



January 7, 2016

The Honorable Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

**Re: California Independent System Operator Corporation  
Docket No. ER16- \_\_\_\_ -000**

**Tariff Amendment to Implement 2015 Interconnection Process  
Enhancements**

Dear Secretary Bose:

The California Independent System Operator Corporation (“CAISO”) submits this tariff amendment to improve its generator interconnection process.<sup>1</sup> This amendment represents the second and final planned set of tariff revisions resulting from the CAISO’s 2015 Interconnection Process Enhancements (“IPE”) stakeholder initiative.<sup>2</sup> The CAISO’s proposed amendment consists of ten categories of revisions:

- A. Affected systems: The CAISO, in lieu of interconnection customers, will notify potentially affected systems of proposed generator interconnections. Potentially affected systems will then have 60 days to

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<sup>1</sup> The CAISO submits this filing pursuant to section 205 of the Federal Power Act, 16 U.S.C. § 824d. Capitalized terms not otherwise defined herein have the meanings set forth in the CAISO tariff, and references to specific sections, articles, and appendices are references to sections, articles, and appendices in the current CAISO tariff and revised or proposed in this filing, unless otherwise indicated.

<sup>2</sup> The Commission approved the CAISO’s revisions to the generator downsizing process on November 24, 2015. *California Independent System Operator Corp.*, 153 FERC ¶ 61,242 (2015). The CAISO initially indicated that it expected to file the IPE revisions in four separate filings. *California Independent System Operator Corp.*, 153 FERC ¶ 61,242 (2015). However, for administrative efficiency, the CAISO is electing to include all remaining proposed revisions here.

verify whether they are actual affected systems that want to be involved in the study processes. With limited exceptions, the CAISO will not delay the synchronization of an interconnection customer if an affected system fails to identify itself within the timeline and later raises an issue. The proposed modifications will reduce administrative burden and financial, schedule, and engineering uncertainty for interconnection customers, affected systems, transmission owners, and the CAISO.

- B. Commercial viability criteria: Interconnection customers requesting extensions to their commercial operation dates that would exceed tariff expectations (ten years in queue for serial customers; seven years for queue clusters) would need to meet commercial viability criteria to maintain their deliverability capacity allocations. Interconnection customers that cannot meet the criteria can remain in queue as energy only. The criteria are (1) have financing or a power purchase agreement (“PPA”); (2) have site exclusivity for 100% of the site; (3) have applied for all required permits; and (4) have executed a Generator Interconnection Agreement (“GIA”) and remain in good standing. The commercial viability criteria will incentivize interconnection customers to develop viable projects while in queue and help to prevent stale or degraded interconnection studies.
- C. Reverse the “trigger” of tendering and negotiating the GIA: Instead of tendering the GIA based on completion of initial studies, tender the agreement based on the longest construction lead-time for required network upgrades, plus time for negotiation. Interconnection customers may still request GIAs earlier. Interconnection customers will thus be able to commence GIA negotiations when they desire (or must) in order to commence procurement and design.
- D. Deposits: Require a \$150,000 interconnection request deposit for small and large generators in lieu of the current deposit requirement of \$50,000 plus \$1,000/MW. This requirement should be sufficient to cover expected costs for the vast majority of projects without deterring small projects, and will provide interconnection customers reasonably accurate expectations for study costs. The CAISO also proposes to require \$10,000 study deposits for certain optional studies where the tariff does not already require deposits.

- E. Stand-alone Network Upgrades: Mitigate cost-shifting risks to transmission owners and other interconnection customers by requiring security for the self-build of Stand-alone Network Upgrades until the GIA is executed.
- F. “Automatic” modifications: Provide interconnection customers additional flexibility by expanding the project changes allowed between phase I and phase II interconnection studies to include changes relating to in-service date, trial operation date, commercial operation date, and point of interconnection.
- G. Phase II study results updates: Clarify that the CAISO can update the phase II study results for changes due to interconnection customer or transmission owner modification requests.
- H. GIA insurance requirements: Update GIA insurance language to be consistent with current insurance industry standards.
- I. Clarify the following financial security requirements: the earliest date interconnection customers can make financial security postings; when posting dates may be adjusted due to study report revisions associated with errors and omissions; and how the ability to obtain interconnection financial security refunds associated with failure to secure a PPA applies to interconnection customers that previously have attested to having a PPA or balance-sheet financing.
- J. Option B projects: Clarify that projects electing transmission plan deliverability option B can proceed as energy-only deliverability status or withdraw.

Each revision is discussed in detail in Section II, below.

## **I. Background**

California’s renewable portfolio standard<sup>3</sup> and the associated changes in the generation development marketplace have made it increasingly important over the past several years for the CAISO to identify ways to administer its

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<sup>3</sup> See California P.U.C., “California Renewables Portfolio Standard,” *available at* <http://www.cpuc.ca.gov/PUC/energy/Renewables/>.

generator interconnection queue more efficiently.<sup>4</sup> The CAISO's overriding goal has been to tailor its procedures to promote California's energy goals while ensuring that they continue to be grounded in principles of cost-causation, fairness, and non-discrimination. Because of the rapid evolution of generation development in California, achieving these goals has required the CAISO to engage in a process of continuous review and enhancement of its generator interconnection procedures.<sup>5</sup> After implementing significant generator interconnection reforms in 2008,<sup>6</sup> 2010,<sup>7</sup> and 2012,<sup>8</sup> the CAISO launched its first IPE initiative in 2013.<sup>9</sup> The 2013 IPE initiative resulted in interconnection enhancements to the CAISO tariff, business practice manuals, and procedures in 2013 and 2014.<sup>10</sup>

After the success of the 2013 IPE initiative, the CAISO re-launched the IPE Initiative at the beginning of 2015. The CAISO worked with stakeholders to identify and develop what became 11 proposals for improvement in the following areas: affected systems; time in queue limitations; negotiation of GIAs; stand-alone network upgrades; allowable modifications between initial studies; conditions for the issuance of study reports; GIA insurance requirements;

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<sup>4</sup> There were over 260 projects in the interconnection queue as of September 21, 2015. See <http://www.caiso.com/planning/Pages/GeneratorInterconnection/Default.aspx> (CAISO website page listing projects in the queue).

<sup>5</sup> The generator interconnection process and related provisions are set forth primarily in section 25 of the CAISO tariff. The interconnection procedures and *pro forma* generator interconnection agreements ("GIAs") are contained in appendices S through FF.

<sup>6</sup> *California Independent System Operator Corp.*, 124 FERC ¶ 61,292 (2008) (approving revisions to move from a serial to a cluster process, and to establish project viability and developer commitment as soon as interconnection customers have an estimate of the costs of their projects).

<sup>7</sup> *California Independent System Operator Corp.*, 133 FERC ¶ 61,223 (2010) (approving revisions to harmonize the CAISO's LGIP with its SGIP by establishing integrated cluster study processes for small and large generators, and to expedite study processes for independent or otherwise adroit generators by implementing new independent study and fast track processes).

<sup>8</sup> *California Independent System Operator Corp.*, 140 FERC ¶ 61,070 (2012) (approving revisions to integrate the transmission planning and generator interconnection processes).

<sup>9</sup> Further background information on the IPE initiative is provided in the CAISO's September 30, 2013 tariff amendment filing in Docket No. ER13-2484 to implement the first set of tariff revisions to come from that initiative.

<sup>10</sup> See, e.g., *California Independent System Operator Corp.*, 149 FERC ¶ 61,231 (2014); 148 FERC ¶ 61,077 (2014); 145 FERC ¶ 61,172 (2013).

deliverability options for interconnection customers willing to assume cost responsibility without repayment; and the forfeiture of funds upon withdrawal after downsizing.<sup>11</sup> The CAISO submitted the first amendment, regarding the generator downsizing process, on September 30, 2015 in Docket No. ER15-2752-000, which was approved by the Commission on November 24, 2015.<sup>12</sup> The instant filing seeks to implement the remaining ten proposals.

## II. Proposed Tariff Revisions

### A. Affected Systems

#### 1. Background

Affected Systems are electric systems other than the CAISO Controlled Grid that may be affected by a proposed generator interconnection to the CAISO. Pursuant to Order No. 2003,<sup>13</sup> the CAISO tariff currently requires the CAISO to notify affected systems of any proposed interconnection that may affect it; coordinate studies to determine the potential impact; include the affected system in all study meetings; and include available affected system study results in the applicable CAISO interconnection studies.<sup>14</sup> The tariff also requires interconnection customers to enter into an agreement with the owner of the affected system to study, identify, and mitigate any reliability impacts to the affected system, cooperate with the CAISO, and consent to the release of all relevant information to the affected system.

For the affected systems themselves, however, the tariff only states that they should “cooperate with the CAISO in all matters related to the conduct of

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<sup>11</sup> Three other proposed topics have resulted or will result in changes to the CAISO’s Business Practice Manuals: oversizing generator inverters within capacity limits; site exclusivity criteria where multiple projects share a common site; and affidavit requirements for the accelerated study process.

<sup>12</sup> *California Independent System Operator Corp.*, 153 FERC ¶ 61,242.

<sup>13</sup> *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146 at PP 116 - 122 (2003), *order on reh’g*, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160, *order on reh’g*, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171 (2004), *order on reh’g*, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005), *aff’d sub nom. Nat’l Ass’n of Regulatory Util. Comm’rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007), *cert. denied*, 552 U.S. 1230 (2008).

<sup>14</sup> Section 3.7 of Appendix DD.

studies and the determination of modifications.”<sup>15</sup> This provision is notably lacking in detail and leaves interconnection customers, CAISO transmission owners, and the CAISO subject to a great deal of uncertainty with respect to the affected systems, who in turn are often waiting for data, deposits, or agreements from interconnection customers. There is currently no definitive timeframe in the CAISO tariff in which an affected system must identify itself and begin to determine whether any network upgrade modifications are required to mitigate reliability impacts caused by the new generator. This allows an electric system operator that may be an affected system to engage with the interconnection customer or the CAISO very late in the process—well after CAISO notice—and unnecessarily cause both schedule and cost uncertainty for interconnection customers and CAISO transmission owners.

On the other hand, interconnection customers themselves can often cause or exacerbate issues in coordinating with affected systems. Interconnection customers may delay notifying affected systems, entering into study agreements, or providing additional technical data. Some interconnection customers can even refuse to mitigate impacts on affected systems or coordinate with affected systems at all.

While the Commission may see relatively few affected system disputes, they occur frequently for ISOs, RTOs, transmission owners, interconnection customers, and the affected systems themselves. For this reason, although the vast majority of commenters urged the Commission to let rules develop on a regional basis and through regional processes (such as this one), several parties agreed that if the Commission re-evaluates new national standards for interconnection customers, it should evaluate the procedures related to affected systems as well.<sup>16</sup> In any case, given the frequency and controversy of the issues the CAISO, affected systems, and interconnection customers have had to face, the CAISO believes that interconnection matters should be addressed on a regional basis through stakeholder processes, and therefore addressed affected systems issues in two initiatives.

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<sup>15</sup> *Id.*

<sup>16</sup> See *American Wind Energy Association*, Docket No. RM15-21-000, Joint Comments of the New York Independent System Operator Inc., the Midcontinent Independent System Operator Inc., PJM Interconnection LLC, and the California Independent System Operator Corp., p. 7 (Sep. 8, 2015); Comments of EDF Renewable Energy Inc., pp. 6-10 (Sep. 8, 2015). Importantly, the Modesto Irrigation District—one of the CAISO’s affected systems—responded to these comments and urged the Commission *not* to address affected systems on a national basis because of the progress of regional stakeholder initiatives such as this one, which are more effective. See Answer and Motion for Leave to Answer out-of-time of the Modesto Irrigation District (Oct. 7, 2015).

In 2014 the CAISO initiated a stakeholder process to develop Business Practice Manual procedures for notifying and working with affected systems on new interconnections.<sup>17</sup> The CAISO—and not interconnection customers— notifies affected systems that an interconnection may have a potential impact on their systems.<sup>18</sup> CAISO notification allows the CAISO to ensure that each affected system has been contacted on a timely basis and allows the affected systems to see in one correspondence all the proposed generators whose interconnections may affect their systems for each interconnection cluster.

Although these changes were beneficial to a certain extent, they did not entirely resolve the issue. Based on their experiences, interconnection customers and affected systems both stressed the need for a definitive time by which the affected system must be notified, and a definitive time by which an electric system operator must identify itself as an actual affected system.<sup>19</sup> As such, the CAISO worked with stakeholders—including the affected systems—to add details to the CAISO tariff regarding affected systems.

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17 See [https://www.caiso.com/informed/Pages/StakeholderProcesses/CompletedStakeholderProcesses/AffectedSystemImpacts\\_GeneratorInterconnection.aspx](https://www.caiso.com/informed/Pages/StakeholderProcesses/CompletedStakeholderProcesses/AffectedSystemImpacts_GeneratorInterconnection.aspx). See also CAISO Business Practice Manual for Generator Interconnection and Deliverability Allocation Procedures, Section 6.1.4, available at <http://bpmcm.caiso.com/Pages/BPMDetails.aspx?BPM=Generator%20Interconnection%20and%20Deliverability%20Allocation%20Procedures>.

18 To ensure all potentially affected systems are notified, the CAISO includes the affected systems in each region of the CAISO controlled grid: [https://www.caiso.com/Documents/GeneratorInterconnectionProcedures\\_AffectedSystemsContentList.xls](https://www.caiso.com/Documents/GeneratorInterconnectionProcedures_AffectedSystemsContentList.xls). For example, interconnections in the “PG&E North Area” (Humboldt, North Coast, North Bay, North Valley, Central Valley, Greater Bay Area including San Francisco Peninsula) may affect the Western Area Power Administration, California Department of Water Resources, the City & County of San Francisco, Modesto Irrigation District, Northern California Power Agency, NV Energy, Sacramento Municipal Utility District, Transmission Agency of Northern California, Turlock Irrigation District, and the City of Redding. Interconnections in “Southern California Edison Co. North Area” (SCE transmission system north of Vincent substation, generally includes Big Creek, Tehachapi and Ventura areas) may affect the Los Angeles Department of Water Resources and Power and the California Department of Water Resources. In total, the CAISO has identified 10 distinct areas where interconnections may affected other systems.

19 Similar to the timeframe and process for WECC Project Coordination and Path Rating.

## 2. *Proposed Revisions*

First, the CAISO proposes to revise its tariff to formalize the obligation that the CAISO—and not interconnection customers—will notify potentially affected systems within 30 days of when interconnection customers post their initial interconnection financial security.<sup>20</sup> However, the CAISO worked with stakeholders to develop a list of limited circumstances that warrant later notification. The CAISO therefore proposes to provide late notification to potentially affected systems where (i) the CAISO failed to identify the affected system initially for any reason (*e.g.*, due to administrative error); (ii) the interconnection customer modifies its project such that an electric system operator becomes a potentially affected system; or (iii) the interconnection customer converts from a Wholesale Distribution Access Tariff to the CAISO tariff and the same affected systems were not notified previously (or the conversion was due to a system change). In these limited circumstances, the CAISO will coordinate with the interconnection customer and the potentially affected system to develop an expedited timeline to determine whether the potentially affected system actually may have a reliability impact so as to warrant affected system studies. The CAISO will then notify the interconnection customer as soon as practical of the new identified affected systems.

Second, the CAISO proposes to give a potentially affected system 60 days to determine whether it is, in fact, an “identified affected system” and to notify the CAISO accordingly. If the potentially affected system does not respond, the CAISO will assume that it is not affected by the proposed interconnection. An affected system’s determination that it is an “identified affected system” merely conveys that the identified affected system wants to coordinate studies to determine potential reliability impact and any required mitigation, and be included in CAISO interconnection study results meetings for that generator.<sup>21</sup> Because the affected system is not required to conduct any studies during this 60-day period or make any final determinations regarding the reliability impacts of the interconnection, a 60-day notification period is reasonable. This straightforward notification period will provide meaningful certainty for interconnection customers: They will know exactly which affected

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<sup>20</sup> Initial interconnection financial security postings generally occur after the interconnection customers’ Phase I study results meetings (approximately one year into the interconnection process). The CAISO intends to provide these notices in complete batches to each affected system (*i.e.*, one email and letter containing all of the proposed interconnections that may affect their system) for administrative efficiency.

<sup>21</sup> In other words, the CAISO does *not* propose to require affected systems to determine actual impact and mitigation at this time; only the potential for impact.

systems with which they will need to coordinate studies and, perhaps more importantly, they know other affected systems cannot raise objections to their interconnection to the CAISO later in the process (absent extenuating circumstances, as discussed below). Interconnection customers will thus be exposed to fewer affected system risks and uncertainties

Third, because affected systems inherently are not subject to the CAISO tariff, the CAISO proposes to include in the tariff how the CAISO will proceed if affected systems fail to identify themselves on a timely basis (rather than try to impose requirements on the affected systems themselves). If an electric system operator advises the CAISO that it is an affected system outside of the 60-day window, the CAISO will not delay the synchronization or commercial operation of the generator unless the electric system operator identifies and the CAISO confirms a reliability issue. Moreover, any mitigation the electric system operator that failed to timely identify as an identified affected system determines is necessary will be the responsibility of the electric system operator and not of the CAISO, the participating transmission owner(s), or the interconnection customer.<sup>22</sup>

The CAISO believes that the proposed modifications will work in concert to reduce administrative burden and financial, schedule, and engineering uncertainty for interconnection customers, affected systems, transmission owners, and the CAISO.

## **B. Limitations on Time in Queue**

### *1. Background*

When interconnection customers request an extension to their commercial operation date, the CAISO evaluates the request under the Material Modification Assessment (“MMA”) process. Under the existing tariff, the in-service date for projects studied in the serial study process should not exceed ten years from when CAISO receives the interconnection request.<sup>23</sup> For projects studied in the

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<sup>22</sup> An affected system’s mitigation remedies that may be available outside the CAISO Tariff are unaffected by these provisions. For example, an affected system may have a separate agreement with the neighboring CAISO transmission owner that addresses mitigation remedies for proposed interconnections.

<sup>23</sup> Section 3.5.1 of Appendix U. Appendix U specifies the required In-service Date—when the generator obtains back feed power—where the other interconnection appendices specify the Commercial Operation Date. These two dates generally must fall very closely to one another,

cluster study process, the commercial operation date should not exceed seven years.<sup>24</sup> However, both study processes allow for extensions beyond the seven- to ten-year limits where “the Interconnection Customer demonstrates, and the applicable Participating TO(s) and the CAISO agree, such agreement not to be unreasonably withheld, that engineering, permitting and construction of the new Generating Facility or increase in capacity of the existing Generating Facility will take longer than the [seven/ten] year period.”<sup>25</sup> These provisions are problematic because they fail to deter projects from lingering in the interconnection queue well beyond the seven- and ten-year periods, which undermines the CAISO’s ability to administer the interconnection process efficiently, and which has significant cascading effects for newer projects that are likely to be more viable.

