capacity Deliverability status** to **Energy Only**

For any modification other than these, the IC must first request that the ISO evaluate whether such a modification is a Material Modification. In response to the IC's request, the ISO, in coordination with the affected PTO(s) and, if applicable, any Affected System Operator, shall evaluate the proposed modification prior to approving it and the ISO shall inform the IC in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection ("POI"), except for that specified by the ISO in an Interconnection Study or otherwise allowed under the ISO Tariff or Business Practice Manuals, shall constitute a Material Modification.

---

<sup>3</sup> GIP section 6.9.2.2.

<sup>4</sup> The IC whose project is governed by Appendix U or Y has 5 Business Days following the results meeting to request modifications.

The IC 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 IC nevertheless intends to implement the change, then the current Interconnection Request must be withdrawn from the applicable study process and the IC 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).

### **9.1.3. Requests Submitted After Phase II Interconnection Studies**

For any requested modification after Phase II study results have been issued, the IC must first request that the ISO evaluate whether such a modification is a Material Modification. In response to the IC's request, the CAISO, in coordination with the affected PTO(s) and, if applicable, any Affected System Operator, shall evaluate the proposed modification prior to approving it and the ISO shall inform the IC in writing of whether the modification would constitute a Material Modification. Any change to the POI, except that allowed under the ISO Tariff or Business Practice Manuals, shall constitute a Material Modification.

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

## **9.2. Scope of Modifications**

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

- the timeline of any Queue Cluster's Interconnection Study Cycle will not be impacted by the modification;
- the modification will not adversely impact the PTO (e.g., by shifting costs from the IC to the PTO);
- the modification will not adversely impact the timing for the construction of Reliability Network Upgrades which are intended to be utilized by multiple ICs;
- confirm transmission will be in place for the generators proposed in-service date;
- the project for which the request is being made is in good standing; and
- final decision on the request is compliant with ISO Tariff requirements.

This BPM goes into greater detail on the considerations as they apply to specific types of requested changes in section 7.4.

In cases where the ISO has approved a modification after the conclusion of an IC's Phase II Interconnection Study, the ISO must be able to evaluate the change and find it acceptable without the need to undertake a re-study to meaningfully evaluate it. If determines a re-study is necessary using prudent engineering judgment, then the requested change is a Material Modification and thus is not permissible within the scope of the existing Interconnection Request.

### **9.2.1. Modifications That Are Approved Without Material Modification Assessment**

The ISO will assess the following types of modifications to confirm that the requested modifications meets the criteria below. The customer must provide the ISO and PTO with

notice of the modification. The ISO shall confirm that such modification is approved within five (5) Business Days of receiving the IC's request.

#### **9.2.1.1. After Phase I study results meeting**

Modifications timely submitted after the phase I study results are issued as outlined in section 6.9.2.2 of this BPM.

#### **9.2.1.2. 5% safe harbor**

If the final MW capacity of the proposed Generating Facility that is completed and achieves COD is at least 95 percent of the MW capacity as specified in the Interconnection Agreement,<sup>5</sup> then the project is deemed to have met the substantial performance obligations of the Interconnection Agreement. The IC shall include in its notice the previous MW capacity and the new final MW capacity.

#### **9.2.1.3. RNU-based In-Service date extension**

In the event that the PTO informs the ISO that construction of a Reliability Network Upgrade is delayed and that a project(s) will need milestone modifications due to that date change, the PTO shall provide a notice to the ISO that includes the previous In-Service Date and the new In-Service Date. The ISO will confirm the PTO's conclusion and evaluate whether any other projects are affected by the date change. The ISO will review the conclusion with all impacted ICs before making a decision on the request.

The COD extensions associated with a PTO's delay in construction of upgrades should be commensurate. For example, if the new in-service date for an upgrade is January 1, 2015, then the In-Service Date of the project should be within approximately 6 months of this new date (*i.e.*, just because the upgrade is delayed does not give the IC an ability to further delay its project). In addition, the timeframes between the In-Service Date, synchronization date, and COD should be similar to the number of days between these dates that were previously agreed to in the executed GIA. Thus if the synchronization date was 30 days after In-Service Date in the executed GIA, and the new In-Service Date in March 1, 2015 then the new Synchronization Date should be March 31, 2015.

