



**California ISO**  
Shaping a Renewed Future

# **Interconnection Process Enhancements**

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## **Draft BPM Language Topic 15 – Material Modification Review With Stakeholder Comments**

**December 16, 2013**

[Note: This draft BPM language is tailored for inclusion in the GIP BPM. The draft BPM language, as revised, will be tailored for inclusion in the GIDAP BPM and the Reliability Requirements BPM.]

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## 9. Overview of Modification Provisions

The Interconnection Customer (“IC”) 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 IC will be permitted to make the change. Requests to increase the MW capacity are not permitted except to the extent permitted by the relevant interconnection procedures as discussed further below in sections 9.1.2 and 9.2.1. Any request to increase capacity of a project must be approved through the submission of a new Interconnection Request. ~~The request to modify will be approved and the IC shall retain its Queue Position if an approved modification is determined not to be a Material Modification. A request to modify will be denied and the IC but shall not be permitted to make the modification while retaining its Queue Position and make the modification if the modification is determined to be a Material Modification.~~ [MSH1]

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”). A modification 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 (“PTO”) (such as shifting costs from the IC to the PTO);
- the costs assigned to other ICs; or
- the timing or cost for the construction of Reliability Network Upgrades which are intended to be utilized by multiple ICs; or
- the timing or cost of other ICs’ Interconnection Facilities that are dependent on the Network Upgrades or Interconnection Facilities of the IC requesting the change.

A modification request will be approved if the criteria set forth below are met, and the IC is in good standing. An IC is in good standing if it is in full compliance with its obligations under its generator interconnection agreement (GIA), if it has one, and the terms of the applicable interconnection procedures in accordance with the CAISO Tariff. An IC’s obligations under the GIA include milestones, postings and required payments. With respect to modifications where CAISO consent is required, the ISO will not unreasonably withhold consent for timely modification requests which are determined to be not Material Modifications.<sup>1</sup>

In response to the modification request, the CAISO, in coordination with the 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 CAISO will assess modification requests to ensure that transmission and generation schedules are consistent with each other. [DAL2].

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

The CAISO 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 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 IC shall then provide the results to any Affected System Operator, if applicable<sup>[DAL3]</sup>. The CAISO 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<sup>[DAL4]</sup>. When the PTO initiates a modification request, the CAISO will create an order number and <sup>[MSH5]</sup>make reasonable efforts to inform the IC<sup>[DAL6]</sup> and make reasonable efforts to obtain its concurrence with the proposed change. Although the PTO 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 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 CAISO will only process requests at certain times as discussed further below.

### 9.1.1. Requests During the Project’s Interconnection Studies

The CAISO will not process modification requests from projects while the project is being studied during the Phase I Interconnection Study process or Phase II Interconnection Study process, or other studies<sup>[DAL7]</sup>. 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 CAISO 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 GIDAP<sup>[DAL8]</sup> 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 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; and

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<sup>2</sup> Appendix Y, Section 6.9.2.2.

<sup>3</sup> Appendix Y, Section 6.9.2.2.

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

- 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; or (3) to a lower level of Partial Capacity Deliverability Status.

For any modification other than these, the IC must first request that the CAISO 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 CAISO 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 CAISO in an Interconnection Study or otherwise allowed under the CAISO Tariff or Business Practice Manuals, shall constitute a Material Modification.

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 Interconnection Study results have been issued, the IC 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. If the CAISO determines, pursuant to prudent engineering judgment, that a re-study is necessary, then 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 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 CAISO 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 CAISO 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 CAISO's business practice is to approve 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 by requesting because the MMA request was made in advance of other existing tariff opportunities to modify the project (i.e. between Phase I and Phase II Interconnection Studies);

- 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 IC's costs;
- the modification will not adversely impact the In-Service Date or Commercial Operation Date of any other IC's project;
- 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 or cost of the construction of **Reliability Network Upgrades** which are intended to be utilized by multiple ICs;
- the modification will not adversely impact the timing or cost of other ICs' Interconnection Facilities that are dependent on the Network Upgrades or Interconnection Facilities of the IC requesting the change;
- the transmission will be in place for the IC's proposed In-Service Date of the project;
- the project for which the request is being made is in good standing; 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 9.4 of this BPM.