Generator projects lingering in the interconnection queue is one of the most common and significant issues for the CAISO and other ISO/RTOs.<sup>26</sup> Many projects slow or completely halt their progress toward commercial operation and thus stay in the interconnection queue for several years, even over a decade. Although the CAISO recognizes that many interconnection customers do so for circumstances beyond the interconnection customers’ control, the effects of projects’ lingering in queue are manifold: the longer a project sits in queue, the greater the likelihood that events unfold that would degrade the inputs and results from its interconnection studies. This, in turn, adversely impacts the accuracy of information to be included in subsequent studies and the GIA, which relies in large part on the results of the studies. In addition, lingering projects often hold transmission capacity, deliverability, and bus positions that future, viable interconnection projects could use. Moreover, the methods interconnection customers employ (e.g., suspension, modification requests) have cascading effects for other interconnection customers, transmission owners, and affected systems. While these projects constitute a minority of the queue, they often monopolize the time and energy of every party involved and undermine the

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rendering any difference insignificant for the revisions proposed herein.

<sup>24</sup> Section 3.5.1 of Appendices Y and DD, as applicable.

<sup>25</sup> *Id.*

<sup>26</sup> See, e.g., *American Wind Energy Association*, Docket No. RM15-21-000, Joint Comments of the New York Independent System Operator Inc., the Midcontinent Independent System Operator Inc., PJM Interconnection LLC, and the California Independent System Operator Corp., pp. 4-5 (Sep. 8, 2015) (surveying ISO/RTO concerns on speculative projects); *Midwest Indep. Transmission Sys. Operator, Inc.*, 143 FERC ¶ 61,114 (2013); *Midwest Indep. Transmission Sys. Operator, Inc.*, 147 FERC ¶ 61,189 (2014); *Sage Grouse Energy Project LLC v. PacifiCorp*, 153 FERC ¶ 61,272 (2015).

CAISO's ability to administer generator interconnection process in an efficient and economic manner.

The Commission and ISO/RTOs have recognized that projects' lingering in queue is problematic. Several years after Order No. 2003, the CAISO and other ISO/RTOs amended their interconnection procedures to require proposed commercial operation dates within seven years of the interconnection request from the ten years allotted by Order No. 2003.<sup>27</sup> Likewise, in 2011, the Commission approved MISO's tariff amendments to hold interconnection customers to the seven-year timeline and only allow project to exceed the seven-year timeline for *force majeure* events. The Commission reaffirmed that "a project that never enters Commercial Operation should not be permitted to hold that capacity indefinitely."<sup>28</sup>

The CAISO has expended significant efforts to address the backlog of older projects in its queue, including the interconnection reforms and stakeholder initiatives described above.<sup>29</sup> Nevertheless, as of December 2015, the CAISO has 44 projects with proposed commercial operation dates more than seven years from their interconnection requests.<sup>30</sup> The projects constitute 17% of the interconnection queue. Moreover, 19 projects have anticipated commercial operate dates more than a decade from when they submitted their interconnection requests.<sup>31</sup>

## 2. Proposed Revisions

The CAISO worked with stakeholders to develop tariff revisions that would deter projects from unreasonably lingering in the interconnection queue and support later-queued viable projects that adhere to their commercial operation dates. These revisions consist of a new tariff subsection that will require projects

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<sup>27</sup> See, e.g., Section 3.5.1.4 of Appendix DD of the CAISO tariff; Section 3.3.1 of Attachment X of the MISO tariff; Section 36.1.01 of the PJM tariff.

<sup>28</sup> *Midwest Independent Transmission System Operator, Inc.*, 137 FERC ¶ 61,188 at P 29 (2011).

<sup>29</sup> The CAISO maintains a public generator interconnection queue spreadsheet with all relevant data, dates, and project information for each proposed, withdrawn, and constructed generator at <http://www.caiso.com/planning/Pages/GeneratorInterconnection/Default.aspx>.

<sup>30</sup> To be sure, some of these projects entered the queue so long ago that they did not have to achieve commercial operation for ten years.

<sup>31</sup> Six of these projects have already been in the interconnection queue for over ten years.

that are holding deliverability capacity to meet and maintain certain commercial viability criteria in order to extend their commercial operation dates beyond the seven- or ten-year timeframe.<sup>32</sup>

Importantly, the proposed reforms will not result in the CAISO deeming an interconnection customer withdrawn or terminating a GIA for failing to meet the commercial viability criteria. Interconnection customers still may exceed the seven- or ten-year timeframes when they comply with the existing tariff, which only requires them to demonstrate that “engineering, permitting and construction of the new Generating Facility or increase in capacity of the existing Generating Facility will take longer than the [seven/ten] year period.”<sup>33</sup> Instead, under the CAISO proposal, interconnection customers that fail to meet the commercial viability criteria but who still wish to commence commercial operation beyond seven or ten years will lose their deliverability capacity allocation and proceed as energy-only projects.<sup>34</sup> However, if they still require Full Capacity Deliverability

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<sup>32</sup> Importantly, the commercial viability criteria will apply only to extensions requested by the interconnection customer. Where the transmission owner must request an extension (generally for delays in constructing network upgrades) on the interconnection customer’s behalf, the commercial viability criteria will not apply.

<sup>33</sup> Section 3.5.1 of Appendices U, Y, and DD, as applicable.

<sup>34</sup> Some of the serial studies were completed before the CAISO process of distinguishing Reliability Network Upgrades from Deliverability Network Upgrades. Because the serial study process did not contemplate separating Network Upgrades into the categories of Reliability Network Upgrades and Deliverability Network Upgrades, projects studied under the serial study process that are subject to the consequences of failure to meet commercial viability criteria may also be required to undergo re-study in accordance with Sections 7.6 and/or 8.5 of Appendix U to determine what Network Upgrades and corresponding GIA amendments will be required to interconnect their project as Energy-Only.

In addition, if a Generating Facility has declared commercial operation for one or more Phases, or has declared commercial operation for markets for a portion of its capacity, the portion of capacity in the market will not be converted to Energy-Only status. Rather, the project will be converted to Partial Capacity Deliverability Status, and will retain deliverability for the portion of the project that is already online. However, where the Generating Facility has multiple Resource IDs for the Generating Facility, each Resource ID will have its own Deliverability Status independent from the Generating Facility. Any individual Resource ID may have Full Capacity Deliverability Status where the Generating Facility as a whole would have Partial Capacity Deliverability Status. The CAISO does not expect that these provisions will be frequently applied, as most projects that reach COD for any portion of their projects likely will be able to meet the commercial viability criteria. Moreover, after any conversion to Partial Capacity Deliverability Status, interconnection customers may continue on to declare Commercial Operation for the remainder of their Generating Facility, or may enter into the next downsizing window to eliminate the undeveloped portion or Phase of their project, in which case the resource may be considered as having Full Capacity Deliverability Status for the downsized project.

Status or Partial Capacity Deliverability Status, they may pursue those designations through the CAISO's annual full capacity deliverability option process.<sup>35</sup> This approach effectively balances the interests of interconnection customers, transmission owners, and the CAISO.

The CAISO worked with stakeholders to develop commercial viability criteria that would allow viable projects to maintain their deliverability capacity allocations. It would not be in anyone's interest to punitively strip projects of deliverability capacity when they are commercially viable but merely need some additional time to complete their projects. As such, the commercial viability criteria are flexible and generally mirror the CAISO's existing criteria for maintaining deliverability capacity allocations.<sup>36</sup> The proposed commercial viability criteria are:

- a) Attesting to having, at a minimum, applied for the necessary governmental permits or authorizations and that the permitting authority has deemed such documentation "as data adequate" for the authority to initiate its review process;
- b) Having an executed, regulator-approved power purchase agreement, attesting that the project will be balance-sheet financed, *or* otherwise receiving a binding commitment of project financing;
- c) Demonstrating Site Exclusivity for 100% of the property (in lieu of a Site Exclusivity Deposit);
- d) Having executed a GIA; and
- e) Being in good standing with the GIA such that neither the transmission owner nor the CAISO has provided the interconnection customer with a Notice of Breach of the GIA (where the breach has not been cured or the interconnection customer has not commenced sufficient curative actions).

Interconnection customers that meet these criteria will be allowed to maintain their deliverability capacity allocations beyond the applicable seven- or ten-year timeframes.<sup>37</sup> This should not be problematic for interconnection customers that

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<sup>35</sup> See Section 9.2 of Appendix DD. Alternatively, they could withdraw and submit new interconnection requests for the same project.

<sup>36</sup> Section 8.9.3 of Appendix DD.

<sup>37</sup> Generating Facilities in cluster 7 and beyond whose Phase II study results identify a longest-lead Network Upgrade required for the project that is beyond the 7-year threshold will be entitled to a limited exception to the commercial viability criteria. Such Generating Facilities requesting COD modification within six (6) months of the CAISO's publishing the Phase II results are eligible for this exception. This six-month timeline allows ample time for TP Deliverability allocation activities, the MMA process, and GIA negotiation. The exemption will be inapplicable

have had significant time to develop their projects. The CAISO will perform an annual review to ensure that interconnection customers maintain their commercial viability. The CAISO believes that these criteria are just and reasonable measures because they are the standard steps generators must take to become commercially viable, and the Commission has already approved similar criteria for allocating and retaining deliverability status.<sup>38</sup>

The CAISO recognizes that the most relevant factor in whether a project proceeds to commercial operation or lingers in queue is whether the project has a power purchase agreement. The CAISO also recognizes that losing deliverability status may make it more difficult for earnest, otherwise viable projects to secure a power purchase agreement and remain viable. As such, where interconnection customers can satisfy all the commercial viability criteria except criterion (b), the CAISO proposes to postpone converting the project to Energy-Only Deliverability Status for one year from the day the interconnection customer submits the modification request, or one year after it exceeds seven years from its interconnection request, whichever occurs later. This one-year safe harbor will allow projects that have demonstrated clear progress an additional year to procure a power purchase agreement or financing.

The CAISO also proposes to include a provision to allow for automatic extensions to commercial operation dates for interconnection customers that have an executed, regulator-approved power purchase agreement with a commencement/delivery date that does not align with their proposed commercial operation date in the GIA. Such extensions will not have to undergo an MMA. Interconnection customers requesting alignment will be required (1) to provide a copy of the power purchase agreement and evidence of regulatory approval, and (2) confirm the power purchase agreement's standing and details in the annual TP Deliverability affidavit process. Requests to align commercial operation dates with power purchase agreements will not be exempt from the other commercial viability criteria (permitting, site exclusivity, etc.). The CAISO believes this will avoid situations where a generator is faced with operating as a merchant generator between its GIA commercial operation date and when its power purchase agreement delivery obligation begins.

In sum, the commercial viability criteria and related proposed revisions will create incentives for interconnection customers to develop their projects.

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to report addendums or revisions required by a request from an interconnection customer for any reason.

<sup>38</sup> Sections 8.9.2 and 8.9.3 of Appendix DD.

## **C. Negotiation of Generator Interconnection Agreements**

### *1. Background*

The current CAISO tariff requires the CAISO and transmission owner to tender draft GIAs to interconnection customers within 30 days of issuing the updated Phase II study report.<sup>39</sup> The parties then have 120 days to negotiate the GIA, unless the CAISO and the transmission owner agree to an extension.<sup>40</sup> Because the timing of the Phase II study report is based on when the interconnection customer submitted its interconnection request,<sup>41</sup> all interconnection customers must therefore negotiate and execute their GIAs based on when they submitted their interconnection request, regardless of their proposed commercial operation dates. For example, if two customers submitted identical interconnection requests in April 2012, they both would have to begin negotiating their GIAs in spring 2014, even if one interconnection customer planned to commence operation in 2014, and the other in 2019.

With this timeline the CAISO and transmission owners frequently face interconnection customers that are understandably unmotivated to negotiate and execute a GIA, particularly if construction for their network upgrades and generating facilities may not begin for years, or they have not yet secured financing. The CAISO and participating transmission owners understand this reticence, and therefore frequently must consent to extending the negotiation timeline well beyond the 120 days the tariff anticipates. These extensions occur so frequently that the 120-day provision has little meaning, if any.

In addition, the current tariff only specifies that interconnection customers can declare that negotiations are at an impasse, which triggers either dispute resolution or the filing of an unexecuted GIA with the Commission.<sup>42</sup> Although the CAISO has the right to file any agreement unexecuted in the event of an impasse, stakeholders and the CAISO desired clarifying language on how and

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<sup>39</sup> Section 13.1 of Appendix DD. Some interconnection customers receive draft GIAs based on the issuance of similar study results. The differences in timing are minimal and irrelevant to this discussion.

<sup>40</sup> Section 13.2 of Appendix DD.

<sup>41</sup> The CAISO must issue the Phase II study report within 205 days after it commences the Phase II interconnection study, which begins by May 1 annually for all interconnection customers with Phase I study results. See Section 8.5 of Appendix DD.

<sup>42</sup> Section 13.2 of Appendix DD.

when the CAISO and the transmission owner could declare an impasse and what would result from their doing so.

## 2. *Proposed Revisions*

The CAISO worked with stakeholders to develop revisions that would provide flexibility in tendering a draft GIA to interconnection customers, while returning to a stricter timeline for them to negotiate and execute a GIA once received. This way, the interconnection customer does not have to commence negotiations until it desires (or must) in order to commence procurement and design; and once it does, the CAISO and the transmission owner do not face an open-ended timeline to do so. The CAISO proposes to revise the start of the negotiation timeline by tendering the draft GIA based on the generating facility's proposed in-service date for the project, plus the longest lead-time to construct all required and dependent facilities, plus sufficient time to negotiate and execute the GIA. In effect, tendering the GIA would be dependent on the proposed commercial operations date rather than when it submitted its interconnection request. As such, the CAISO also proposes to add provisions requiring interconnection customers to maintain feasible in-service dates based on the construction timelines provided in their study results. Because the CAISO recognizes that some interconnection customers may want to execute GIAs on an expedited basis, it also proposes to add provisions allowing the interconnection customer to receive its draft GIA and begin negotiations earlier when desired.

Once negotiation commences, all parties desire to negotiate in good faith. The CAISO therefore proposes to add provisions that will once again make the negotiation timeline the rule, and "unless otherwise agreed by the Parties" the exception. To do so, the CAISO proposes to give itself and the transmission owner the ability to declare that negotiations have reached an impasse. Unlike the interconnection customer, which can declare an impasse at any time, the CAISO and the transmission owner will not be able to declare an impasse until the negotiation period elapses. If the CAISO or the transmission owner declares an impasse, the transmission owner will file an unexecuted GIA with the Commission within 21 days.

## **D. Deposits**

### 1. *Background*

To initiate an interconnection request under current tariff provisions, an interconnection customer must submit a deposit of \$50,000 plus \$1,000 per

requested MW of capacity.<sup>43</sup> The CAISO has found that these deposit requirements, especially for small generators,<sup>44</sup> are often insufficient to meet the actual study costs incurred.<sup>45</sup> As such, the CAISO and transmission owners frequently must invoice interconnection customers beyond their original deposits to cover actual costs incurred. This process is an administrative burden for all parties, and it diminishes interconnection customers' reliance on the deposit amounts as a reasonably accurate estimate of their study costs.<sup>46</sup> In addition, many interconnection customers withdraw from the queue with outstanding invoices. They then dissolve the limited liability companies that were the interconnection customers, forcing the transmission owner to absorb losses.

In addition, the CAISO tariff and the GIA allow interconnection customers a variety of optional studies, including repowering studies, modification studies, and limited operation studies. While the interconnection customer is responsible for actual costs incurred for these studies, neither the tariff nor the GIA provide a mechanism to obtain a deposit for the study, consistent with the other studies in the interconnection process.

## 2. *Proposed Revisions*

To reflect the capacity-independent nature that interconnection studies have assumed, the CAISO proposes to replace the MW-based interconnection

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<sup>43</sup> Section 3.5.1 of Appendix DD. This section does not apply to Fast Track and Independent Study applications.

<sup>44</sup> This is the result of several contributing factors. First, small generation projects now more commonly apply for TP Deliverability allocations, which incur related study costs. Second, small generation projects often come from less experienced developers. Such developers often make a number of revisions to their projects for optimization, which requires more time studying them than other projects. Third, megawatt capacity has become far less determinative of study costs than in the past.

<sup>45</sup> The average study cost for large and small generators in Cluster 5 projects was \$156,500. Specifically the cost for small Generating Units completing the entire study process averaged \$190,798 with a range of study costs from \$60,339 to \$233,749. The cost for large Generating Units completing the entire study process averaged \$146,395 with a range of study costs from \$57,265 to \$242,266. In contrast, the average study deposit was only \$135,181 for all Generating Units, \$67,409 for small Generating Units, and \$169,750 for large Generating Units.

<sup>46</sup> Although section 3.5.1.2 of Appendix DD of the CAISO tariff states that interconnection customers shall pay all actual study costs incurred, interconnection customers usually receive refunds of remaining deposit funds. As such, they have come to rely on deposits to cover study costs, and are understandably surprised when they receive an invoice for costs in excess of their deposits.

study deposit calculus with a flat deposit of \$150,000 for all projects, both large and small. In addition, the \$150,000 deposit will provide interconnection customers a more realistic estimate of study costs, and should be enough to cover all study costs in most cases, resulting in refunds to customers rather than invoices. As explained in the attached testimony of Robert Emmert, the CAISO worked with stakeholders to settle on the \$150,000 figure because it would be sufficient to cover reasonably expected costs without creating a barrier to entry for small projects (which could occur if the CAISO proposed to set the deposit high enough to eliminate virtually any need to invoice any customer).<sup>47</sup>

For those studies requested by the interconnection customer for which the CAISO tariff does not provide an initial deposit requirement, the CAISO proposes to add an initial deposit requirement of \$10,000. Historical study costs demonstrate that this figure should be sufficient to avoid invoices in excess of the deposit in most cases, and it aligns with existing optional study deposit requirements.<sup>48</sup>

## **E. Self-building Stand-alone Network Upgrades**

### *1. Background*

When an interconnection customer's studies identify a network upgrade that only that interconnection customer needs,<sup>49</sup> the studies naturally assign 100% of the cost responsibility for that upgrade to that interconnection customer. If it is possible for the interconnection customer to construct such an upgrade without affecting the day-to-day operations of the participating transmission owner's system, the CAISO controlled grid, or any affected system, the upgrade qualifies as a Stand Alone Network Upgrade ("SANU") under the CAISO tariff.<sup>50</sup> Interconnection customers may elect to build SANUs themselves in place of the transmission owner.<sup>51</sup> The transmission owner and the CAISO must agree to

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<sup>47</sup> Projects at or below 5 MW generally could still use the Fast Track process, which only requires a processing fee of \$500.