#### **9.2.1.4. Construction sequencing<sup>6</sup>**

If the COD of a proposed Generating Facility is delayed by 6 months either before or after the COD set forth in the GIA, then the requested change in dates for In-Service Date, synchronization date, and COD may be approved without going through the modification assessment process ICs 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 a Material Modification Assessment.

#### **9.2.1.5. Inverter changes**

To the extent that the IC requests an inverter change for which (1) there is only a change in manufacturer, (2) **(NOTE: SCE believes that any proposed modification, including a POI or technology change, should be evaluated by both the ISO and PTO to check whether it would have a material impact. Concurrence would be needed from the ISO and PTO prior to any modification approvals would be granted.)** the technology change is like-for-like, including the number and size of inverters, and (3) the electrical characteristics are not changed,

<sup>5</sup> Appendix CC LGIA, article 5.19.4.

<sup>6</sup> GIP section 12.2.

the IC can change the inverters for the proposed Generating Facility without going through the modification assessment process. The IC shall include in its notice the previous inverter manufacturer, the previous number of inverters, their previous MW capability, the previous inverter maximum fault current, the previous power factor regulation range, and the new inverter manufacturer, the new number of inverters, their new MW capability, the new inverter maximum fault current and the new power factor regulation range.

### **9.3. Modification Assessment Deposit<sup>7</sup>**

The IC must include a modification assessment deposit at the time the IC requests modification. The ISO will not commence a modification assessment without the deposit.

#### **9.3.1. Modification Assessment Deposit Amount**

The modification assessment deposit is \$10,000.

#### **9.3.2. Use of Modification Assessment Deposit**

The ISO 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 PTOs, or third parties working at the direction of the ISO or PTOs, as applicable, to perform and administer the modification assessment and to meet and otherwise communicate with ICs with respect to their projects.

In general, the IC will receive invoices from the ISO that list assessment expenses incurred and corresponding amounts due. The amounts due will be offset against the IC's study deposit. If the amounts due exceed the amounts in the study deposit, the invoice will direct the customer to pay the excess amount. PTOs will provide invoices to the ISO within 75 calendar days after the completion of the assessment.

The IC 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, PTOs, and third parties at the direction of the ISO, as applicable, third parties have incurred on the IC's behalf to perform the assessment. In the event that the IC withdraws its modification assessment request prior to completion of the assessment, the IC 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 IC's withdrawal, that exceeds the costs the CAISO, PTOs, and third parties have incurred on the IC's behalf.

The ISO will publish aggregated cost data regarding modification assessments. The data report will be published annual outlining the types of modification assessments reviewed and the cost for the assessment. The data will be aggregated to a level such take individual projects cannot be identified.

---

<sup>7</sup> See GIP section 6.9.2.3 [which was proposed the IPE-1 tariff amendment filed on Sept. 30 and currently under FERC review].



### **9.3.3. Obligation for Study Costs**

The modification assessment deposit will be applied against actual assessment costs and the IC will pay the actual costs which are drawn from the modification assessment deposit. The IC will pay by direct invoice any actual costs exceeding the modification assessment deposit. If the IC 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 PTO and any third parties performing work on the IC's behalf shall invoice the ISO for such work, and the ISO shall issue invoices for the modification assessment that shall include a detailed and itemized accounting of the cost of each Interconnection Study. The ISO shall draw from the modification assessment deposit any undisputed costs by the IC within thirty (30) calendar days of issuance of an invoice. Whenever the actual cost of performing the modification assessment exceeds the modification assessment deposit, the IC shall pay the undisputed difference in accordance with the ISO issued invoice within thirty (30) calendar days. The ISO is not obligated to continue to conduct the assessment conducted unless and until the IC has paid all undisputed amounts. If a modification assessment normally performed by the ISO or PTO is instead performed by an authorized third party vendor, the modification assessment costs shall include the costs of those activities performed by the ISO or PTO to adequately review or validate that the modification assessment performed by the third party.