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

The CAISO will assess the following types of modifications to confirm that the requested modifications meet the criteria below. The customer must provide the CAISO and PTO with notice of the modification. The CAISO 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 9.1.2 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 GIA,<sup>5</sup> then the project is deemed to have met the substantial performance obligations of the GIA. 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 CAISO that construction of a Reliability Network Upgrade or required pre-cursor 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 CAISO that includes the previous In-Service Date and the new In-Service Date. The CAISO will confirm the PTO's conclusion and evaluate whether any other projects are affected by the date change. The CAISO will review the conclusion with all impacted ICs before making a decision on the request.

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<sup>5</sup> Appendix CC, Article 5.19.4.

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 a Network 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, 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 IC must demonstrate to the CAISO. Thus if the Initial Synchronization Date was 30 days after 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.

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

If the COD of a proposed Generating Facility is changed by 6 months or less (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. 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 MMA.

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

If the IC 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. The IC 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.

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

The IC must include a modification assessment deposit at the time the IC requests modification. The CAISO 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 CAISO deposits all modification assessment deposits into an interest-bearing account at a bank or financial institution designated by the CAISO. The CAISO will create a unique order number for each MMA in order to account for costs.[MSH11] 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 CAISO or PTOs, as applicable, to perform and administer the modification assessment and to meet and otherwise communicate with ICs with respect to their projects.

<sup>6</sup> Appendix Y, Section 12.2.

<sup>7</sup> See Appendix Y, Section 6.9.2.3.



In general, the IC will receive invoices from the CAISO that list assessment expenses incurred and corresponding amounts due, and that provide at least the level of detail included in invoices for interconnection studies. The amounts due will be offset against the IC's study deposit. If the amounts due exceed the study deposit, the invoice will direct the customer to pay the excess amount. PTOs will provide invoices to the CAISO 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 CAISO, as applicable, have incurred on the IC's behalf to perform the assessment. In the event that the IC withdraws its modification 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 CAISO will publish aggregated cost data regarding modification assessments. The data report will be published annually and will include the types of modification requests conducted and the cost for the assessment. The data will be aggregated to a level such that individual projects cannot be identified.

### **9.3.3. Obligation for Study Costs** [DAL12]

The modification assessment deposit will be applied against actual assessment costs and the IC will pay the actual costs of the assessment 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 CAISO for such work, and the CAISO shall issue invoices for the modification assessment that shall include a detailed and itemized accounting of the cost of each Interconnection Study, and that provide at least the level of detail included in invoices for interconnection studies. The CAISO shall draw from the modification assessment deposit any undisputed costs by the IC within thirty (30) calendar days of issuance of an MMA 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 CAISO issued invoice within thirty (30) calendar days. The CAISO is not obligated to continue to conduct the assessment unless and until the IC has paid all undisputed amounts.

## 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 CAISO and the PTO as to their allocation of responsibilities.<sup>9</sup> [DAL13] 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 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 CAISO shall use reasonable efforts to commence and complete assessments within the timelines set forth in the GIP/GIDAP and this GIP BPM.<sup>10</sup> For any portion of an assessment performed at the direction of the CAISO by the PTOs or by a third party, the CAISO shall require that this work also be completed within the timelines set forth in the GIP and this GIP BPM. If an assessment cannot be completed within those timelines, the CAISO will notify the IC 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 GIP Section 3.7 and GIP BPM Section 18.1. However, it is the IC that is responsible for contracting with the Affected System for construction of those Affected System Network Upgrades which are necessary to safely and reliably connect the proposed Generating Facility to the CAISO Controlled Grid. The CAISO 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 detailed in the subject of your email and include the project name, queue number, 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 Generating Facility;
- 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 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; and

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<sup>8</sup> See Appendix Y, Section 6.9.2.3.

<sup>9</sup> See Appendix Y, Appendix 4.