<sup>48</sup> See, e.g., Sections 6.7.2.3 and 9.2.3 of Appendix DD.

<sup>49</sup> In other words, no other interconnection customers' studies list that network upgrade as required for interconnection at that time.

<sup>50</sup> Appendix A of the CAISO tariff.

<sup>51</sup> Sections 5.1.3 and 5.2 of Appendix EE.

any SANU, and the upgrade must be identified as a SANU in the interconnection customer's GIA.<sup>52</sup>

Because the interconnection customer is expected to build any SANU—and not the transmission owner—it has not been required to post interconnection financial security for the SANU. In practice, this has resulted in complications, especially where other interconnection customers come to rely on the network upgrade after the original interconnection customer committed to build it as a SANU and the original customer wants to delay construction or withdraws from the queue. In the case of withdrawal, if later-queued interconnection customers' studies have relied on that SANU, the construction costs of the SANU will revert to the transmission owner because the withdrawing interconnection customer's financial security does not include funds for the SANU. This problem compounds when the interconnection customer withdraws well after the time it should have begun design, procurement, or even construction of the SANU: Transmission owners are then left with additional expenses of needing to expedite construction. The CAISO also has experienced several cases where the SANU is a switchyard that a later-queued project selects as its point of interconnection, but the interconnection customer building the SANU fails to meet the anticipated construction timeline, thereby delaying the later-queued interconnection customer's commercial operation date.

## 2. *Proposed Revisions*

The CAISO worked with stakeholders to revise the interconnection financial security requirements for SANUs to recognize the transmission owner's reliance on the SANU without forcing the interconnection customer to post financial security for a network upgrade it intends to build itself. For interconnection customers electing to self-build SANUs, the CAISO proposes to include two figures for maximum cost responsibility in the GIA: the interconnection customer's "original" maximum cost responsibility, which would include the SANU, and its "revised" maximum cost responsibility, which would not. In addition, interconnection customers will not be allowed to lower their financial security postings for SANUs until they have executed a GIA that will require the interconnection customer to submit a milestone schedule for the design, procurement, and construction of the SANU. If at any time the SANU reverts to the transmission owner, the interconnection customer's maximum cost responsibility will revert to the original figure, and the interconnection customer will have to revise its interconnection financial security posting within 30 days.

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*Id.*

This approach reduces the risks identified above while balancing the interests of both the transmission owner and the interconnection customer.

### 3. *Stakeholder Process*

While most stakeholders ultimately supported the CAISO's proposed revisions, EDF Renewable Energy and the Large Scale Solar Association opposed these revisions, arguing that interconnection customers never should have to post interconnection financial security for SANUs, and that SANU costs should be removed from any and all cost caps. The CAISO disagrees. This would only maintain the *status quo*, which results in severe complications, as described above. The CAISO worked with stakeholders throughout this initiative to develop a proposal that strikes an appropriate balance between interconnection customers' needs and the risk their SANUs can pose to later-queued customers. Moreover, the CAISO's proposal provides financial security parity between customers that plan to self-build facilities and customers that do not. Customers that plan to self-build should be required to demonstrate that they have the financial ability to do so, and this is demonstrated by the requirement to post financial security prior to the execution of the GIA. Once an interconnection customer signs an interconnection agreement and assumes the legal and contractual obligation to self-build, the financial security can be released to the customer to be utilized for financing the SANU. . Until then, an interconnection customer should not be able to avoid financial security requirements and make the transmission owner and later-queued customers bear all the risk.

#### **F. Modifications Allowed between Phase I and Phase II Study Results**

##### 1. *Background*

Interconnection customers modify their projects while in queue. Some modifications are minor and arise early, others are significant and arise precariously close to synchronization. The CAISO tariff therefore provides different levels of scrutiny depending on the type of modification and when the interconnection customer requests it. For certain minor and early modifications, the tariff currently allows interconnection customers to make modifications without the otherwise-required request for a material modification analysis (which also requires a \$10,000 deposit).<sup>53</sup> The interconnection customer must make the modification no later than ten days after the Phase I Interconnection Study

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<sup>53</sup> Section 6.7.2.2 of Appendix DD.

Results Meeting, and the modification must be limited to (a) decreasing the electrical output of the proposed project; (b) modifying the technical parameters associated with the Generating Facility technology or the Generating Facility step-up transformer impedance characteristics; and/or (c) modifying the interconnection configuration.

## 2. *Proposed Revisions*

To provide interconnection customers with additional flexibility and avoid unnecessary material modification analyses, the CAISO worked with stakeholders to identify other modifications that would not require a material modification analysis if raised shortly after the Phase I Interconnection Study Results Meeting. Because at this point the parties will have a better idea of the required network upgrades, the CAISO proposes to include an additional automatic modification: revising the interconnection customer's commercial operation date.<sup>54</sup>

## G. **Conditions for Issuing Addenda to Study Reports**

### 1. *Background*

The CAISO tariff currently contemplates revising final interconnection study reports in limited circumstances: (i) substantial errors or omissions,<sup>55</sup> or (ii) updates due to system condition changes brought to light by the CAISO's

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<sup>54</sup> This would include the corresponding in-service, synchronization, and trial operation dates, etc. Revised commercial operation dates still would have to meet the requirements of section 3.5.1.4 of Appendix DD, namely, they could not extend beyond seven years from the date the CAISO received the interconnection request without CAISO and transmission owner consent for specified reasons, such consent not to be unreasonably withheld.

For clarity in the tariff, the CAISO also proposes to move the provisions of section 7.1 of Appendix DD, which allows interconnection customers to reduce their requests for deliverability capacity, into section 6.7.2. The CAISO also proposes to include the provisions of section 6.7.2.1, which allows limited beneficial changes to the point of interconnection. Interconnection customers will thus be able to see all possible modifications that do not require a material modification analysis in the same tariff section.

<sup>55</sup> Section 6.8 of Appendix DD. The tariff defines a substantial error or omissions as "(i) understatement or overstatement of the Interconnection Customer's cost responsibility for either Network Upgrades or Participating TO Interconnection Facilities by more than five percent or one million dollars (\$1,000,000), whichever is greater; or (ii) results in a delay to the schedule by which the Interconnection Customer can achieve Commercial Operation, based on the results of the final Interconnection Study, by more than one year." As such, study revisions for substantial errors or omissions are rare.

annual reassessment.<sup>56</sup> The CAISO and stakeholders examined whether the tariff should provide study report revisions in other circumstances—such as when interconnection customers modify their own projects—and how those revisions may affect the interconnection customer’s maximum cost responsibility.

## 2. *Proposed Revisions*

The CAISO and stakeholders concluded that Phase II interconnection studies and the reassessment already cover most modifications. If, for example, an interconnection customer makes a modification between the Phase I and Phase II studies, the new scope and cost of its interconnection facilities and network upgrades will be evaluated in the Phase II study, and the Phase I study would not require revision. If the change would materially shift costs to the transmission owner, it would qualify as a substantial error or omission. The CAISO therefore proposes to add language merely clarifying that where an interconnection customer makes a modification request after the Phase II study that would change the scope, schedule, or cost of the interconnection facilities or network upgrades, the CAISO will issue a report to the interconnection customer within 90 days of the request. This will help to clarify the circumstances that can trigger study report revisions or other reports.

## H. **Insurance Required in GIAs**

### 1. *Background*

The CAISO’s *pro forma* Large Generator Interconnection Agreement (“LGIA”) describes the insurance coverage the transmission owner, the CAISO, and the interconnection customer must secure for new generating facilities.<sup>57</sup> Most, if not all, of these requirements trace back to Order No. 2003, which the Commission issued over a decade ago. Based on discussions with interconnection customers and industry insurance brokers and underwriters, some of the existing insurance coverage provisions of the LGIA are anachronistic or no longer available as described in the LGIA.

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<sup>56</sup> Section 7.4 of Appendix DD. Because the reassessment principally identifies network upgrades that are no longer needed because of the customer withdrawals or duplication with CAISO transmission planning projects, revisions due to the reassessment typically are well-received by interconnection customers.

<sup>57</sup> Section 18.3 of Appendix EE.

## 2. *Proposed Revisions*

In consultation with regional insurance professionals, the CAISO and stakeholders developed language to modernize the LGIA's insurance provisions, which the CAISO now proposes to incorporate. The proposed revisions are generally non-substantive and are consistent with the Order No. 2003 standards. With these revisions, the CAISO hopes to facilitate interconnection customers' obtaining commercially reasonable insurance for new generator projects.

### I. **Interconnection Financial Security**

#### 1. *Background*

##### a. *Deliverability Affidavits and Withdrawal*

Under the current CAISO tariff, interconnection customers attest to the status of their projects so that the CAISO can allocate deliverability capacity in constrained areas to the projects most likely to proceed to commercial operation.<sup>58</sup> These attestations relate to the project's financing status (including whether it has obtained a power purchase agreement), permitting status, and land acquisition.<sup>59</sup> Interconnection customers receive the most points—and therefore the greatest chance of a deliverability capacity allocation—where they attest to having secured financing and a regulator-approved power purchase agreement, or that they will proceed to commercial operation without a power purchase agreement.<sup>60</sup> In recent years, the CAISO has observed that many interconnection customers that make this attestation and receive the most points toward deliverability later withdraw from the interconnection queue. They then claim that they failed to secure a power purchase agreement, which allows them to avail themselves of tariff provisions granting greater refund of interconnection financial security upon withdrawal.<sup>61</sup> As such, the CAISO believes that many

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<sup>58</sup> See Section 8.9 *et seq.* of Appendix DD.

<sup>59</sup> Section 8.9.2 of Appendix DD.

<sup>60</sup> *Id.* They receive the most points toward deliverability because this attestation demonstrates the best odds that the project will proceed to commercial operation. Interconnection customers that are not as far in their financing, procurement, permitting, and property efforts receive fewer points based on their likelihood according to these milestones.

<sup>61</sup> Section 11.4.1 of Appendix DD allows for partial recovery of interconnection financial security upon withdrawal where the interconnection customer, *inter alia*, (a) fails to secure a power purchase agreement after a good faith effort to do so; (b) fails to secure a necessary permit; or (c) receives a material increase in interconnection facilities costs.

interconnection customers are making the most advantageous attestations in their affidavits while taking an inconsistent position when seeking refunds following withdrawal.

*b. Posting Dates*

There are three separate interconnection financial security postings identified under the tariff.<sup>62</sup> Each posting is required “on or before” a specified date that is triggered as a result of a specific interconnection activity, such as the publication of an interconnection study. Because this language is open-ended, stakeholders requested clarification on the earliest dates they can post financial security.

Stakeholders also requested clarification on whether revisions to study reports that originally triggered financial security postings correspondingly result in revisions to required posting dates. The tariff currently states that only substantial errors or omissions can delay posting dates, but this language tacitly assumes that the postings have not already been made.

In addition, the tariff states that when a study report revision would result in a downward adjustment to an interconnection customer’s maximum cost responsibility, the interconnection customer may decline the corresponding adjustment to its financial security postings by notifying the CAISO in writing within ten days of the revised study or reassessment.<sup>63</sup> This default process of automatically adjusting the required financial security postings unless the interconnection customer declines has proven problematic for many interconnection customers. In particular, interconnection customers sometimes receive negligible downward adjustments, and it can cost more to revise their financial security than the benefit of the downward adjustment. For this reason, interconnection customers requested that the CAISO change the default process to the interconnection customer’s opting into any downward adjustment to financial security postings rather than having to opt out of them.

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<sup>62</sup> Generally, the first posting comes after the Phase I study results and requires financial security for 15% of the planned network upgrades and interconnection facilities; the second posting comes after the Phase II study requires and requires financial security for 30% of planned network upgrades and interconnection facilities; and the third posting comes upon execution of the GIA or commencement of construction and requires financial security for 100% of the planned network upgrades and interconnection facilities. See Sections 11.2 and 11.3 of Appendix DD.

<sup>63</sup> Section 7.4.3 of Appendix DD.

2. *Proposed Revisions*

a. *Deliverability Affidavits and Withdrawal*

The CAISO proposes to add a provision to the tariff stating that any interconnection customer that declares it has secured financing and a power purchase agreement, or that it will proceed to commercial operation without a power purchase agreement, will be precluded from exercising its rights to receive partial recovery of its financial security for failure to secure a power purchase agreement. These interconnection customers still will be able to receive partial recovery if they meet any of the other criteria for doing so.<sup>64</sup> This proposed change will ensure that interconnection customers make accurate, meaningful attestations for deliverability purposes.

b. *Posting Dates*

The CAISO proposes to provide stakeholders with the clarity they requested regarding posting dates. First, the CAISO proposes to specify that interconnection customers may post interconnection financial security early—before the deadline—but not before the study report triggering the posting. In effect, interconnection customers will only be able to post interconnection financial security anytime within the 90-day window after the issuance of the study report.

Second, the CAISO proposes to state explicitly in the tariff that if interconnection customers have already posted their interconnection financial security and then receive a revision to that study report, the tariff language regarding delayed postings for substantial errors or omissions does not apply.

Third, the CAISO proposes to adopt stakeholders' request that interconnection customers will not be required to adjust their financial security instruments downward unless they request them after the issuance of a revised report or reassessment. This will give interconnection customers greater flexibility over their financial security postings.

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<sup>64</sup> See Section 11.4.1 of Appendix DD (listing five additional criteria).

## **J. TP Deliverability Option B**

### *1. Background*

Interconnection customers requesting deliverability capacity allocations must elect to be “Option A” or “Option B” customers after their Phase I study results.<sup>65</sup> Option A customers attest that they will proceed to commercial operation only if they receive a deliverability capacity allocation. Option B customers, on the other hand, attest that they must have deliverability capacity and therefore will assume cost responsibility for their network upgrades required for deliverability without cash repayment even if they do not receive their requested deliverability allocation.<sup>66</sup> If an Option A customer does not receive its deliverability allocation, it has the options to convert to energy-only status (i.e., without deliverability capacity), “park” for one year to try and receive a better deliverability capacity allocation in the subsequent cycle, or withdraw.<sup>67</sup> Option B customers only have two choices: proceed and build their own delivery network upgrades, or withdraw. These rules stem naturally from the elections made by the interconnection customer, but stakeholders have expressed the need for greater clarity around these rules. Recently, several interconnection customers elected Option B even though there were no delivery network upgrades required for their projects. Selecting Option B in such a case may be misleading, because the selection will not provide value to the interconnection customer—there is no delivery network upgrade for it to finance or build—and actually limits its ability to move forward if it does not qualify to receive a deliverability allocation.

### *2. Proposed Revisions*

After working with stakeholders, the CAISO proposes to clarify that if an interconnection customer selects Option B and does not receive its requested deliverability capacity allocation, it has the option to change its deliverability status to energy-only, just like the Option A customers. The CAISO further seeks to clarify that all interconnection customers must still meet the minimum criteria identified in the tariff to be eligible to receive a deliverability allocation in the first

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<sup>65</sup> Section 7.2 of Appendix DD.

<sup>66</sup> See Section 14.3.2 of Appendix DD.

<sup>67</sup> Section 8.9.4 of Appendix DD (interconnection customers also can choose to reduce their generating capacity to, for example, match their deliverability capacity allocation).

place.<sup>68</sup> These revisions will provide greater clarity and will ensure that interconnection customers cannot unnecessarily limit their own options.

### III. Stakeholder Process

The stakeholder process that resulted in this filing included:

- A series of four issue papers issued by the CAISO on topics (A), (B), and (E), and three issue papers on the remaining topics;
- The development of draft tariff provisions and revised draft tariff provisions;
- Eight stakeholder meetings and conference calls to discuss the CAISO papers and the draft tariff provisions; and
- Five opportunities to submit written comments on the CAISO papers and the draft tariff provisions.<sup>69</sup>

With the exception of EDF Renewable Energy and Large Scale Solar Association's reservations to the CAISO's revisions on SANUs, discussed above, the revisions proposed in this stakeholder process received broad stakeholder support. The proposals were presented to the CAISO Governing Board during its public meetings on September 17, 2015 and November 4, 2015.<sup>70</sup> The Board voted unanimously to authorize this filing.<sup>71</sup>

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<sup>68</sup> Section 8.9.2 of Appendix DD.

<sup>69</sup> Materials regarding the IPE stakeholder process are available on the CAISO website at <http://www.caiso.com/informed/Pages/StakeholderProcesses/InterconnectionProcessEnhancements2015.aspx>. A list of key dates in the stakeholder process that are relevant to this tariff amendment is provided in attachment E to this filing.

<sup>70</sup> Three topics were given additional time to develop and therefore went to the later Board meeting: affected systems, commercial viability criteria, and stand-alone network upgrades.

<sup>71</sup> Materials related to the Board's authorization to prepare and submit this filing are available on the CAISO website at <http://www.caiso.com/informed/Pages/BoardCommittees/BoardGovernorsMeetings.aspx>.

#### **IV. Effective Date**

The CAISO requests an effective date of March 8, 2016, 61 days from this filing.

#### **V. Communications**

Correspondence and other communications regarding this filing should be directed to:

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#### **VI. Service**

The CAISO has served copies of this filing on the California Public Utilities Commission, the California Energy Commission, and all parties with scheduling coordinator agreements under the CAISO tariff. In addition, the CAISO has posted a copy of the filing on the CAISO website.

#### **VII. Contents of Filing**

In addition to this transmittal letter, this filing includes the following attachments:

Attachment A	Clean CAISO tariff sheets incorporating this tariff amendment
Attachment B	Red-lined document showing the revisions contained in this tariff amendment
Attachment C	Draft final proposal and revised draft final proposal

Attachment D	Board memoranda
Attachment E	List of key dates in the stakeholder process
Attachment F	Prepared Direct Testimony of Robert Emmert in support of Topic D (Deposits)

**VIII. Conclusion**

For the reasons set forth in this filing, the CAISO respectfully requests that the Commission accept the tariff revisions proposed in the filing.

Respectfully submitted,

/s/ William H. Weaver  
Roger E. Collanton  
General Counsel  
Sidney L. Mannheim  
Assistant General Counsel  
William H. Weaver  
Counsel

Counsel for the California Independent System  
Operator Corporation

## CERTIFICATE OF SERVICE

I certify that I have served the foregoing document upon the parties listed on the official service list in the captioned proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 7th day of January, 2016.