## **9.4. Assessment Process and Timeline<sup>8</sup>**

### **9.4.1. Obligation for Assessment**

Each modification assessment will be performed under the direction and oversight of the CAISO, although the PTOs may perform certain parts of the assessment work pursuant to agreement between the ISO and the PTO as to their allocation of responsibilities.<sup>9</sup> The ISO will conduct or cause to be performed the required modification assessment and any additional assessment the ISO determines to be reasonably necessary, and will direct the applicable PTO to perform portions of the assessment where the PTO has specific and non-transferable expertise or data and can conduct the assessment more efficiently and cost-effectively than the CAISO.

The ISO shall use reasonable efforts to commence and complete assessments within the timelines set forth in the GIP and this GIP BPM. For any portion of an assessment performed at the direction of the ISO by the PTOs or by a third party, the ISO shall require that this work also be completed within the timelines set forth provided in the GIP and this GIP BPM. If an assessment cannot be completed within those timelines, the ISO will notify the IC and provide an estimated completion date with an explanation of the reasons why additional time is required.

The ISO will also coordinate with Affected System Operators under GIP Section 3.7 and GIP BPM Section 18.1.<sup>10</sup> However, it is the IC who is primarily responsible for contracting

---

<sup>8</sup> See GIP section 6.9.2.3 [which was proposed the IPE-1 tariff amendment filed on Sept. 30 and currently under FERC review].

<sup>9</sup> See GIP appendix 4.

<sup>10</sup> See GIP section 3.7 and GIP BPM section 18.1.

with the Affected System for construction of those Affected System Network Upgrades which are necessary to safely and reliably connect the proposed Generating Facility to the CAISO Controlled Grid. The ISO will provide Affected System Operators with information regarding any modification that has been approved.

#### **9.4.2. How and what to submit**

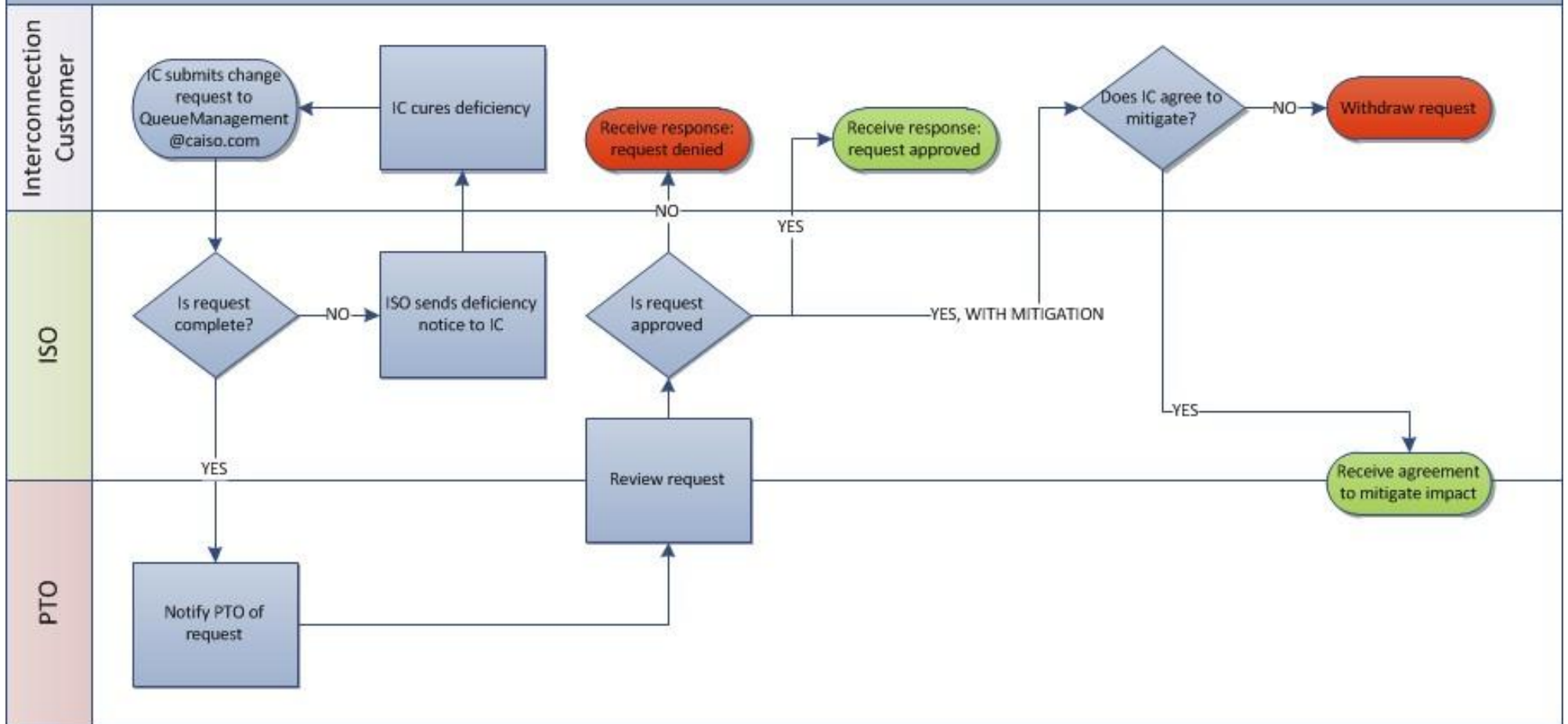
The IC or PTO should submit all modification requests to [QueueManagement@caiso.com](mailto:QueueManagement@caiso.com) for review. Please be descriptive in your email title and include the project name, queue number, and study process. In addition to the modification assessment deposit, all requests should include:

- a description of the proposed changes to the Generating Facility;
- applicable technical information and diagrams (except for changes to Appendix B milestones, all change requests should be accompanied by complete package of 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 Generating Facility, a user written \*.p EPCL file should be submitted.);
- proposed updates to the project milestones; and
- a description of project status including the reason for the change (the description of the reason for the change is the starting point for the ISO business assessment).

#### **9.4.3. High-level overview of assessment process**

A graphical representation of the review process is presented on the next page. **(NOTE: One additional step is needed in the assessment process/diagram. The ISO should notify the IC and the PTO of the outcome of the Material Modification Review, as to whether the request is approved or denied. Currently, when SCE approves a Material Modification Review, SCE typically is not apprised the ISO regarding whether the request was finalized.)**

## Material Modification Review Process – High Level Overview



#### **9.4.4. Timeline**

Each modification assessment will be completed, and a response will be provided to the IC in writing, within 45 calendar days after the ISO receives a completed modification request and modification assessment deposit. If the modification assessment cannot be completed within that time period, the ISO shall notify the IC and provide an estimated completion date with an explanation of the reasons why additional time is required. The modification assessment will not commence until all of the necessary technical documents have been received.

#### **9.4.5. Engineering Analysis**

In the event that the IC or the PTO was not copied on the modification request, the ISO will forward the request to the appropriate party. The ISO will evaluate the request pursuant to ISO tariff Appendix Y Section 6.9.2. The ISO will work in coordination with the PTO for modifications requested by the IC. For modifications requested by the PTO, the ISO will coordinate with the impacted IC(s).

#### **9.4.6. Business Assessment**

For modification requests from ICs or the PTO, the ISO will perform a business assessment of the project. The purpose of the business assessment is to:

- ensure compliance with applicable ISO Tariff sections;
- ensure compliance with the executed IA or study results, as applicable;
- ensure consistent compliance with applicable ISO tariff sections
- consider the length of time the project has been in the queue<sup>11</sup>

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

#### **9.4.7. Results and Next Steps**

The ISO will draft a response letter to the IC based on the engineering analysis and the business assessment. The ISO will coordinate with the PTO to address any issues and/or concerns raised by the PTO. A final letter will then be issued by the ISO.

For a modification request received from a PTO, based on the assessment, the ISO will coordinate with the impacted IC to address any issues and/or concern raised by the IC. A final letter will then be issued by the ISO.

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

##### **9.4.7.1. Approved**

A modification request that is determined not to be a request for Material Modification is considered approved when the ISO issues a final letter approving it. The requested change will subsequently be made for the project. The approved modification will be incorporated into any future amendments to the GIA.

---

<sup>11</sup> Appendix Y section 3.5.1.4.