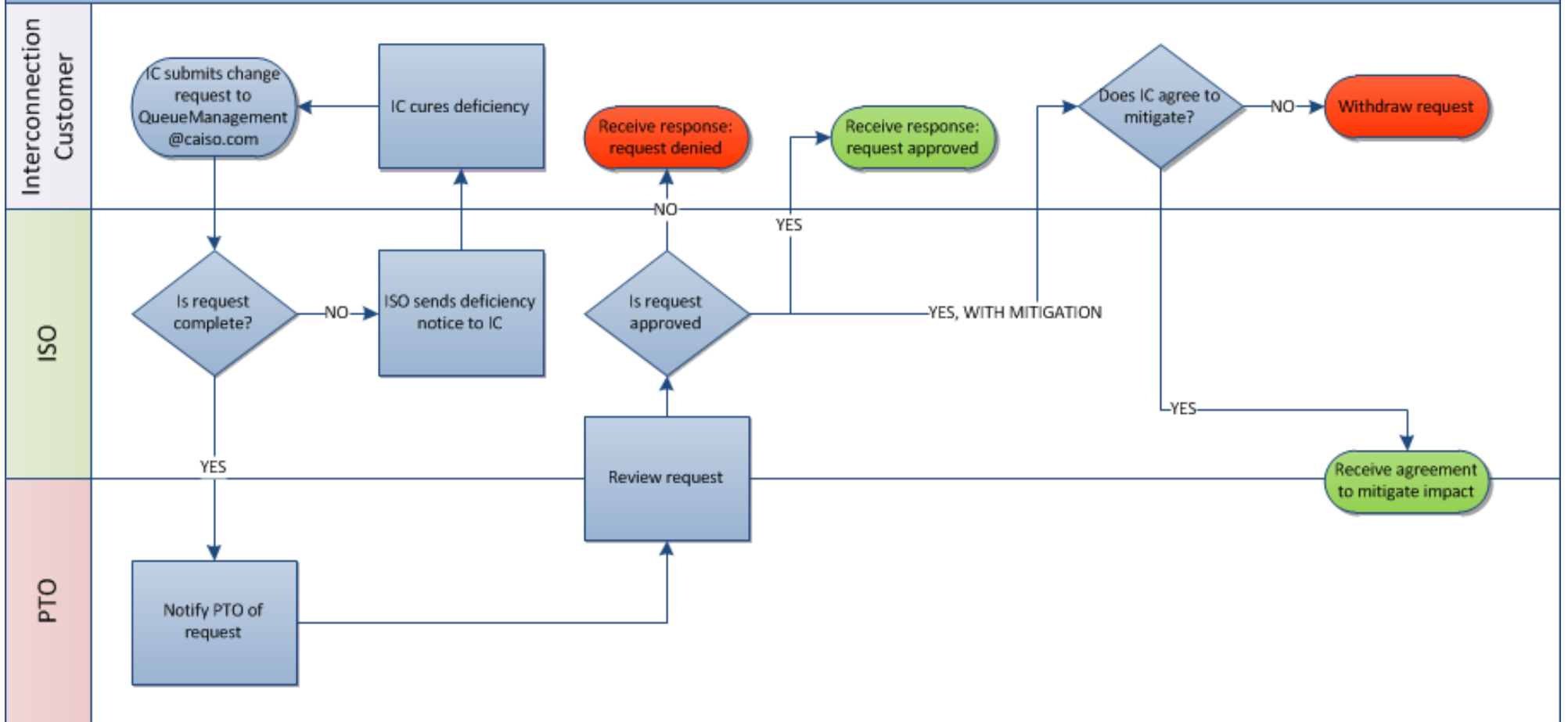
<sup>10</sup> See Appendix Y, Section 6.9.2.3 and this BPM Section 9.4.4.

- 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 CAISO business assessment described in Section 9.4.6 of this BPM).