*/s/ Martha Sedgley*

Martha Sedgley

**Attachment A – Clean Tariff Records**  
**Tariff Amendment to Implement**  
**2015 Interconnection Process Enhancements**

**California Independent System Operator Corporation**

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### **25.1.2 Affidavit Requirement**

If the owner of a Generating Unit described in Section 25.1(d), or its designee, represents that the total generating capability and electrical characteristics of the Generating Unit will be substantially unchanged, then that entity must submit an affidavit to the CAISO and the applicable Participating TO representing that the total generating capability and electrical characteristics of the Generating Unit have remained substantially unchanged. However, if there is any change to the total generating capability and electrical characteristics of the Generating Unit, the affidavit shall include supporting information describing any such changes and a \$10,000 deposit for the study. The CAISO, in coordination with the applicable Participating TO, will evaluate whether the total generating capability or electrical characteristics of the Generating Unit have substantially changed or will substantially change. The CAISO may engage the services of the applicable Participating TO in conducting such verification activities. Costs incurred by the CAISO and Participating TO (if any) shall be borne by the party making the request under Section 25.1.2, and such costs shall be included in a CAISO invoice for verification activities.

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**25.1.2.3** Upon receipt of the affidavit, the complete technical data, and the deposit, the CAISO will issue a draft study plan to the Generating Unit owner within ten (10) Business Days. Upon receipt of an executed study plan the CAISO will commence the study. The CAISO will complete the study within ninety (90) calendar days from the date the CAISO receives the signed study plan. If the CAISO cannot complete the study within that time period, the CAISO shall notify the Generating Unit owner and provide an estimated completion date and an explanation of the reasons why additional time is required. The CAISO will issue a final study report to the Generating Unit owner upon completion of the study. Any and all costs of the study shall be borne by the Generating Unit owner requesting the study.

**25.1.2.4** The Generating Unit owner will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the study. If the actual costs of the study are less than the deposit provided by the Generating Unit owner, the Generating Unit owner will be refunded the balance. If the actual costs of the study are greater than the deposit provided by the Generating Unit owner, the Generating Unit owner shall pay the balance within thirty (30) days of being invoiced by the CAISO. The Participating TO(s) shall invoice the CAISO for any study work within seventy-five (75) calendar days of

completion of the study, and, within thirty (30) days of payment of the Participating TO(s) invoice, the CAISO shall issue an invoice or refund to the Generating Unit owner, as applicable, based upon such submitted Participating TO invoices and the CAISO's costs for the study.

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## **25.5 Modifications to Generating Facilities**

Pursuant to Article 5.19 of the Large Generator Interconnection Agreement set forth in Appendices V, BB, CC, and EE, or Article 1.3.4 of the Small Generator Interconnection Agreement set forth in Appendices T and FF, Generating Facilities may make modifications to their Generating Facilities where the CAISO and the Participating TO are notified at least ninety (90) calendar days in advance of commencement of work and sufficient information is provided such that the CAISO and the Participating TO(s) have determined that Section 25.1 does not apply to the modification.

### **25.5.1**

Prior to making any modification after the Generating Facility's Commercial Operation Date, the Generating Unit owner must first request that the CAISO evaluate whether Section 25.1 would apply to the modification. In response to the Generating Unit owner's request, the CAISO, in coordination with the affected Participating TO, will evaluate the proposed modification. The CAISO may engage the services of the applicable Participating TO to assess the modification. The CAISO will inform the Generating Unit owner in writing whether Section 25.1 would apply to the modification and therefore be denied. Costs incurred by the Participating TO and the CAISO (if any) shall be borne by the party making the request under Section 25.5, and such costs shall be included in any CAISO invoice for modification assessment activities.

### **25.5.2**

The Generating Unit owner will provide the CAISO a \$10,000 deposit for the modification assessment at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Generating Unit owner in writing, within forty-five (45) calendar days from the date the CAISO receives all of the following: the Generating Unit owner's written notice to modify the project, technical data required to assess the request, and payment of the \$10,000

deposit. If the modification assessment cannot be completed within that time period, the CAISO will notify the Generating Unit owner and provide an estimated completion date and an explanation of the reasons why additional time is required.

### **25.5.3**

The Generating Unit owner will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the modification assessment. If the actual costs of the modification assessment are less than the deposit provided by the Generating Unit owner, the Generating Unit owner will be refunded the balance. If the actual costs of the modification assessment are greater than the deposit provided by the Generating Unit owner, the Generating Unit owner will pay the balance within thirty (30) days of being invoiced. The CAISO will coordinate the modification request with the Participating TO(s). The Participating TO(s) will invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days of payment of the Participating TO(s) invoice, the CAISO will issue an invoice or refund to the Generating Unit owner, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment.

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## **Appendix A-Definitions**

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### **- Identified Affected System**

An Affected System Operator that responds affirmatively to CAISO notification, as described in Section 3.7 of Appendix DD.

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### **- Stand Alone Network Upgrades**

Network Upgrades or tasks (e.g., telecommunications, environmental, or property work) that an Interconnection Customer may construct without affecting day-to-day operations of the CAISO Controlled Grid or Affected Systems during their construction. The Participating TO, the CAISO, and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Large Generator Interconnection Agreement.

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## Appendix U

### Standard Large Generator Interconnection Procedures (LGIP)

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#### 4.4.7 **Commercial Viability Criteria for Retention of Deliverability beyond Ten Years in Queue**

Interconnection Customers will be converted to Energy-Only Deliverability Status if they exceed ten (10) years from the date the Interconnection Request is received by the CAISO, unless the Interconnection Customer demonstrates that it is commercially viable.

The CAISO's agreement to an extension of the proposed In-Service Date with retention of Deliverability will be predicated upon the Interconnection Customer's ability to meet and maintain the following commercial viability criteria:

- a) Providing proof of having, at a minimum, applied for the necessary governmental permits or authorizations, and that the permitting authority has deemed such documentation as data adequate for the authority to initiate its review process;
- b) Providing proof of having an executed and regulator-approved power purchase agreement, attesting that the Generating Facilities will be balance-sheet financed, or otherwise receiving a binding commitment of project financing;
- c) Demonstrating Site Exclusivity for 100% of the property necessary to construct the facility through the Commercial Operation Date requested in the modification request. A Site Exclusivity Deposit does not satisfy this criterion;
- d) Having an executed Generator Interconnection Agreement ("GIA"); and
- e) Being in good standing with the GIA such that neither the Participating TO nor the CAISO has provided a Notice of Breach that has not been cured and the Interconnection Customer has not commenced sufficient curative actions.

If the Interconnection Customer fails to meet all of the commercial viability criteria but informs the CAISO that it intends to proceed with the modified Commercial Operation Date, the Generating Facility's Deliverability Status will become Energy-Only Deliverability Status.

If an Interconnection Customer satisfies all the commercial viability criteria except criterion (b), 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 occurs later. Interconnection Customers exercising this provision must continue to meet all other commercial viability criteria.

If an Interconnection Customer has declared Commercial Operation for a portion of a Generating Facility, or one or more Phases of a Phased Generating Facility, the CAISO will not convert to Energy-Only the portion of the Generating Facility that is in service and operating in the CAISO markets. 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 the Generating Facility, each Resource ID will have its own Deliverability Status independent from the Generating Facility. Any individual Resource ID may have Full Capacity Deliverability Status where the Generating Facility as a whole would have Partial Capacity Deliverability Status. If the Generating Facility downsizes pursuant to Section 7.5 of Appendix DD to the CAISO Tariff to the amount in service and operating in the CAISO markets, it will revert to Full Capacity Deliverability Status.

#### **4.4.7.1 Annual Review**

For Interconnection Customers extending their Commercial Operation Date beyond the seven-year threshold and retaining Deliverability pursuant to Section 4.4.7, the CAISO will perform an annual review of commercial viability. If any Interconnection Customer fails to maintain its level of commercial viability, the Deliverability Status of the Generating Facility corresponding to the Interconnection Request will convert to Energy-Only Deliverability Status.

#### **4.4.8 Alignment with Power Purchase Agreements**

An Interconnection Customer with an executed GIA and an executed, regulator-approved power purchase agreement may request to automatically extend the GIA In-Service Date to align with its power purchase agreement for that Generating Facility, including any extension or amendment. Interconnection Customers requesting alignment must provide a copy of the power purchase agreement and evidence of regulatory approval. Requests to align the Commercial Operation Date with power purchase agreements are not exempt from the commercial viability criteria provisions in Section 4.4.7, where applicable.

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## **Appendix V**

### **Standard Large Generator Interconnection Agreement**

#### **STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)**

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18.3 Insurance. Each Party shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of the CAISO, the State of California:

18.3.1 Workers' Compensation and Employers' Liability Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located, except in the case of the CAISO, the State of California.

18.3.2 Commercial General Liability Insurance including coverage for premises and operations, bodily injury (including death), personal injury, property damage, products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, and (i) liability of Participating TO and the Interconnection Customer that would be imposed without the LGIA, or (ii) liability

assumed by the Participating TO and the Interconnection Customer in a contract or agreement that is an "insured contract" under commercial general liability insurance policy. Such insurance shall include no cross liability exclusions or separation of insured clause endorsement exclusions, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate.

18.3.3 Business Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.

18.3.4 Excess Liability Insurance over and above the Employer's Liability Commercial General Liability and Business Automobile Liability Insurance coverage, with a minimum limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.

18.3.5 The Commercial General Liability Insurance, Business Automobile Insurance and Excess Liability Insurance policies shall include the other Parties, their parents, their subsidiaries, respective directors, officers, agents, servants and employees ("Other Party Group"), and the CAISO as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group.

18.3.6 The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Liability Insurance policies shall contain provisions that specify that the policies are primary and non-contributory. Each Party shall be responsible for its respective deductibles or self-insured retentions.

18.3.7 The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of extended reporting period coverage if agreed by the Parties.

18.3.8 [Not Used.]

18.3.9 Thirty (30) Calendar Days prior to the start of any work at the construction site related to Interconnection Facilities or Generating Facility under this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) Calendar Days thereafter, the Participating TO and the Interconnection Customer shall provide a certificate of insurance for all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.

18.3.10 Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum

insurance requirements in a manner consistent with that specified in Article 18.3.9.

18.3.11 The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage greater than \$25,000, including within the scope of coverage of such insurance whether or not such coverage is sought.

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**Appendix Y GIP**  
**For Interconnection Requests**  
**Generator Interconnection Procedures (GIP)**

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**6.9.5 Commercial Viability Criteria for Retention of Deliverability beyond Seven Years in Queue**

Interconnection Customers may not retain Full Capacity Deliverability Status or Partial Capacity Deliverability Status if they exceed seven (7) years from the date the Interconnection Request is received by the CAISO, unless the Interconnection Customer demonstrates that the Generating Facility is commercially viable.

The CAISO's agreement to an extension of the proposed Commercial Operation Date with retention of Full Capacity Deliverability Status or Partial Capacity Deliverability Status will be predicated upon the Interconnection Customer's ability to meet and maintain the following commercial viability criteria:

- a) Providing proof of having, at a minimum, applied for the necessary governmental permits or authorizations, and that the permitting authority has deemed such documentation as data adequate for the authority to initiate its review process;
- b) Providing proof of having an executed and regulator-approved power purchase agreement, attesting that the Generating Facilities will be balance-sheet financed, or otherwise receiving a binding commitment of project financing;
- c) Demonstrating Site Exclusivity for 100% of the property necessary to construct the facility through the Commercial Operation Date requested in the modification request. A Site Exclusivity Deposit does not satisfy this criterion;
- d) Having an executed Generator Interconnection Agreement ("GIA"); and
- e) Being in good standing with the GIA such that neither the Participating TO nor the CAISO has provided a Notice of Breach that has not been cured and the Interconnection Customer has not commenced sufficient curative actions.

If the Interconnection Customer fails to meet all of the commercial viability criteria but informs the CAISO that it intends to proceed with the modified Commercial Operation

Date, the Generating Facility's Deliverability Status will become Energy-Only Deliverability Status.

If an Interconnection Customer satisfies all the commercial viability criteria except criterion (b), 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 occurs later. Interconnection Customers exercising this provision must continue to meet all other commercial viability criteria.

If an Interconnection Customer has declared Commercial Operation for a portion of a Generating Facility, or one or more Phases of a Phased Generating Facility, the CAISO will not convert to Energy-Only the portion of the Generating Facility that is in service and operating in the CAISO markets. 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 the Generating Facility, each Resource ID will have its own Deliverability Status independent from the Generating Facility. Any individual Resource ID may have Full Capacity Deliverability Status where the Generating Facility as a whole would have Partial Capacity Deliverability Status. If the Generating Facility downsizes pursuant to Section 7.5 of Appendix DD to the CAISO Tariff to the amount in service and operating in the CAISO markets, it will revert to Full Capacity Deliverability Status.

#### **6.9.5.1 Annual Review**

For Interconnection Customers extending their Commercial Operation Date beyond the seven-year threshold and retaining Full Capacity Deliverability Status or Partial Capacity Deliverability Status pursuant to Section 6.9.5, the CAISO will perform an annual review of commercial viability. If any Interconnection Customer fails to maintain its level of commercial viability, the Deliverability Status of the Generating Facility corresponding to the Interconnection Request will convert to Energy-Only Deliverability Status.

#### **6.9.6 Alignment with Power Purchase Agreements**

An Interconnection Customer with an executed GIA and an executed, regulator-approved power purchase agreement may request to automatically extend the GIA Commercial Operation Date to align with its power purchase agreement for that Generating Facility, including any extension or amendment. Interconnection Customers requesting alignment must provide a copy of the power purchase agreement and evidence of regulatory approval. Requests to align the Commercial Operation Date with power purchase agreements are not exempt from the commercial viability criteria provisions in Section 6.9.5, where applicable.

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### **CAISO TARIFF APPENDIX BB**

#### **Standard Large Generator Interconnection Agreement**

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- 18.3 Insurance.** Each Party shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of the CAISO, the State of California:
- 18.3.1** Workers' Compensation and Employers' Liability Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located, except in the case of the CAISO, the State of California.
  - 18.3.2** Commercial General Liability Insurance including coverage for premises and operations, bodily injury (including death), personal injury, property damage, products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, and (i) liability of Participating TO and the Interconnection Customer that would be imposed without the LGIA, or (ii) liability assumed by the Participating TO and the Interconnection Customer in a contract or agreement that is an "insured contract" under commercial general liability insurance policy. Such insurance shall include no cross liability exclusions or separation of insured clause endorsement exclusions, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate.
  - 18.3.3** Business Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.
  - 18.3.4** Excess Liability Insurance over and above the Employer's Liability Commercial General Liability and Business Automobile Liability Insurance coverage, with a minimum limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.
  - 18.3.5** The Commercial General Liability Insurance, Business Automobile Insurance and Excess Liability Insurance policies shall include the other Parties, their parents, their subsidiaries, respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group.
  - 18.3.6** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Liability Insurance policies shall contain provisions that specify that the policies are primary non-contributory. Each Party shall be responsible for its respective deductibles or self-insured retentions.
  - 18.3.7** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of extended reporting period coverage if agreed by the Parties.
  - 18.3.8** [Not used.]
  - 18.3.9** Thirty (30) Calendar Days prior to the start of any work at the construction site related to Interconnection Facilities or Generating Facility under this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) Calendar Days thereafter, the Participating TO and

the Interconnection Customer shall provide a certificate of insurance for all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.

- 18.3.10** Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.
- 18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage greater than \$25,000, including within the scope of coverage of such insurance whether or not such coverage is sought.

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## CAISO TARIFF APPENDIX CC

### Large Generator Interconnection Agreement

#### for Interconnection Requests in a Queue Cluster Window

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- 18.3 Insurance.** As indicated below, the designated Party shall, at its own expense, maintain in force throughout the periods noted in this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of any insurance required to be carried by the CAISO, the State of California:
- 18.3.1 Workers' Compensation Insurance and Employers' Liability.** The Participating TO and the Interconnection Customer shall maintain such coverage from the commencement of any Construction Activities providing statutory benefits for Workers Compensation coverage and coverage amounts of no less than One Million Dollars (\$1,000,000) for employer's liability for each employee for bodily injury by accident and One Million Dollars (\$1,000,000) for each employee for bodily injury by disease in accordance with the laws and regulations of the state in which the Point of Interconnection is located. The Participating TO shall provide the Interconnection Customer with evidence of such insurance coverage within thirty (30) Calendar Days of any request by the Interconnection Customer. The Interconnection Customer shall provide evidence of such insurance thirty (30) Calendar Days prior to entry by any employee or contractor or other person acting on the Interconnection Customer's behalf onto any construction site to perform any work related to the Interconnection Facilities or Generating Facility.

- 18.3.2 Commercial General Liability Insurance.** The Participating TO and the Interconnection Customer shall maintain commercial general liability insurance coverage commencing within thirty (30) Calendar Days of the Effective Date of this LGIA, including coverage for premises and operations, bodily injury (including death), personal injury, property damage, products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, and (i) liability of Participating TO and the Interconnection Customer that would be imposed without the LGIA, or (ii) liability assumed by the Participating TO and the Interconnection Customer in a contract or agreement that is an "insured contract" under commercial general liability insurance policy. Such insurance shall include no cross liability exclusions or separation of insured clause endorsement exclusions, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000). If the activities of the Interconnection Customer are being conducted through the actions of an Affiliate, then the Interconnection Customer may satisfy the insurance requirements of this Section 18.3.2 by providing evidence of insurance coverage carried by such Affiliate and showing the Participating TO and the CAISO as additional insured only with respect to the LGIA, together with the Interconnection Customer's written representation to the Participating TO and the CAISO that the insured Affiliate is conducting all of the necessary pre-construction work. Within thirty (30) Calendar Days prior to the entry of any person on behalf of the Interconnection Customer onto any construction site to perform work related to the Interconnection Facilities or Generating Facility, the Interconnection Customer shall replace any evidence of Affiliate Insurance with evidence of such insurance carried by the Interconnection Customer, naming the Participating TO and the CAISO as additional insured only with respect to the LGIA.
- 18.3.3 Business Automobile Liability Insurance.** Prior to the entry of any such vehicles on any construction site in connection with work done by or on behalf of the Interconnection Customer, the Interconnection Customer shall provide evidence of coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage. The Interconnection Customer shall include the Participating TO and the CAISO as additional insured with respect to the LGIA on any such policies.
- 18.3.4 Excess Liability Insurance.** Commencing at the time of entry of any person on its behalf upon any construction site for the Network Upgrades, Interconnection Facilities, or Generating Facility, the Participating TO and the Interconnection Customer shall maintain Excess Liability insurance over and above the Employer's Liability, Commercial General Liability, and Business Automobile Liability Insurance coverage, with a minimum limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate. Such insurance carried by the Participating TO shall include the Interconnection Customer and the CAISO as additional insured with respect to the LGIA, and such insurance carried by the Interconnection Customer shall include the Participating TO and the CAISO as additional insured with respect to the LGIA. The requirements of Section 18.3.2 and 18.3.4 may be met by any combination of general and excess liability insurance.
- 18.3.5** The Commercial General Liability Insurance, Business Automobile Insurance and Excess Liability Insurance policies shall include the other Parties identified in the sections above, their parents, their subsidiaries, respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group. If any Party can reasonably demonstrate that coverage policies containing provisions for insurer waiver of subrogation rights, or advance notice are not commercially available, then the

Parties shall meet and confer and mutually determine to (i) establish replacement or equivalent terms in lieu of subrogation or notice or (ii) waive the requirements that coverage(s) include such subrogation provision or require advance written notice from such insurers.