#### **9.4.7.2. Approved with Mitigation**

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

#### **9.4.7.3. Denied**

A modification request that is determined to be a request for Material Modification will be denied. If the IC nevertheless informs the ISO that it intends to implement the change, then the Interconnection Request must be withdrawn. The IC 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).

### **9.5. Types of Modifications<sup>12</sup>**

#### **9.5.1. Point of Interconnection (POI)**

During the course of the Interconnection Studies, the IC, PTO or the ISO may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes are acceptable to the applicable PTO(s), the ISO and the IC, such acceptances not to be unreasonably withheld, the ISO shall modify the Point of Interconnection. After completion of the study process, the ISO will review POI change requests through the modification assessment process. However, the engineering scope of these reviews is limited, and if the ISO and PTO cannot conclusively determine that the proposed POI change improves the costs and benefits without a re-study, the ISO 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 IC, the PTO, and the ISO without a re-study.

#### **9.5.2. COD Changes**

##### **9.5.2.1. Time in Queue**

The COD for projects studied in the *cluster* process shall not exceed seven (7) years from the ~~COD specified in the Interconnection Request.~~ date the Interconnection Request is received by the ISO<sup>13</sup>

ICs requesting COD extensions beyond those timeframes must clearly demonstrate that engineering, permitting and construction will take longer than the 7-year period and that circumstances that caused the delay were beyond the control of the IC. The ISO and PTO will not unreasonably withhold agreement to this extension, but the IC must provide sufficient documentation to support the request prior to commencement of the modification assessment.

---

<sup>12</sup> GIP Section 6.9.2.

<sup>13</sup> Appendix Y section 3.5.1.4.

#### **9.5.2.2. COD Extensions as they Relate to Financial Obligations**

Any permissible extension of the COD will not alter the IC'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 ISO will not permit a COD extension as a vehicle for delaying security postings or other milestones.

#### **9.5.2.3. Phased Implementation for Market Participation**

The ISO permits and has a procedure for phased implementation of a proposed Generating Facility. In general, if phasing is not already contemplated in the executed GIA and the IC desires phasing of its project for participation in the ISO markets, the IC shall work with the ISO to draft an implementation plan that outlines the phased approach, the plan to provide test energy, Participating Intermittent Resource Program testing plan, or other tasks as required on a project-specific basis. Please note that the IC is not eligible to receive, and the PTO is not required to commence, ~~commence~~ repayment of the Network Upgrades until the project's performance capabilities have been met in accordance with the GIA, including as applicable, the total capability has achieved the COD. Please refer questions on the topic to [QueueManagement@caiso.com](mailto:QueueManagement@caiso.com).

#### **9.5.2.4. COD accelerations**

The ISO and PTO 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 ISO and PTO 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 within 6 months, the IC will not be permitted to accelerate its COD as a project pursuant to the Material Modification provisions of the ISO tariff. Alternatively, the IC can request and fund a Limited Operation Study in accordance with Section 5.9 of the Interconnection Agreement.

### **9.5.3. Changes to the Fuel Type of the Proposed Project**

Generally, a change to a project's fuel type cannot be evaluated without a re-study, and as outlined in section 7.1.2 of this BPM, where the ISO has granted modifications after the conclusion of an IC's Phase II Interconnection Study phase, the ISO must be able to evaluate the change and find it acceptable without the need to undertake a re-study in order to approve it as non-material.

### **9.5.4. Project Technology Changes**

#### **9.5.4.1. Inverter Changes**

Changes that do not qualify under section 7.2.1.6 of this BPM Must be reviewed in the Material Modification Assessment process.

#### **9.5.4.2. Equipment and Transformer Changes**

The ISO will consider changes to project equipment and transformers to be non-material if the change is “like for like” and does not cause significant electrical changes, including changes to short circuit duty or reactive support.

#### **9.5.5. 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.

#### **9.5.6. Site Location**

The ISO and PTO 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.

#### **9.5.7. Changes to Point of Change of Ownership Location**

The ISO and PTO 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.