### **9.4.3. 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



#### **9.4.4. Timeline**

The modification assessment will not commence until a completed modification request (including all of the necessary technical documents) and the IC's modification assessment deposit have been received. Reasonable efforts will be used to complete each assessment and Each modification assessment will be completed, and a response will be provided a response to the IC in writing, within 45-90 calendar days<sup>[ZW14]</sup> after the CAISO receives a completed modification request and modification assessment deposit. If the modification assessment cannot be completed within that time period, the CAISO shall notify the IC and provide an estimated completion date with an explanation of the reasons why additional time is required.

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

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

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

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

- ensure compliance with applicable CAISO Tariff sections;
- ensure compliance with the executed IA or study results, as applicable;
- ensure consistent compliance with applicable CAISO tariff sections<sup>[DAL15]</sup>; and
- consider the length of time the project has been in the queue.<sup>11</sup>

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

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

The CAISO will draft a response letter to the IC based on the engineering analysis and the business assessment. The CAISO 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 CAISO.

For a modification request received from a PTO, based on the assessment, the CAISO 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 CAISO.

The CAISO 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 CAISO issues a final letter approving

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<sup>11</sup> Appendix Y, Section 3.5.1.4.

it. The approved modification will be incorporated into any future amendments to the GIA.

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

A modification request that is approved under specific conditions outlined in the CAISO response to the IC is approved with mitigation. The IC must explicitly agree to the mitigation for the request 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 Material Modification will be denied. If the IC nevertheless informs the CAISO 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 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 PTO(s), the CAISO and the IC, such acceptances not to be unreasonably withheld, the CAISO shall modify the Point of Interconnection.

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 PTO 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 IC, the PTO, and the CAISO 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 date the Interconnection Request is received by the CAISO.<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 CAISO and PTO will not unreasonably withhold agreement to this extension,

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<sup>12</sup> Appendix Y, Section 6.9.2.

<sup>13</sup> Appendix Y, Section 3.5.1.4.

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

#### **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 CAISO 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<sup>[DAL16]</sup>**

The CAISO 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 CAISO markets, the IC shall work with the CAISO 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, 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 CAISO 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 CAISO 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 of the approved COD, the IC will not be permitted to accelerate its COD. Alternatively, the IC can request and fund a Limited Operation Study in accordance with Article 5.9 of the GIA.

### **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, because the output profile of various fuel-types is different, and as outlined in Section 9.1.3 of this BPM, where the CAISO has granted modifications after the conclusion of an IC'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 in order to approve it as non-material. The CAISO will consider a change in fuel type if the IC is willing to retain the MW approved through the original study process. For example, consider a hypothetical 300 MW wind-powered unit that has an output profile of 192 MW on-peak and 300 MW off-peak. If the IC wants to change the 300 MW wind-powered unit to a 192 MW solar-powered unit, then the CAISO will perform a MMA regarding that modification request.

## **9.5.4. Project Technology Changes**

### **9.5.4.1. Inverter Changes**

Changes that do not qualify under Section 9.2.1.5 of this BPM must be reviewed in the Material Modification Assessment process.

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

The CAISO will consider changes to project equipment and transformers to be non-material if the change is substantially similar 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 CAISO 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 CAISO 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 CAISO, in coordination with the applicable PTO(s), will determine, based on best engineering judgment, whether such modifications will eliminate the need for any Network Upgrades identified in the Phase I Interconnection Study report. The CAISO and applicable PTO(s) will not conduct any re-studies in making this determination.

If the CAISO and applicable PTO(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 IC'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 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 CAISO 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

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



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.

#### **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. Such an approval will not result in any decrease in interconnection financial security or cost responsibility prior to or inconsistent with the results of the reassessment process as described in Section 7.4 of the GIDAP, as such reductions would negatively impact other ICs or PTOs. 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 CAISO 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 or reduce the Partial Capacity Deliverability Status level.<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 re-study 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

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<sup>15</sup> See Appendix Y, Section 6.9.3.

<sup>16</sup> Appendix DD, Sections 7 and 7.1.

Upgrades identified in the Phase I Interconnection Study report. The CAISO and applicable PTO(s) will not conduct any re-studies in making this determination.

If the CAISO 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 CAISO 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 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.