- 18.3.6** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Liability Insurance policies shall contain provisions that specify that the policies are primary and non-contributory. Each Party shall be responsible for its respective deductibles or self-insured retentions.
- 18.3.7** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of extended reporting period coverage if agreed by the Parties.
- 18.3.8** [Not Used.]
- 18.3.9** Thirty (30) Calendar Days prior to the start of any work at the construction site related to Interconnection Facilities or Generating Facility under this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) Calendar Days thereafter, the Participating TO and the Interconnection Customer shall provide a certificate of insurance for all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.
- 18.3.10** Notwithstanding the foregoing, each Party may self-insure
- a) to meet the minimum insurance requirements of Article 18.3.1, to the extent that it maintains a self-insurance program that is a qualified self insurer within the state in which the Point of Interconnection is located, under the laws and regulations of such state; and
  - b) to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9.
  - c) in the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.
- 18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage greater than \$25,000, including within the scope of coverage of such insurance whether or not such coverage is sought.

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**Appendix DD**

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

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### **3.5.1 Initiating an Interconnection Request.**

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

- (i) An Interconnection Study Deposit of \$150,000.
- (ii) A completed application in the form of Appendix 1, including requested Deliverability status, requested study process (either Queue Cluster or Independent Study Process), preferred Point of Interconnection and voltage level, and all other required technical data.
- (iii) Demonstration of Site Exclusivity or, for Interconnection Requests in a Queue Cluster, a posting of a Site Exclusivity Deposit of \$100,000 for a Small Generating Facility or \$250,000 for a Large Generating Facility. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Generating Facility or increase in capacity of the existing Generating Facility.

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### **3.7 Coordination With Affected Systems**

Pursuant to Section 3.7.1, the CAISO will notify the Affected System Operators that are potentially affected by the Interconnection Customer's Interconnection Request or Group Study within which the Interconnection Customer's Interconnection Request will be studied. The CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators, to the extent possible, and, if possible, the CAISO will include those results (if available) in its applicable Interconnection Study within the time frame specified in this GIDAP. The CAISO will include Affected System Operators in all meetings held with the Interconnection Customer as required by this GIDAP.

The Interconnection Customer will cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems, including providing consent to CAISO's identification of Interconnection Customer's name, Generating Facility project name, and release of information that the Interconnection Customer provided as part of its Interconnection Request to the Affected System, and participating in any coordinating activities and communications undertaken by the Affected System or CAISO. If required by an Identified Affected System, the Interconnection Customer will sign separate study agreements with the Identified Affected System and pay for necessary studies. Identified Affected Systems will cooperate with the CAISO in all matters related to the Identified Affected System Operators' determination of modifications to Identified Affected Systems.

#### **3.7.1 Timing for Identification of Identified Affected Systems**

The CAISO will provide notice to the Affected System Operators that are potentially affected by the Interconnection Customer's Interconnection Request or Group Study within thirty (30) calendar days after determining which projects in each study cluster have posted their initial Interconnection Financial Security.

The CAISO may later notify Affected Systems if (i) the CAISO failed to identify the Affected System initially; (ii) the Interconnection Customer modifies its project such that an electric system becomes a potentially Affected System; or (iii) the Interconnection Customer converts from a Wholesale Distribution Access Tariff to the CAISO Tariff and the same Affected Systems were not notified previously or the conversion was due to a system change. In such cases, the CAISO will coordinate with the Interconnection Customer and the potentially Affected System Operator to develop an expedited timeline to determine whether the Affected System is an Identified Affected System. The CAISO will then notify the Interconnection Customer as soon as practical of the new Identified Affected System.

Within sixty (60) calendar days of notification from the CAISO, the Affected System Operator will advise the CAISO in writing that either: (i) the CAISO should consider the electric system to be an Identified Affected System; or (ii) the electric system should not be considered an Identified Affected System. If the Affected System Operator fails to advise the CAISO within (60) calendar days of notification, the CAISO will assume that the electric system is not an Affected System.

If an electric system operator advises the CAISO that it is an Identified Affected System after the 60-day notification period, the CAISO will not delay the synchronization or Commercial Operation of the Generating Facility for mitigation required by the Affected System unless the Affected System identifies, and the CAISO confirms, a legitimate reliability issue. Where legitimate reliability issues are present, the CAISO will work with the Affected System and the Interconnection Customer to establish temporary mitigations, if possible, for the identified reliability issue. Any mitigation the electric system operator that failed to timely identify as an Identified Affected System determines is necessary will be the responsibility of the electric system operator and not of the CAISO, the Participating Transmission Owner(s), or the Interconnection Customer. An Affected System's mitigation remedies that may be available outside the CAISO Tariff are unaffected by these provisions.

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#### **6.7.2.2**

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

Modifications permitted under this Section shall include specifically: (a) a decrease in the electrical output (MW) of the proposed project; (b) modifying the technical parameters associated with the Generating Facility technology or the Generating Facility step-up transformer impedance characteristics; (c) modifying the interconnection configuration; (d) modifying the In-Service Date, Initial Synchronization Date, Trial Operation Date, and/or Commercial Operation Date that meets the criteria set forth in Section 3.5.1.4 and

is acceptable to the applicable Participating TO(s) and the CAISO, such acceptance not to be unreasonably withheld; (e) change in Point of Interconnection as set forth in Section 6.7.2.1; and (f) change in Deliverability Status to Energy Only Deliverability Status, Partial Capacity Deliverability Status, or a lower fraction of Partial Capacity Deliverability Status.

For any modification other than these, the Interconnection Customer must first request that the CAISO evaluate whether such modification is a Material Modification. In response to the Interconnection Customer's request, the CAISO, in coordination with the affected Participating TO(s) and, if applicable, any Affected System Operator, shall evaluate the proposed modifications prior to making them and the CAISO shall inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. The CAISO may engage the services of the applicable Participating TO to assess the modification. Costs incurred by the Participating TO and CAISO (if any) shall be borne by the party making the request under Section 6.7.2, and such costs shall be included in any CAISO invoice for modification assessment activities. Any change to the Point of Interconnection, except for that specified by the CAISO in an Interconnection Study or otherwise allowed under this Section, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

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

If any requested modification after the Phase II Interconnection Study report would change the scope, schedule, or cost of the Interconnection Facilities or Network Upgrades, the CAISO will issue a report to the Interconnection Customer. Potential adjustments to the maximum cost responsibility for Network Upgrades for the Interconnection Customer will be determined in accordance with Section 7.4.3.

### **6.7.2.3**

The Interconnection Customer shall provide the CAISO a \$10,000 deposit for the modification assessment at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Interconnection Customer in writing, within forty-five (45) calendar days from the date the CAISO receives all of the following: the Interconnection Customer's written notice to modify the project, technical data required to assess the request and payment of the \$10,000 deposit. If the modification request results in a change to the Interconnection Facilities or Network Upgrades the modification assessment could take up to ninety (90) total 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.

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, as set forth in Section 7.5.2.

The Interconnection Customer will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the modification assessment. If the actual costs of the modification assessment are less than the deposit provided by the Interconnection Customer, the Interconnection Customer will be refunded the balance. If the actual costs of the modification assessment are greater than the deposit provided by

the Interconnection Customer, the Interconnection Customer shall pay the balance within 30 days of being invoiced. The CAISO shall coordinate the modification request with the Participating TO(s). The Participating TO(s) shall invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO shall issue an invoice or refund to the Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment.

The CAISO will publish cost data regarding modification assessments in accordance with the terms set forth in a Business Practice Manual.

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

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

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

### **6.7.4 Commercial Viability Criteria for Retention of Deliverability beyond Seven Years in Queue**

Interconnection Customers may not retain their TP Deliverability if they exceed seven (7) years from the date the Interconnection Request is received by the CAISO, unless the Interconnection Customer demonstrates that the Generating Facility is commercially viable. The CAISO's agreement to an extension of the proposed Commercial Operation Date does not relieve the Interconnection Customer from compliance with the requirements of any of the criteria in Section 8.9.3 to retain TP Deliverability.

The CAISO's agreement to an extension of the proposed Commercial Operation Date with retention of TP Deliverability will be predicated upon the Interconnection Customer's ability to meet and maintain the following commercial viability criteria:

- a) Providing proof of having, at a minimum, applied for the necessary governmental permits or authorizations, and that the permitting authority has deemed such documentation as data adequate for the authority to initiate its review process;
- b) Providing proof of having an executed and regulator-approved power purchase agreement, attesting that the Generating Facilities will be balance-sheet financed, or otherwise receiving a binding commitment of project financing;
- c) Demonstrating Site Exclusivity for 100% of the property necessary to construct the facility through the Commercial Operation Date requested in the modification request. A Site Exclusivity Deposit does not satisfy this criterion;
- d) Having an executed Generator Interconnection Agreement ("GIA"); and
- e) Being in good standing with the GIA such that neither the Participating TO nor the CAISO has provided a Notice of Breach that has not been cured and the Interconnection Customer has not commenced sufficient curative actions.

If the Interconnection Customer fails to meet all of the commercial viability criteria but informs the CAISO that it intends to proceed with the modified Commercial Operation Date, the Generating Facility's Deliverability Status will become Energy-Only Deliverability Status.

If an Interconnection Customer satisfies all the commercial viability criteria except criterion (b), 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 occurs later. Interconnection Customers exercising this provision must continue to meet all other commercial viability criteria.

If an Interconnection Customer has declared Commercial Operation for a portion of a Generating Facility, or one or more Phases of a Phased Generating Facility, the CAISO will not convert to Energy-Only the portion of the Generating Facility that is in service and operating in the CAISO markets. 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 the Generating Facility, each Resource ID will have its own Deliverability Status independent from the Generating Facility. Any individual Resource ID may have Full Capacity Deliverability Status where the Generating Facility as a whole would have Partial Capacity Deliverability Status. If the Generating Facility downsizes pursuant to Section 7.5 to the amount in service and operating in the CAISO markets, it will revert to Full Capacity Deliverability Status.

Interconnection Customers in Queue Cluster 7 and beyond whose Phase II Interconnection Study reports require a timeline beyond the seven-year threshold are exempt from the commercial viability criteria in this section provided that they modify their Commercial Operation Dates within six (6) months of the CAISO's publishing the Phase II

Interconnection Study report. This exemption is inapplicable to report addenda or revisions required by a request from an Interconnection Customer for any reason.

#### **6.7.4.1 Annual Review**

For Interconnection Customers extending their Commercial Operation Date beyond the seven-year threshold and retaining their TP Deliverability pursuant to Section 6.7.4, the CAISO will perform an annual review of commercial viability. If any Interconnection Customer fails to maintain its level of commercial viability, the Deliverability Status of the Generating Facility corresponding to the Interconnection Request will convert to Energy-Only Deliverability Status.

#### **6.7.5 Alignment with Power Purchase Agreements**

An Interconnection Customer with an executed GIA and an executed, regulator-approved power purchase agreement may request to automatically extend the GIA Commercial Operation Date to align with its power purchase agreement for that Generating Facility, including any extension or amendment. Interconnection Customers requesting alignment must (1) provide a copy of the power purchase agreement and evidence of regulatory approval, and (2) confirm the power purchase agreement's standing and details in the annual TP Deliverability affidavit process. Requests to align the Commercial Operation Date with power purchase agreements are not exempt from the commercial viability criteria provisions in Section 6.7.4, where applicable.

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#### **6.8.3 Only Substantial Errors or Omissions Adjust Posting Dates**

Only substantial errors and omissions related to the Phase I and Phase II study reports can result in adjustments to Interconnection Financial Security posting due dates. Once the initial and second Interconnection Financial Security posting due dates as described in this section have passed, the error or omission provisions described in this Section 6.8.3 no longer apply. Unless the error or omission is substantial, resulting in the issuance of a revised final Interconnection Study report, the correction of an error or omission will not delay any deadline for posting Interconnection Financial Security set forth in Section 11. In the case of a substantial error or omission resulting in the issuance of a revised final Phase I or Phase II Interconnection Study report, the deadline for posting Interconnection Financial Security shall be extended as set forth in Section 11. In addition to issuing a revised final report, the CAISO will promptly notify the Interconnection Customer of any revised posting amount and extended due date occasioned by a substantial error or omission.

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

Interconnection Customer shall post the amount of Interconnection Financial Security in accordance with Section 11, subject to refund in the event that the Interconnection Customer prevails in the dispute.

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## **Section 7      Activities in Preparation for Phase II**

Within ten (10) Business Days following the Phase I Interconnection Study Results Meeting, the Interconnection Customer shall submit to the CAISO the completed form of Appendix B (Data Form to Be Provided by the Interconnection Customer Prior to Commencement of the Phase II Interconnection Study) to the Generator Interconnection Study Process Agreement. Within such Appendix B, Interconnection Customers seeking Full or Partial Deliverability Capacity will provide the information in 7.2 below:

### **7.1              [Not Used]**

### **7.2              Full/Partial Capacity Deliverability Options for Interconnection Customers**

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

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

Option (A), which means that the Generating Facility requires TP Deliverability to be able to continue to Commercial Operation. If the Interconnection Customer selects Option (A), then the Interconnection Customer shall be required to make an initial posting of Interconnection Financial Security under Section 11.2 for the cost responsibility assigned to it in the Phase I Interconnection Study for RNUs and LDNUs; or,

Option (B), which means that the Interconnection Customer will assume cost responsibility for Delivery Network Upgrades (both ADNUs and LDNUs, to the extent applicable) without cash repayment under Section 14.2.1 to the extent that sufficient TP Deliverability is not allocated to the Generating Facility to provide its requested Deliverability Status. If the Interconnection Customer selects Option (B) then the Interconnection Customer shall be required to make an initial posting of Interconnection Financial Security under Section 11.2 for the cost responsibility assigned to it in the Phase I Interconnection Study for RNUs, LDNUs and ADNUs. To qualify to receive any allocation of TP Deliverability, Interconnection Customers selecting Option (B) must still meet the minimum criteria identified in Section 8.9.2.

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### **7.4.3      Such changes to plans of service in Queue Clusters earlier than the current Interconnection Study Cycle will also serve as the basis for potential adjustments to the maximum cost**

responsibility for Network Upgrades for Interconnection Customers in such earlier Queue Clusters, as follows:

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

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

- (ii) If an Interconnection Customer's maximum cost responsibility for Network Upgrades is adjusted downward pursuant to (i) above, and a subsequent reassessment identifies a change on the CAISO's system that occurs after the completion of the Interconnection Customer's Interconnection Studies and requires additional or expanded Network Upgrades, resulting in an increase in the Interconnection Customer's estimated cost responsibility for Network Upgrades above the maximum cost responsibility as adjusted based on the results of a prior reassessment, then the Interconnection Customer's maximum cost responsibility for Network Upgrades will be the estimated cost responsibility determined in the subsequent reassessment, so long as this amount does not exceed the maximum cost responsibility originally established by the Interconnection Customer's Interconnection Studies. In such cases, where the estimated cost responsibility determined in the subsequent reassessment exceeds the maximum cost responsibility as adjusted based on the results of a prior reassessment, the Interconnection Customer's maximum cost responsibility for Network Upgrades shall be the maximum cost responsibility established by its Interconnection Studies.

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

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

If the CAISO determines, under Section 8.9.1 above, that no TP Deliverability exists for allocation to the current Queue Cluster, then no allocation of TP Deliverability shall be made to the current Queue Cluster. If TP Deliverability is available for allocation, then

the CAISO will allocate such capacity to eligible Generating Facilities.

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

The CAISO shall allocate available TP Deliverability to Option (A) and Option (B) Generating Facilities according to the Interconnection Customers' demonstration of having met the criteria listed below for all or a portion of the full MW generating capacity of the Generating Facility as specified in the Interconnection Request. Where a criterion is met by a portion of the full MW generating capacity of the Generating Facility, the eligibility score associated with that criterion shall apply to the portion that meets the criterion. The demonstration must relate to the same proposed Generating Facility as described in Appendix A to the Interconnection Request. The Generating Facility shall be assigned a numerical score reflecting the Interconnection Customer's demonstration of having met the criteria below under the methodology set forth in the Business Practice Manual. At a minimum, the Generating Facility must meet (1)d and either (2)a or (2)d.

(1) Permitting status. An Interconnection Customer's Generating Facility must meet at least one of the following:

- a. The Interconnection Customer has received its final governmental permit or authorization allowing the Generating Facility to commence construction.
- b. The Interconnection Customer has received a draft environmental report document (or equivalent environmental permitting document) indicating likely approval of the requested permit and/or which indicates that the permitting authority has not found an environmental impact which would likely prevent the permit approval.
- c. The Interconnection Customer has applied for the necessary governmental permits or authorizations and the authority has deemed such documentation as data adequate for the authority to initiate its review process.
- d. The Interconnection Customer has applied for the necessary governmental permit or authorization for the construction.

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

- a. The Generating Facility will be balance-sheet financed or has otherwise received a commitment of project financing, and the Interconnection Customer represents to the CAISO that either it has a regulator-approved power purchase agreement or that the Interconnection Customer is proceeding to commercial operation without a power purchase agreement.

Interconnection Customers that attest to this status at any time will be

precluded from exercising rights in accordance with Section 11.4.1(a) as a condition for partial recovery of the Network Upgrade Interconnection Financial Security.

- b. The Interconnection Customer has an executed and regulator-approved power purchase agreement.
- c. The Interconnection Customer has an executed power purchase agreement but such agreement has not yet received regulatory approval.
- d. The Interconnection Customer does not have an executed power purchase agreement but the Interconnection Customer is included on an active short list or other commercially recognized method of preferential ranking of power providers by a prospective purchaser Load Serving Entity.