#### **9.5.8. Decreases in Electrical Output (MW) of the Proposed Project<sup>14</sup>**

##### **9.5.8.1. Between Phase 1 and Phase 2 Interconnection Studies**

After receiving from the IC any modification elections involving decreases in electrical output (MW) of the Generating Facility and/or changes (*i.e.*, reductions) in Deliverability Status as permitted under GIP Section 6.9.3, the ISO, in coordination with the applicable PTO(s), will determine, based on best engineering judgment, whether such modifications will eliminate the need for any Delivery Network Upgrades identified in the Phase I Interconnection Study report. The ISO and applicable PTO(s) will not conduct any re-studies in making this determination.

If the ISO and applicable PTO(s) should determine that one or more Delivery Network Upgrades identified in the Phase I Interconnection Study are no longer needed, then, solely for purposes of calculating the amount of the IC’s initial Financial Security posting under GIP Section 9.2, such Delivery Network Upgrade(s) will be considered to be removed from the plan of service described in the IC’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 ISO will inform in a timely manner any ICs so affected, and provide the ICs with written notice of the revised initial Interconnection Financial Security posting amounts. No determination under this Section shall affect either (i) the timing for the initial Interconnection Financial Security posting or (ii) the maximum value for the IC’s total cost responsibility for Network Upgrades established by the Phase I Interconnection Study report.

---

<sup>14</sup> GIP BPM Section 6.9.4.

#### **9.5.8.2. Downsizing Due to Permitting or Land Issues**

With respect to downsizing requests based on permitting or land issues, the IC must provide certain documentation to make such a demonstration.

In the case of permitting issues, the customer should provide a written statement that the construction of the facility at the total MW size specified in the Interconnection Request will likely result in disapproval due to a significant environmental or other impact that cannot be mitigated.

In the case of a failure to obtain a legal right to use of the full site acreage necessary to construct/operate the total MW generating capacity size for the entire generating facility after making diligent efforts, the requested modification will be granted without modification review. This avenue is only applicable where an IC previously demonstrated and maintained its demonstration of site exclusivity.

#### **9.5.9. Changes from Full or Partial Deliverability Status to Partial Capacity or Energy-Only Deliverability Status<sup>15</sup>**

Within five (5) Business Days following the Phase I Interconnection Study Results Meeting, the IC is required to complete and submit to the ISO the form set forth in Appendix B to GIP Appendix 3. In that form, the IC may change the proposed project's designation from Full or Partial Capacity Deliverability Status to Partial Capacity or Energy-Only Deliverability Status.<sup>16</sup>

For ICs that elect Energy-Only Deliverability Status, this election will eliminate the Deliverability Network Upgrade portion of the first Interconnection Financial Security posting required of the IC, but it will not lower the Phase I cost cap. The reason the cost cap remains the same is that no restudy will be performed based on such project changes and the IC's allocation of Reliability Network Upgrades as determined in the Phase II studies could be higher than the reduced first Interconnection Financial Security posting amount that is based on the project's election to move from Full Capacity to Energy-Only Deliverability Status.

For ICs that elect modification involving decreases in Deliverability Status, the CAISO, in coordination with the applicable PTO(s), will determine, based on their best engineering judgment, whether such modifications will eliminate the need for any Delivery Network Upgrades identified in the Phase I Interconnection Study report. The ISO and applicable PTO(s) will not conduct any re-studies in making this determination.

If the ISO and applicable PTO(s) should determine that one or more Delivery Network Upgrades identified in the Phase I Interconnection Study are no longer needed, then, solely for purposes of calculating the amount of the IC's initial Financial Security posting under GIP Section 9.2, such Delivery Network Upgrade(s) will be considered to be removed from the plan of service described in the IC's Phase I Interconnection Study report and the cost estimates for such upgrades shall not be included in the calculation of Interconnection Financial Security. The ISO will inform in a timely manner any ICs so affected, and provide

---

<sup>15</sup> See GIP section 6.9.3.

<sup>16</sup> GIDAP Sections 7 and 7.1.



the ICs with written notice of the revised initial Interconnection Financial Security posting amounts. No such determination under this section shall affect either (i) the timing for the initial Interconnection Financial Security posting or (ii) the maximum value for the IC's total cost responsibility for Network Upgrades established by the Phase I Interconnection Study report.