(3) Land acquisition

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

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

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

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

- (i) Accept the allocated amount of TP Deliverability and reduce the MW generating capacity of the proposed Generating Facility such that the allocated amount of TP Deliverability will provide Full Capacity Deliverability Status to the reduced generating capacity;
- (ii) Accept the allocated amount of TP Deliverability and adjust the Deliverability status of the proposed Generating Facility to achieve Partial Capacity Deliverability corresponding to the allocated TP Deliverability;
- (iii) For Option (A) Generating Facilities, accept the allocated amount of TP

Deliverability and seek additional TP Deliverability for the remainder of the requested Deliverability of the Interconnection Request in the next allocation cycle. In such instance, the Interconnection Customer shall execute a GIA for the entire Generating Facility having Partial Capacity Deliverability corresponding to the allocated amount of TP Deliverability. Following the next cycle of TP Deliverability allocation, the GIA shall be amended as needed to adjust its Deliverability status to reflect any additional allocation of TP Deliverability. At this time the Interconnection Customer may also adopt options (i) or (ii) above based on the final amount of TP Deliverability allocated to the Generating Facility. There will be no further opportunity for this Generating Facility to participate in any subsequent cycle of TP Deliverability allocation; or

- (iv) Decline the allocated amount of TP Deliverability and either withdraw the Interconnection Request or convert to Energy Only Deliverability Status. An Interconnection Customer having an Option (A) Generating Facility that has not previously parked may decline the allocation of TP Deliverability and park until the next cycle of TP Deliverability allocation in the next Interconnection Study Cycle.

An Interconnection Customer that selects option (iii) or (iv) above may, at the time it selects the option, elect to reduce the generating capacity of its Generating Facility.

Interconnection Customers accepting a partial allocation of TP Deliverability may pursue additional deliverability through the Annual Full Capacity Deliverability Option under Section 9.2.

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**11.2.2** Timing of Postings. The postings set forth in this Section shall be made any time after the issuance of the final Phase I Interconnection Study report but no later than ninety (90) calendar days after issuance of the final Phase I Interconnection Study report for Interconnection Customers in a Queue Cluster, or on or before sixty (60) calendar days after the CAISO provides the results of the System Impact Study for Interconnection Customers in the Independent Study Process.

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

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

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**11.3.1.2**      **Timing of Posting**

The postings set forth in this Section for Interconnection Customers in a Queue Cluster shall be made any time after issuance of the final Phase II Interconnection Study report but no later than one hundred eighty (180) calendar days after issuance of the final Phase II Interconnection Study report. The postings for Interconnection Customers in the Independent Study Process shall be made any time after the issuance of the final System Impact and Facilities Study report under the Independent Study Process but no later than one hundred twenty (120) calendar days after the CAISO provides the results of the System Impact and Facilities Study.

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

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

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#### **11.3.1.4.4 Posting Related to Interconnection Customer's Stand Alone Network Upgrades**

If the Interconnection Customer desires to self-build Stand Alone Network Upgrades consistent with its interconnection study reports, the Interconnection Customer must post the Interconnection Financial Security for the Stand Alone Network Upgrades in its Interconnection Financial Security posting. The Interconnection Customer may request to build the Stand Alone Network Upgrades in the Generator Interconnection Agreement negotiation process, and if the Participating TO and the CAISO agree, the interconnection study reports and the second posting will be revised accordingly once the Generator Interconnection Agreement has been fully executed and documents the Stand Alone Network Upgrades. If the Participating TO and the CAISO agree to allow the Interconnection Customer to build a Stand Alone Network Upgrade in an executed Generator Interconnection Agreement, the Interconnection Customer's maximum cost responsibility will be reduced by the cost of the Stand Alone Network Upgrade and both the original and revised maximum cost responsibility will be documented in the Generation Interconnection Agreement.

If at any time the responsibility for constructing the Stand Alone Network Upgrade, or a portion thereof, reverts to the Participating TO, the Interconnection Customer will be required to revise its Interconnection Financial Security posting within thirty (30) calendar days to reflect that the Participating TO will build the Stand Alone Network Upgrade. The Interconnection Customer's maximum cost responsibility also will be revised to reflect that the Participating TO will build the Stand Alone Network Upgrade. Failure to make a timely posting adjustment will result in the withdrawal of the Interconnection Request in accordance with Section 3.8. If an Interconnection Customer has been allowed to reduce its Interconnection Financial Security posting following the execution of its Generator Interconnection Agreement and subsequently withdraws, the amount of the Interconnection Financial Security that is determined to be refundable under Section 11.4.2 will be reduced by the amount of the Interconnection Financial Security posting the Interconnection Customer avoided through the self-build option.

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### 11.3.2 Third Posting

After the second posting for a Queue Cluster has been made but no later than the start of Construction Activities for Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer, whichever is earlier, the Interconnection Customer shall modify the two separate Interconnection Financial Security instruments posted pursuant to Section 11.3.1.

After the first posting for Independent Study Process Customers has been made but no later than the start of Construction Activities for Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer, whichever is earlier, the Interconnection Customer shall modify the two separate Interconnection Financial Security instruments posted pursuant to Section 11.3.1.

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

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

- (a) Failure to Secure a Power Purchase Agreement. At the time of withdrawal of the Interconnection Request or termination of the GIA, the Interconnection Customer demonstrates to the CAISO that it has failed to secure an acceptable power purchase agreement for the Energy or capacity of the Generating Facility after a good faith effort to do so. A good faith effort can be established by demonstrating participation in a competitive solicitation process or bilateral negotiations with an entity other than an Affiliate that progressed, at minimum, to the mutual exchange by all counter-parties of proposed term sheets.

Interconnection Customers that attested on the TP Deliverability Affidavit under Section 8.9.2, part (2), subpart (a) are ineligible to claim this condition for partial recovery of Interconnection Financial Security.

- (b) Failure to Secure a Necessary Permit. At the time of withdrawal of the Interconnection Request or termination of the GIA, the Interconnection Customer demonstrates to the CAISO that it has received a final denial from the primary issuing Governmental Authority of any permit or other authorization necessary for the construction or operation of the Generating Facility.
- (c) Increase in the Cost of Participating TO's Interconnection Facilities. The Interconnection Customer withdraws the Interconnection Request or terminates the GIA based on an increase of more than 30% or \$300,000, whichever is greater, in the estimated cost of Participating TO's Interconnection Facilities between the Phase I Interconnection Study and the Phase II Interconnection Study, provided, however, that the Interconnection Financial Security shall not be released if this increase in the estimated cost is due to the Interconnection

Customer's requested modification to the interconnection configuration.

- (d) Material Change in Interconnection Customer Interconnection Facilities Created by a CAISO Change in the Point of Interconnection. The Interconnection Customer withdraws the Interconnection Request or terminates the GIA based on a material change from the Phase I Interconnection Study in the Point of Interconnection for the Generating Facility mandated by the CAISO and included in the final Phase II Interconnection Study. A material change in the Point of Interconnection shall be where Point of Interconnection has moved to (i) a different substation, (ii) a different line on a different right of way, or (iii) a materially different location than previously identified on the same line.
- (e) An Interconnection Customer having selected Option (A) in accordance with Section 7.2 is not allocated TP Deliverability and notifies the CAISO of its election to withdraw by the deadline for the second posting of Interconnection Financial Security. This condition does not apply to an Interconnection Customer whose Generating Facility was allocated TP Deliverability for a portion of its Interconnection Request and elected to seek additional Deliverability in the next TP Deliverability allocation process.
- (f) For an Interconnection Customer having selected Option (B) in accordance with Section 7.2 an increase in the Phase II Interconnection Study cost estimates for ANDUs over the Phase I Interconnection Study cost estimates for ANDUs of either twenty (20) percent, or \$20 million, whichever is less. Provided, however, that the Interconnection Financial Security shall not be released if this increase in the estimated cost of ANDUs is due to the Interconnection Customer's requested modification to the interconnection configuration.

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

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

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

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

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

If the Interconnection Customer either withdraws or terminates its GIA under any of the

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

- a. the Interconnection Financial Security plus (any other provided security plus any separately provided capital) less (all costs and expenses incurred or irrevocably committed to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer) and less (any posting reduction due to the Interconnection Customer's election to self-build Stand Alone Network Upgrades), or
- b. the Interconnection Financial Security plus (any other provided security plus any separately provided capital) minus the lesser of fifty (50) percent of the value of the posted Interconnection Financial Security for Network Upgrades or \$20,000 per requested and approved, pre-downsized megawatt of the Generating Facility Capacity.

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

### **13.1 Tender**

**13.1.1** The applicable Participating TO will tender a draft GIA, together with draft appendices, to the CAISO and the Interconnection Customer no later than the sum of (i) one hundred eighty (180) calendar days and (ii) the estimated time to construct the Interconnection Facilities and Network Upgrades indicated in the applicable study report needed by this or any other dependent project, prior to the In-Service Date. The applicable Participating TO may tender the draft GIA any time after the Phase II Study report is issued and before the determined tender date on its own accord or at the request of either the CAISO or the Interconnection Customer. The draft GIA will be in the form of the FERC-approved GIA set forth in CAISO Tariff Appendix EE or Appendix FF, as applicable.

**13.1.2** Consistent with Section 13.1.1, when the transmission system of a Participating TO, in which the Point of Interconnection is not located, is affected, such Participating TO shall tender a separate agreement, in the form of the GIA, as appropriately modified.

### **13.2 Negotiation**

The applicable Participating TO, the CAISO and the Interconnection Customer will negotiate concerning any disputed provisions of the appendices to the draft GIA for not more than one hundred twenty (120) calendar days after the Participating TO provides the Interconnection Customer and the CAISO with the draft GIA. If the Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft GIA. Within seven (7) calendar days of such request, the Interconnection Customer will request submission of the unexecuted GIA with FERC or initiate Dispute Resolution procedures pursuant to Section 15.5. If the Interconnection Customer requests termination but fails to request submission of the unexecuted GIA or to initiate Dispute Resolution within seven (7) calendar days, it will be deemed to have withdrawn its Interconnection Request.

Neither the CAISO nor the Participating TO may declare an impasse until one hundred twenty (120) calendar days after the draft GIA was tendered. If the CAISO or the Participating TO declares an impasse, that party will file the GIA unexecuted with FERC within twenty one (21) calendar days.

Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed and returned the GIA, requested filing of an unexecuted GIA, or initiated Dispute Resolution procedures pursuant to Section 15.5 within one hundred twenty (120) calendar days after issuance of the draft GIA, it shall be deemed to have withdrawn its Interconnection Request. The CAISO will provide to the Interconnection Customer a final GIA within ten (10) Business Days after the completion of the negotiation process and receipt of all requested information.

- 13.2.1** Any time after the Phase II Study report is issued, if the Interconnection Customer's In-Service Date is not achievable based on the estimated time (i) to construct the longest lead Network Upgrade, Interconnection Facility, or Generating Facility as set forth in the Interconnection Customer's study reports, and (ii) the time needed to negotiate the GIA, the Interconnection Request shall be deemed withdrawn pursuant to Section 3.8.

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#### **14.2.4 Limited Operation Study**

- 14.2.4.1** Pursuant to Article 5.9 of the Large Generator Interconnection Agreement set forth in Appendices V, BB, CC, and EE, Generating Facilities may request a limited operation study if any of the Participating TO's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Generating Unit. The Participating TO and/or the CAISO, as applicable, will, upon the request and at the expense of the Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Generating Unit and the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Participating TO's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice. The Participating TO and the CAISO will permit the Interconnection Customer to operate the Generating Unit and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.
- 14.2.4.2** The Generating Unit owner will provide the CAISO a \$10,000 deposit for the limited operation study with the request. Except as provided below, any limited operation study will be concluded, and a response provided to the Generating Unit owner in writing, within forty-five (45) calendar days from when the CAISO receives all of the following: the Generating Unit owner's written approval of the limited operation study plan, technical data required to assess the request, and the \$10,000 deposit. If the limited operation study cannot be completed within that time period, the CAISO will notify the Generating Unit owner and provide an estimated completion date and an explanation of the reasons why additional time is required.
- 14.2.4.3** The Generating Unit owner will be responsible for the actual costs incurred by the CAISO and the Participating TO(s) in conducting the modification assessment. If the actual costs of the limited operation study are less than the deposit provided by the Generating Unit owner, the Generating Unit owner will be refunded the balance. If the actual costs of the limited operation study are greater than the deposit provided by the Generating Unit owner, the Generating Unit owner shall pay the balance within thirty (30) days of being

invoiced. The CAISO will coordinate the request with the Participating TO(s). The Participating TO(s) will invoice the CAISO for any limited operation study work within seventy-five (75) calendar days of completion of the study, and, within thirty (30) days of payment of the Participating TO(s) invoice, the CAISO will issue an invoice or refund to the Generating Unit owner, as applicable, based upon such submitted Participating TO invoices and the CAISO's costs for the assessment.

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**Appendix 3**

**GENERATOR INTERCONNECTION STUDY PROCESS AGREEMENT  
FOR QUEUE CLUSTERS**

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**Appendix B**

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

Generating Facility size (MW): \_\_\_\_\_

Provide two copies of this completed form and other required plans and diagrams in accordance with Section 8.1 of the GIDAP.

Provide location plan and one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

One set of metering is required for each generation connection to the new bus or existing CAISO Controlled Grid station. Number of generation connections: \_\_\_\_\_

On the one line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)

On the one line indicate the location of auxiliary power. (Minimum load on CT/PT)

Will an alternate source of auxiliary power be available during CT/PT maintenance? \_\_\_\_\_ Yes  
\_\_\_\_\_ No

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes No  
(Please indicate on one line).

What type of control system or PLC will be located at the Interconnection Customer's Generating Facility?  
\_\_\_\_\_  
\_\_\_\_\_

What protocol does the control system or PLC use?  
\_\_\_\_\_  
\_\_\_\_\_

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.

Physical dimensions of the proposed interconnection station:

Bus length from generation to interconnection station:

Line length from interconnection station to the Participating TO's transmission line.

Tower number observed in the field. (Painted on tower leg)\*

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

\* To be completed in coordination with the Participating TO or CAISO.

Is the Generating Facility in the Participating TO's service area?

Yes      No

Local service provider for auxiliary and other power: \_\_\_\_\_

Point of Interconnection: \_\_\_\_\_

Please provide proposed schedule dates:

Environmental survey start: \_\_\_\_\_

Environmental impact report submittal: \_\_\_\_\_

Procurement of project equipment: \_\_\_\_\_

Begin Construction Date: \_\_\_\_\_

In-Service Date: \_\_\_\_\_

r

Trial Operation Date: \_\_\_\_\_

Commercial Operation Date: \_\_\_\_\_

Level of Deliverability: Choose one of the following:

\_\_\_\_\_ Energy Only

\_\_\_\_\_ Full Capacity

\_\_\_\_\_ Partial Capacity for \_\_\_\_\_ MWs



What type of control system or PLC will be located at the Interconnection Customer's Generating Facility?

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What protocol does the control system or PLC use?

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Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.

Physical dimensions of the proposed interconnection station:

Bus length from generation to interconnection station:

Line length from interconnection station to the Participating TO's transmission line.

Tower number observed in the field. (Painted on tower leg)\*

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

\* To be completed in coordination with the Participating TO or CAISO.

Is the Generating Facility in the Participating TO's service area?

Yes      No

Local service provider for auxiliary and other power: \_\_\_\_\_

Please provide proposed schedule dates:

Environmental survey start: \_\_\_\_\_

Environmental impact report submittal: \_\_\_\_\_

Procurement of project equipment: \_\_\_\_\_

Begin Construction Date: \_\_\_\_\_

In-Service Date: \_\_\_\_\_

Trial Operation Date: \_\_\_\_\_

Commercial Operation Date: \_\_\_\_\_

Level of Deliverability Status: Choose one of the following:

\_\_\_\_\_ Energy-Only

\_\_\_\_\_ Full Capacity

\_\_\_\_\_ Partial Capacity (expressed in fraction of Full Capacity)

Please provide any additional modification request pursuant to Section 6.7.2.2 of Appendix DD.

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## Appendix EE

### Large Generator Interconnection Agreement

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**5.2 General Conditions Applicable to Option to Build.** If the Interconnection Customer assumes responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, or assumes responsibility for any stand-alone task, such as telecommunications, environmental, or real-estate related work:

(1) within six (6) months of the execution of this LGIA, or at a later date agreed to by the Parties, the Interconnection Customer will submit to the CAISO and the Participating TO a milestone schedule for the design, procurement, and construction of the Stand Alone Network Upgrades, or any stand-alone task assumed by the Interconnection Customer. The milestone schedule will be required to support the Interconnection Customer's Commercial Operation Date, and any Appendix B Milestones will be amended to include the milestone schedule for the Stand Alone Network Upgrades;

(2) the Interconnection Customer shall engineer, procure equipment, and construct the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the Participating TO;

(3) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which the Participating TO would be subject in the engineering, procurement or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(4) the Participating TO shall review, and the Interconnection Customer shall obtain the Participating TO's approval of, the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, which approval shall not be unreasonably withheld, and the CAISO may, at its option, review the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(5) prior to commencement of construction, the Interconnection Customer shall provide to the Participating TO, with a copy to the CAISO for informational purposes, a schedule for construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, and shall promptly respond to requests for information from the Participating TO;

(6) at any time during construction, the Participating TO shall have the right to gain unrestricted access to the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;

(7) at any time during construction, should any phase of the engineering, equipment procurement, or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by the Participating TO, the Interconnection Customer shall be obligated to remedy deficiencies in that portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(8) the Interconnection Customer shall indemnify the CAISO and Participating TO for claims arising from the Interconnection Customer's construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 Indemnity;

(9) The Interconnection Customer shall transfer control of the Participating TO's Interconnection Facilities to the Participating TO and shall transfer Operational Control of Stand Alone Network Upgrades to the CAISO;

(10) Unless the Parties otherwise agree, the Interconnection Customer shall transfer ownership of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO. As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, the Interconnection Customer shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO, which invoice shall set forth such costs in sufficient detail to enable the Participating TO to reflect the proper costs of such facilities in its transmission rate base and to identify the investment upon which refunds will be provided;

(11) the Participating TO shall accept for operation and maintenance the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and

(12) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of the "Option to Build" conditions set forth in Appendix C. Interconnection Customer shall deliver to the Participating TO "as-built" drawings, information, and any other documents that are reasonably required by the Participating TO to assure that the Interconnection Facilities and Stand-Alone Network Upgrades are built to the standards and specifications required by the Participating TO.

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**18.3 Insurance.** As indicated below, the designated Party shall, at its own expense, maintain in force throughout the periods noted in this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of any insurance required to be carried by the CAISO, the State of California:

**18.3.1 Workers' Compensation Insurance and Employers' Liability.** The Participating TO and the Interconnection Customer shall maintain such coverage from the commencement of any Construction Activities providing statutory benefits for Workers Compensation coverage and coverage amounts of no less than One Million Dollars (\$1,000,000) for employer's liability for each employee for bodily injury by accident and One Million Dollars (\$1,000,000) for each employee for bodily injury by disease in accordance with the laws and regulations of the state in which the Point of Interconnection is located. The Participating TO shall provide the Interconnection Customer with evidence of such insurance coverage within thirty (30) Calendar Days of any request by the Interconnection Customer. The Interconnection Customer shall provide evidence of such insurance thirty (30) Calendar Days prior to entry by any employee or contractor or other person acting on the Interconnection Customer's behalf onto any construction site to perform any work related to the Interconnection Facilities or Generating Facility.

**18.3.2 Commercial General Liability Insurance.** The Participating TO and the Interconnection Customer shall maintain commercial general liability insurance coverage commencing within thirty (30) Calendar Days of the Effective Date of this LGIA, including coverage for premises and operations, bodily injury (including death), personal injury, property damage, products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, and (i) liability of Participating TO and the Interconnection Customer that would be imposed without the LGIA, or (ii) liability assumed by the Participating TO and the Interconnection Customer in a contract or agreement that is an "insured contract" under commercial general liability insurance policy. Such insurance shall include no cross liability exclusions or separation of insured clause endorsement exclusions, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate. If the activities of the Interconnection Customer are being conducted through the actions of an Affiliate, then the Interconnection Customer may satisfy the insurance requirements of this Section 18.3.2 by providing evidence of insurance coverage carried by such Affiliate and showing the Participating TO and the CAISO as an additional insured only with respect to the LGIA, together with the Interconnection Customer's written representation to the Participating TO and the CAISO that the insured Affiliate is conducting all of the necessary preconstruction work. Within thirty (30) Calendar Days prior to the entry of any person on behalf of the Interconnection Customer onto any construction site to perform work related to the Interconnection Facilities or Generating Facility, the Interconnection Customer shall replace any evidence of Affiliate Insurance with evidence of such insurance carried by the Interconnection Customer, naming the Participating TO and CAISO as additional insured only with respect to the LGIA.

**18.3.3 Business Automobile Liability Insurance.** Prior to the entry of any such vehicles on any construction site in connection with work done by or on behalf of the Interconnection Customer, the Interconnection Customer shall provide evidence of coverage of owned and non-owned and hired vehicles, trailers or semi-trailers

designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage. The Interconnection Customer shall include the Participating TO and the CAISO as additional insured with respect to the LGIA on any such policies.

- 18.3.4 Excess Liability Insurance.** Commencing at the time of entry of any person on its behalf upon any construction site for the Network Upgrades, Interconnection Facilities, or Generating Facility, the Participating TO and the Interconnection Customer shall maintain Excess Liability insurance over and above the Employer's Liability Commercial General Liability and Business Automobile Liability Insurance coverage, with a minimum limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate. Such insurance carried by the Participating TO shall include the Interconnection Customer and CAISO as additional insured with respect to the LGIA, and such insurance carried by the Interconnection Customer shall include the Participating TO and CAISO as an additional insured with respect to the LGIA. The requirements of Section 18.3.2 and 18.3.4 may be met by any combination of general and excess liability insurance.
- 18.3.5** The Commercial General Liability Insurance, Business Automobile Insurance and Excess Liability Insurance policies shall include the other Parties identified in the sections above, their parents, their subsidiaries, respective directors, officers, agents, servants and employees ("Other Party Group") and the CAISO as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group. If any Party can reasonably demonstrate that coverage policies containing provisions for insurer waiver of subrogation rights, or advance notice are not commercially available, then the Parties shall meet and confer and mutually determine to (i) establish replacement or equivalent terms in lieu of subrogation or notice or (ii) waive the requirements that coverage(s) include such subrogation provision or require advance written notice from such insurers.
- 18.3.6** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Liability Insurance policies shall contain provisions that specify that the policies are primary and non-contributory. Each Party shall be responsible for its respective deductibles or self-insured retentions.
- 18.3.7** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of extended reporting period coverage if agreed by the Parties.
- 18.3.8** [Not Used.]
- 18.3.9** Thirty (30) Calendar Days prior to the start of any work at the construction site related to Interconnection Facilities or Generating Facility under this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) Calendar Days thereafter, the Participating TO and the Interconnection Customer shall provide a certificate of insurance for all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.
- 18.3.10** Notwithstanding the foregoing, each Party may self-insure
- a) to meet the minimum insurance requirements of Article 18.3.1, to the extent that it maintains a self-insurance program that is a qualified self-insurer within the state in

which the Point of Interconnection is located, under the laws and regulations of such state; and

b) to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9.

c) in the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.

**18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage greater than \$25,000, including within the scope of coverage of such insurance whether or not such coverage is sought..

**Attachment B – Marked Tariff Records**  
**Tariff Amendment to Implement**  
**2015 Interconnection Process Enhancements**

**California Independent System Operator Corporation**

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### 25.1.2 Affidavit Requirement

If the owner of a Generating Unit described in Section 25.1(d), or its designee, represents that the total generating capability and electrical characteristics of the Generating Unit will be substantially unchanged, then that entity must submit an affidavit to the CAISO and the applicable Participating TO representing that the total generating capability and electrical characteristics of the Generating Unit have remained substantially unchanged. However, if there is any change to the total generating capability and electrical characteristics of the Generating Unit, the affidavit shall include supporting information describing any such changes and a \$10,000 deposit for the study. The CAISO ~~and, in coordination with~~ the applicable Participating TO, ~~shall have the right to verify~~ will evaluate whether ~~or not~~ the total generating capability or electrical characteristics of the Generating Unit have substantially changed or will substantially change. The CAISO may engage the services of the applicable Participating TO in conducting such verification activities. ~~Costs incurred by the CAISO and Participating TO (if any) shall be borne by the party making the request under Section 25.1.2, and such costs shall be included in a CAISO invoice for verification activities.~~

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25.1.2.3 Upon receipt of the affidavit, the complete technical data, and the deposit, the CAISO will issue a draft study plan to the Generating Unit owner within ten (10) Business Days. Upon receipt of an executed study plan the CAISO will commence the study. The CAISO will complete the study within ninety (90) calendar days from the date the CAISO receives the signed study plan. If the CAISO cannot complete the study within that time period, the CAISO shall notify the Generating Unit owner and provide an estimated completion date and an explanation of the reasons why additional time is required. The CAISO will issue a final study report to the Generating Unit owner upon completion of the study. Any and all costs of the study shall be borne by the Generating Unit owner requesting the study.

25.1.2.4 The Generating Unit owner will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the study. If the actual costs of the study are less than the deposit provided by the Generating Unit owner, the Generating Unit owner will be refunded the balance. If the actual costs of the study are greater than the deposit provided by the Generating Unit owner, the Generating Unit owner shall pay the balance within thirty (30) days of being invoiced by the CAISO. The

Participating TO(s) shall invoice the CAISO for any study work within seventy-five (75) calendar days of completion of the study, and, within thirty (30) days of payment of the Participating TO(s) invoice, the CAISO shall issue an invoice or refund to the Generating Unit owner, as applicable, based upon such submitted Participating TO invoices and the CAISO's costs for the study.

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## **25.5 Modifications to Generating Facilities**

Pursuant to Article 5.19 of the Large Generator Interconnection Agreement set forth in Appendices V, BB, CC, and EE, or Article 1.3.4 of the Small Generator Interconnection Agreement set forth in Appendices T and FF, Generating Facilities may make modifications to their Generating Facilities where the CAISO and the Participating TO are notified at least ninety (90) calendar days in advance of commencement of work and sufficient information is provided such that the CAISO and the Participating TO(s) have determined that Section 25.1 does not apply to the modification.

### **25.5.1**

Prior to making any modification after the Generating Facility's Commercial Operation Date, the Generating Unit owner must first request that the CAISO evaluate whether Section 25.1 would apply to the modification. In response to the Generating Unit owner's request, the CAISO, in coordination with the affected Participating TO, will evaluate the proposed modification. The CAISO may engage the services of the applicable Participating TO to assess the modification. The CAISO will inform the Generating Unit owner in writing whether Section 25.1 would apply to the modification and therefore be denied. Costs incurred by the Participating TO and the CAISO (if any) shall be borne by the party making the request under Section 25.5, and such costs shall be included in any CAISO invoice for modification assessment activities.

### **25.5.2**

The Generating Unit owner will provide the CAISO a \$10,000 deposit for the modification assessment at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Generating Unit owner in writing, within forty-five (45) calendar days from the date the CAISO receives all of the following: the Generating Unit owner's written

notice to modify the project, technical data required to assess the request, and payment of the \$10,000 deposit. If the modification assessment cannot be completed within that time period, the CAISO will notify the Generating Unit owner and provide an estimated completion date and an explanation of the reasons why additional time is required.

### **25.5.3**

The Generating Unit owner will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the modification assessment. If the actual costs of the modification assessment are less than the deposit provided by the Generating Unit owner, the Generating Unit owner will be refunded the balance. If the actual costs of the modification assessment are greater than the deposit provided by the Generating Unit owner, the Generating Unit owner will pay the balance within thirty (30) days of being invoiced. The CAISO will coordinate the modification request with the Participating TO(s). The Participating TO(s) will invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days of payment of the Participating TO(s) invoice, the CAISO will issue an invoice or refund to the Generating Unit owner, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment.

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## **Appendix A-Definitions**

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### **- Identified Affected System**

An Affected System Operator that responds affirmatively to CAISO notification, as described in Section 3.7 of Appendix DD.

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### **- Stand Alone Network Upgrades**

Network Upgrades or tasks (e.g., telecommunications, environmental, or property work) that an Interconnection Customer may construct without affecting day-to-day operations of the CAISO Controlled Grid or Affected Systems during their construction. The Participating TO, the CAISO, and the Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Large Generator Interconnection Agreement.

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## Appendix U

### Standard Large Generator Interconnection Procedures (LGIP)

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#### 4.4.7 Commercial Viability Criteria for Retention of Deliverability beyond Ten Years in Queue

Interconnection Customers will be converted to Energy-Only Deliverability Status if they exceed ten (10) years from the date the Interconnection Request is received by the CAISO, unless the Interconnection Customer demonstrates that it is commercially viable.

The CAISO's agreement to an extension of the proposed In-Service Date with retention of Deliverability will be predicated upon the Interconnection Customer's ability to meet and maintain the following commercial viability criteria:

- a) Providing proof of having, at a minimum, applied for the necessary governmental permits or authorizations, and that the permitting authority has deemed such documentation as data adequate for the authority to initiate its review process;
- b) Providing proof of having an executed and regulator-approved power purchase agreement, attesting that the Generating Facilities will be balance-sheet financed, or otherwise receiving a binding commitment of project financing;
- c) Demonstrating Site Exclusivity for 100% of the property necessary to construct the facility through the Commercial Operation Date requested in the modification request. A Site Exclusivity Deposit does not satisfy this criterion;
- d) Having an executed Generator Interconnection Agreement ("GIA"); and
- e) Being in good standing with the GIA such that neither the Participating TO nor the CAISO has provided a Notice of Breach that has not been cured and the Interconnection Customer has not commenced sufficient curative actions.

If the Interconnection Customer fails to meet all of the commercial viability criteria but informs the CAISO that it intends to proceed with the modified Commercial Operation Date, the Generating Facility's Deliverability Status will become Energy-Only Deliverability Status.

If an Interconnection Customer satisfies all the commercial viability criteria except criterion (b), 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 occurs later. Interconnection Customers exercising this provision must continue to meet all other commercial viability criteria.

If an Interconnection Customer has declared Commercial Operation for a portion of a Generating Facility, or one or more Phases of a Phased Generating Facility, the CAISO

will not convert to Energy-Only the portion of the Generating Facility that is in service and operating in the CAISO markets. 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 the Generating Facility, each Resource ID will have its own Deliverability Status independent from the Generating Facility. Any individual Resource ID may have Full Capacity Deliverability Status where the Generating Facility as a whole would have Partial Capacity Deliverability Status. If the Generating Facility downsizes pursuant to Section 7.5 of Appendix DD to the CAISO Tariff to the amount in service and operating in the CAISO markets, it will revert to Full Capacity Deliverability Status.

#### **4.4.7.1 Annual Review**

For Interconnection Customers extending their Commercial Operation Date beyond the seven-year threshold and retaining Deliverability pursuant to Section 4.4.7, the CAISO will perform an annual review of commercial viability. If any Interconnection Customer fails to maintain its level of commercial viability, the Deliverability Status of the Generating Facility corresponding to the Interconnection Request will convert to Energy-Only Deliverability Status.

#### **4.4.8 Alignment with Power Purchase Agreements**

An Interconnection Customer with an executed GIA and an executed, regulator-approved power purchase agreement may request to automatically extend the GIA In-Service Date to align with its power purchase agreement for that Generating Facility, including any extension or amendment. Interconnection Customers requesting alignment must provide a copy of the power purchase agreement and evidence of regulatory approval. Requests to align the Commercial Operation Date with power purchase agreements are not exempt from the commercial viability criteria provisions in Section 4.4.7, where applicable.

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## **Appendix V**

### **Standard Large Generator Interconnection Agreement**

### **STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)**

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18.3 Insurance. Each Party shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of the CAISO, the State of California:

18.3.1 ~~Employer's Liability and~~ Workers' Compensation ~~and Employers' Liability~~ Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located, except in the case of the CAISO, the State of California.

18.3.2 Commercial General Liability Insurance including coverage for premises and operations,

~~bodily injury (including death), personal injury, broad form~~ property damage, ~~broad form blanket contractual liability coverage (including coverage for the contractual indemnification)~~ products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, ~~coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability~~ and (i) liability of Participating TO and the Interconnection Customer that would be imposed without the LGIA, or (ii) liability assumed by the Participating TO and the Interconnection Customer in a contract or agreement that is an "insured contract" under commercial general liability insurance policy. Such insurance shall include no cross liability exclusions or separation of insured clause endorsement exclusions, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate ~~combined single limit for personal injury, bodily injury, including death and property damage.~~

18.3.3 Business Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.

18.3.4 Excess ~~Public~~-Liability Insurance over and above the Employer's Liability Commercial General Liability and Business Automobile Liability Insurance coverage, with a minimum ~~combined single~~ limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.

18.3.5 The Commercial General Liability Insurance, Business Automobile Insurance and Excess ~~Public~~-Liability Insurance policies shall name include the other Parties, their parents, ~~associated and Affiliate companies and their subsidiaries,~~ respective directors, officers, agents, servants and employees ("Other Party Group"), and the CAISO as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group ~~and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.~~

18.3.6 The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess ~~Public~~-Liability Insurance policies shall contain provisions that specify that the policies are primary and ~~non-contributory shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered.~~ Each Party shall be responsible for its respective deductibles or self-insured retentions.

18.3.7 The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess ~~Public~~-Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of ~~tail coverage or~~ extended reporting period coverage if agreed by the Parties.

18.3.8 ~~The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this LGIA.~~ [Not Used.]

18.3.9 ~~Within ten~~ Thirty (30) Calendar Days prior to the start of any work at the construction site

~~related to Interconnection Facilities or Generating Facility under following execution of~~ this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) Calendar Days thereafter, ~~each Party~~the Participating TO and the Interconnection Customer shall provide ~~certification~~a certificate of insurance of for all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.

18.3.10 Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.

18.3.11 The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage ~~greater than \$25,000, including within the scope of coverage of such insurance whether or not such coverage is sought~~arising out of this LGIA.

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**Appendix Y GIP**  
**For Interconnection Requests**  
**Generator Interconnection Procedures (GIP)**

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**6.9.5 Commercial Viability Criteria for Retention of Deliverability beyond Seven Years in Queue**

Interconnection Customers may not retain Full Capacity Deliverability Status or Partial Capacity Deliverability Status if they exceed seven (7) years from the date the Interconnection Request is received by the CAISO, unless the Interconnection Customer demonstrates that the Generating Facility is commercially viable.

The CAISO's agreement to an extension of the proposed Commercial Operation Date with retention of Full Capacity Deliverability Status or Partial Capacity Deliverability Status will be predicated upon the Interconnection Customer's ability to meet and maintain the following commercial viability criteria:

- a) Providing proof of having, at a minimum, applied for the necessary governmental permits or authorizations, and that the permitting authority has deemed such documentation as data adequate for the authority to initiate its review process;

- b) Providing proof of having an executed and regulator-approved power purchase agreement, attesting that the Generating Facilities will be balance-sheet financed, or otherwise receiving a binding commitment of project financing;
- c) Demonstrating Site Exclusivity for 100% of the property necessary to construct the facility through the Commercial Operation Date requested in the modification request. A Site Exclusivity Deposit does not satisfy this criterion;
- d) Having an executed Generator Interconnection Agreement (“GIA”); and
- e) Being in good standing with the GIA such that neither the Participating TO nor the CAISO has provided a Notice of Breach that has not been cured and the Interconnection Customer has not commenced sufficient curative actions.

If the Interconnection Customer fails to meet all of the commercial viability criteria but informs the CAISO that it intends to proceed with the modified Commercial Operation Date, the Generating Facility’s Deliverability Status will become Energy-Only Deliverability Status.

If an Interconnection Customer satisfies all the commercial viability criteria except criterion (b), 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 occurs later. Interconnection Customers exercising this provision must continue to meet all other commercial viability criteria.

If an Interconnection Customer has declared Commercial Operation for a portion of a Generating Facility, or one or more Phases of a Phased Generating Facility, the CAISO will not convert to Energy-Only the portion of the Generating Facility that is in service and operating in the CAISO markets. 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 the Generating Facility, each Resource ID will have its own Deliverability Status independent from the Generating Facility. Any individual Resource ID may have Full Capacity Deliverability Status where the Generating Facility as a whole would have Partial Capacity Deliverability Status. If the Generating Facility downsizes pursuant to Section 7.5 of Appendix DD to the CAISO Tariff to the amount in service and operating in the CAISO markets, it will revert to Full Capacity Deliverability Status.

#### **6.9.5.1 Annual Review**

For Interconnection Customers extending their Commercial Operation Date beyond the seven-year threshold and retaining Full Capacity Deliverability Status or Partial Capacity Deliverability Status pursuant to Section 6.9.5, the CAISO will perform an annual review of commercial viability. If any Interconnection Customer fails to maintain its level of commercial viability, the Deliverability Status of the Generating Facility corresponding to the Interconnection Request will convert to Energy-Only Deliverability Status.

#### **6.9.6 Alignment with Power Purchase Agreements**

An Interconnection Customer with an executed GIA and an executed, regulator-approved power purchase agreement may request to automatically extend the GIA Commercial

Operation Date to align with its power purchase agreement for that Generating Facility, including any extension or amendment. Interconnection Customers requesting alignment must provide a copy of the power purchase agreement and evidence of regulatory approval. Requests to align the Commercial Operation Date with power purchase agreements are not exempt from the commercial viability criteria provisions in Section 6.9.5, where applicable.

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## CAISO TARIFF APPENDIX BB

### Standard Large Generator Interconnection Agreement

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- 18.3 Insurance.** Each Party shall, at its own expense, maintain in force throughout the period of this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of the CAISO, the State of California:
- 18.3.1** ~~Employer's Liability and~~ Workers' Compensation and Employers' Liability Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located, except in the case of the CAISO, the State of California.
  - 18.3.2** Commercial General Liability Insurance including coverage for premises and operations, bodily injury (including death), personal injury, ~~broad form~~ property damage, ~~broad form blanket contractual liability coverage (including coverage for the contractual indemnification)~~ products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, and (i) liability of Participating TO and the Interconnection Customer that would be imposed without the LGIA, or (ii) liability assumed by the Participating TO and the Interconnection Customer in a contract or agreement that is an "insured contract" under commercial general liability insurance policy. Such insurance shall include no cross liability exclusions or separation of insured clause coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement exclusions, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate ~~combined single limit for personal injury, bodily injury, including death and property damage.~~
  - 18.3.3** Business Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.
  - 18.3.4** Excess ~~Public~~-Liability Insurance over and above the Employer's Liability Commercial General Liability and Business Automobile Liability Insurance coverage, with a minimum ~~combined single~~ limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.
  - 18.3.5** The Commercial General Liability Insurance, Business Automobile Insurance and Excess ~~Public~~-Liability Insurance policies shall name-include the other Parties, their

parents, ~~associated and Affiliate companies and~~ their subsidiaries, respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group ~~and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.~~

- 18.3.6** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess ~~Public~~-Liability Insurance policies shall contain provisions that specify that the policies are primary ~~and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered~~ non-contributory. Each Party shall be responsible for its respective deductibles or self-insured retentions.
- 18.3.7** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess ~~Public~~-Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of ~~tail coverage or~~ extended reporting period coverage if agreed by the Parties.
- 18.3.8** ~~[Not used.]The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this LGIA.~~
- 18.3.9** ~~Within ten~~ Thirty (30) Calendar Days ~~following execution of~~ prior to the start of any work at the construction site related to Interconnection Facilities or Generating Facility under this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) Calendar Days thereafter, ~~each Party~~ the Participating TO and the Interconnection Customer shall provide ~~certification a certificate of insurance for~~ of all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.
- 18.3.10** Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.
- 18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this LGIA greater than \$25,000, including within the scope of coverage of such insurance whether or not such coverage is sought.

**CAISO TARIFF APPENDIX CC**  
**Large Generator Interconnection Agreement**  
**for Interconnection Requests in a Queue Cluster Window**

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**18.3 Insurance.** As indicated below, the designated Party shall, at its own expense, maintain in force throughout the periods noted in this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of any insurance required to be carried by the CAISO, the State of California:

**18.3.1 ~~Employer's Liability and Workers' Compensation Insurance and Employers' Liability.~~** The Participating TO and the Interconnection Customer shall maintain such coverage from the commencement of any Construction Activities providing statutory benefits for ~~W~~workers ~~C~~ompensation coverage and coverage amounts of no less than One Million Dollars (\$1,000,000) for employer's liability for each employee for bodily injury by accident and One Million Dollars (\$1,000,000) for each employee for bodily injury by disease in accordance with the laws and regulations of the state in which the Point of Interconnection is located. The Participating TO shall provide the Interconnection Customer with evidence of such insurance coverage within thirty (30) ~~Calendar D~~ays of any request by the Interconnection Customer. The Interconnection Customer shall provide evidence of such insurance thirty (30) ~~Calendar d~~Days prior to entry by any employee or contractor or other person acting on the Interconnection Customer's behalf onto any construction site to perform any work related to the Interconnection Facilities or Generating Facility.

**18.3.2 Commercial General Liability Insurance.** The Participating TO and the Interconnection Customer shall maintain commercial general liability insurance coverage commencing within thirty (30) ~~Calendar D~~ays of the ~~E~~ffective ~~D~~ate of this LGIA, including coverage for premises and operations, bodily injury (including death), personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification), products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available, and (i) liability of Participating TO and the Interconnection Customer that would be imposed without the LGIA, or (ii) liability assumed by the Participating TO and the Interconnection Customer in a contract or agreement that is an "insured contract" under commercial general liability insurance policy. Such insurance shall include no cross liability exclusions or separation of insured clause and punitive damages to the extent normally available, and a cross liability endorsement exclusions, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) ~~aggregate combined single limit for personal injury, bodily injury, including death and property damage.~~ If the activities of the Interconnection Customer are being conducted through the actions of an Affiliate, then the Interconnection Customer may satisfy the insurance requirements of this Section 18.3.2 by providing evidence of insurance coverage carried by such Affiliate and showing the Participating TO and the CAISO as an additional insured only with respect to the LGIA, together with the Interconnection Customer's written representation to the Participating TO and the CAISO that the insured Affiliate is conducting all of the necessary pre-construction work. Within thirty (30) ~~Calendar D~~ays prior to the entry of any person on behalf of the Interconnection Customer onto any construction site to perform work related to the Interconnection Facilities or Generating Facility, the Interconnection Customer shall

replace any evidence of Affiliate Insurance with evidence of such insurance carried by the Interconnection Customer, naming the Participating TO and the CAISO as additional insured only with respect to the LGIA.

- 18.3.3 Business Automobile Liability Insurance.** Prior to the entry of any such vehicles on any construction site in connection with work done by or on behalf of the Interconnection Customer, the Interconnection Customer shall provide evidence of coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage. ~~Upon the request of the Participating TO, t~~The Interconnection Customer shall ~~name-include~~ the Participating TO and the CAISO as ~~an~~ additional insured with respect to the LGIA on any such policies.
- 18.3.4 Excess ~~Public~~-Liability Insurance.** Commencing at the time of entry of any person on its behalf upon any construction site for the Network Upgrades, Interconnection Facilities, or Generating Facility, the Participating TO and the Interconnection Customer shall maintain ~~E~~excess ~~public~~-liability insurance over and above the Employer's Liability, Commercial General Liability, and Business Automobile Liability Insurance coverage, with a minimum ~~combined single~~ limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate. Such insurance carried by the Participating TO shall ~~name-include~~ the Interconnection Customer and the CAISO as ~~an~~ additional insured with respect to the LGIA, and such insurance carried by the Interconnection Customer shall ~~name-include~~ the Participating TO and the CAISO as ~~an~~ additional insured with respect to the LGIA. The requirements of Section 18.3.2 and 18.3.4 may be met by any combination of general and excess liability insurance.
- 18.3.5** The Commercial General Liability Insurance, Business Automobile Insurance and Excess ~~Public~~-Liability Insurance policies shall ~~name-include~~ the other Parties identified in the sections above, their parents, ~~associated and Affiliate companies and~~ their ~~subsidiaries~~, respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group ~~and provide thirty (30) Calendar Days advance written notice to the Other Party Group of cancellation in coverage or condition~~. If any Party can reasonably demonstrate that coverage policies containing provisions for insurer waiver of subrogation rights, or advance ~~written~~ notice are not commercially available, then the Parties shall meet and confer and mutually determine to (i) establish replacement or equivalent terms in lieu of subrogation or notice or (ii) waive the requirements that coverage(s) include such subrogation provision or require advance written notice from such insurers.
- 18.3.6** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess ~~Public~~-Liability Insurance policies shall contain provisions that specify that the policies are primary and ~~non-contributory shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered~~. Each Party shall be responsible for its respective deductibles or self-insured retentions.
- 18.3.7** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess ~~Public~~-Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of ~~tail coverage or~~ extended reporting period

coverage if agreed by the Parties.

- 18.3.8** ~~[Not Used.] The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this LGIA.~~
- 18.3.9** ~~Within ten~~ Thirty (30) Calendar Days ~~following execution of~~ prior to the start of any work at the construction site related to Interconnection Facilities or Generating Facility under this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) Calendar Days thereafter, the Participating TO and the Interconnection Customer shall provide ~~certification a~~ certificate of insurance for ~~of~~ all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.
- 18.3.10** Notwithstanding the foregoing, each Party may self-insure
- a) to meet the minimum insurance requirements of Article 18.3.1, to the extent that it maintains a self-insurance program that is a qualified self insurer within the state in which the Point of Interconnection is located, under the laws and regulations of such state; and
  - b) to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9.
  - c) in the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.
- 18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage ~~arising out of this LGIA~~ greater than \$25,000, including within the scope of coverage of such insurance whether or not such coverage is sought.

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## Appendix DD

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

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#### 3.5.1 Initiating an Interconnection Request.

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

- (i) An Interconnection Study Deposit ~~equal to \$50,000 plus \$1,000 per MW of electrical output of the Generating Facility, up to a maximum of \$250,000 of \$150,000.~~
- (ii) A completed application in the form of Appendix 1, including requested Deliverability status, requested study process (either Queue Cluster or Independent Study Process), preferred Point of Interconnection and voltage level, and all other required technical data.
- (iii) Demonstration of Site Exclusivity or, for Interconnection Requests in a Queue Cluster, a posting of a Site Exclusivity Deposit of \$100,000 for a Small Generating Facility or \$250,000 for a Large Generating Facility. The demonstration of Site Exclusivity, at a minimum, must be through the Commercial Operation Date of the new Generating Facility or increase in capacity of the existing Generating Facility.

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### 3.7 Coordination With Affected Systems

~~The Pursuant to Section 3.7.1, the~~ CAISO will notify the Affected System Operators that are potentially affected by the Interconnection Customer's Interconnection Request or Group Study within which the Interconnection Customer's Interconnection Request will be studied. The CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators, to the extent possible, and, if possible, the CAISO will include those results (if available) in its applicable Interconnection Study within the time frame specified in this GIDAP. The CAISO will include ~~such~~ Affected System Operators in all meetings held with the Interconnection Customer as required by this GIDAP.

The Interconnection Customer will cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems, including providing consent to CAISO's identification ~~to of~~ Interconnection Customer's name, Generating Facility project name, and release of information ~~which that~~ the Interconnection Customer provided as part of its Interconnection Request to the Affected System, and participating in any coordinating activities and communications undertaken by the Affected System or CAISO, ~~signing~~. If required by an Identified Affected System, the Interconnection Customer will sign separate study agreements with the Identified Affected System owners and paying for necessary studies. ~~An entity which may be an Identified Affected System shall will~~ cooperate with the CAISO in all matters related to the ~~conduct of studies and the Identified Affected System Operators'~~ determination of modifications to Identified Affected Systems.

#### 3.7.1 Timing for Identification of Identified Affected Systems

The CAISO will provide notice to the Affected System Operators that are potentially affected by the Interconnection Customer's Interconnection Request or Group Study within thirty (30) calendar days after determining which projects in each study cluster have posted their initial Interconnection Financial Security.  
The CAISO may later notify Affected Systems if (i) the CAISO failed to identify the Affected System initially; (ii) the Interconnection Customer modifies its project such that an electric system becomes a potentially Affected System; or (iii) the Interconnection Customer converts from a Wholesale Distribution Access Tariff to the CAISO Tariff and

the same Affected Systems were not notified previously or the conversion was due to a system change. In such cases, the CAISO will coordinate with the Interconnection Customer and the potentially Affected System Operator to develop an expedited timeline to determine whether the Affected System is an Identified Affected System. The CAISO will then notify the Interconnection Customer as soon as practical of the new Identified Affected System.

Within sixty (60) calendar days of notification from the CAISO, the Affected System Operator will advise the CAISO in writing that either: (i) the CAISO should consider the electric system to be an Identified Affected System; or (ii) the electric system should not be considered an Identified Affected System. If the Affected System Operator fails to advise the CAISO within (60) calendar days of notification, the CAISO will assume that the electric system is not an Affected System.

If an electric system operator advises the CAISO that it is an Identified Affected System after the 60-day notification period, the CAISO will not delay the synchronization or Commercial Operation of the Generating Facility for mitigation required by the Affected System unless the Affected System identifies, and the CAISO confirms, a legitimate reliability issue. Where legitimate reliability issues are present, the CAISO will work with the Affected System and the Interconnection Customer to establish temporary mitigations, if possible, for the identified reliability issue. Any mitigation the electric system operator that failed to timely identify as an Identified Affected System determines is necessary will be the responsibility of the electric system operator and not of the CAISO, the Participating Transmission Owner(s), or the Interconnection Customer. An Affected System's mitigation remedies that may be available outside the CAISO Tariff are unaffected by these provisions.

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#### **6.7.2.2**

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

Modifications permitted under this Section shall include specifically: (a) a decrease in the electrical output (MW) of the proposed project; (b) modifying the technical parameters associated with the Generating Facility technology or the Generating Facility step-up transformer impedance characteristics; ~~and~~ (c) modifying the interconnection configuration; (d) modifying the In-Service Date, Initial Synchronization Date, Trial Operation Date, and/or Commercial Operation Date that meets the criteria set forth in Section 3.5.1.4 and is acceptable to the applicable Participating TO(s) and the CAISO, such acceptance not to be unreasonably withheld; (e) change in Point of Interconnection as set forth in Section 6.7.2.1; and (f) change in Deliverability Status to Energy Only Deliverability Status, Partial Capacity Deliverability Status, or a lower fraction of Partial Capacity Deliverability Status.-

For any modification other than these, the Interconnection Customer must first request that the CAISO evaluate whether such modification is a Material Modification. In response to the Interconnection Customer's request, the CAISO, in coordination with the affected Participating TO(s) and, if applicable, any Affected System Operator, shall evaluate the proposed modifications prior to making them and the CAISO shall inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. The CAISO may engage the services of the applicable Participating TO to assess the modification. Costs incurred by the Participating TO and CAISO (if any) shall be borne by the party making the request under Section 6.7.2, and such costs shall be included in any CAISO invoice for modification assessment activities. Any change to the Point of Interconnection, except for that specified by the CAISO in an Interconnection Study or otherwise allowed under this Section, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

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

If any requested modification after the Phase II Interconnection Study report would change the scope, schedule, or cost of the Interconnection Facilities or Network Upgrades, the CAISO will issue a report to the Interconnection Customer. Potential adjustments to the maximum cost responsibility for Network Upgrades for the Interconnection Customer will be determined in accordance with Section 7.4.3.

### 6.7.2.3

The Interconnection Customer shall provide the CAISO a \$10,000 deposit for the modification assessment at the time the request is submitted. Except as provided below, any modification assessment will be concluded, and a response provided to the Interconnection Customer in writing, within forty-five (45) calendar days from the date the CAISO receives all of the following: the Interconnection Customer's written notice to modify the project, technical data required to assess the request and payment of the \$10,000 deposit. If the modification request results in a change to the Interconnection Facilities or Network Upgrades the modification assessment could take up to ninety (90) total 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.

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, as set forth in Section 7.5.2.

The Interconnection Customer will be responsible for the actual costs incurred by the CAISO and applicable Participating TO(s) in conducting the modification assessment. If the actual costs of the modification assessment are less than the deposit provided by the Interconnection Customer, the Interconnection Customer will be refunded the balance. If the actual costs of the modification assessment are greater than the deposit provided by the Interconnection Customer, the Interconnection Customer shall pay the balance within 30 days of being invoiced. The CAISO shall coordinate the modification request with the Participating TO(s). The Participating TO(s) shall invoice the CAISO for any assessment work within seventy-five (75) calendar days of completion of the assessment, and, within thirty (30) days thereafter, the CAISO shall issue an invoice or refund to the

Interconnection Customer, as applicable, based upon such submitted Participating TO invoices and the CAISO's own costs for the assessment.

The CAISO will publish cost data regarding modification assessments in accordance with the terms set forth in a Business Practice Manual.

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

After receiving from the Interconnection Customer any modification elections involving decreases in electrical output (MW) of the Generating Facility and/or changes (*i.e.*, reductions) in Deliverability status as permitted in [this Section 7.4](#), the CAISO, in coordination with the applicable Participating TO(s), will determine, based on best engineering judgment, whether such modifications will eliminate the need for any Delivery Network Upgrades identified in the Phase I Interconnection Study report. The CAISO and applicable Participating TO(s) will not conduct any re-studies in making this determination.

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

### **6.7.4 Commercial Viability Criteria for Retention of Deliverability beyond Seven Years in Queue**

Interconnection Customers may not retain their TP Deliverability if they exceed seven (7) years from the date the Interconnection Request is received by the CAISO, unless the Interconnection Customer demonstrates that the Generating Facility is commercially viable. The CAISO's agreement to an extension of the proposed Commercial Operation Date does not relieve the Interconnection Customer from compliance with the requirements of any of the criteria in Section 8.9.3 to retain TP Deliverability.

The CAISO's agreement to an extension of the proposed Commercial Operation Date with retention of TP Deliverability will be predicated upon the Interconnection Customer's ability to meet and maintain the following commercial viability criteria:

- a) Providing proof of having, at a minimum, applied for the necessary governmental permits or authorizations, and that the permitting authority has deemed such documentation as data adequate for the authority to initiate its review process;
- b) Providing proof of having an executed and regulator-approved power purchase agreement, attesting that the Generating Facilities will be balance-sheet financed, or otherwise receiving a binding commitment of project financing;
- c) Demonstrating Site Exclusivity for 100% of the property necessary to construct the facility through the Commercial Operation Date requested in the modification request. A Site Exclusivity Deposit does not satisfy this criterion;
- d) Having an executed Generator Interconnection Agreement (“GIA”); and
- e) Being in good standing with the GIA such that neither the Participating TO nor the CAISO has provided a Notice of Breach that has not been cured and the Interconnection Customer has not commenced sufficient curative actions.

If the Interconnection Customer fails to meet all of the commercial viability criteria but informs the CAISO that it intends to proceed with the modified Commercial Operation Date, the Generating Facility’s Deliverability Status will become Energy-Only Deliverability Status.

If an Interconnection Customer satisfies all the commercial viability criteria except criterion (b), 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 occurs later. Interconnection Customers exercising this provision must continue to meet all other commercial viability criteria.

If an Interconnection Customer has declared Commercial Operation for a portion of a Generating Facility, or one or more Phases of a Phased Generating Facility, the CAISO will not convert to Energy-Only the portion of the Generating Facility that is in service and operating in the CAISO markets. 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 the Generating Facility, each Resource ID will have its own Deliverability Status independent from the Generating Facility. Any individual Resource ID may have Full Capacity Deliverability Status where the Generating Facility as a whole would have Partial Capacity Deliverability Status. If the Generating Facility downsizes pursuant to Section 7.5 to the amount in service and operating in the CAISO markets, it will revert to Full Capacity Deliverability Status.

Interconnection Customers in Queue Cluster 7 and beyond whose Phase II Interconnection Study reports require a timeline beyond the seven-year threshold are exempt from the commercial viability criteria in this section provided that they modify their Commercial Operation Dates within six (6) months of the CAISO’s publishing the Phase II Interconnection Study report. This exemption is inapplicable to report addenda or revisions required by a request from an Interconnection Customer for any reason.

For Interconnection Customers extending their Commercial Operation Date beyond the seven-year threshold and retaining their TP Deliverability pursuant to Section 6.7.4, the CAISO will perform an annual review of commercial viability. If any Interconnection Customer fails to maintain its level of commercial viability, the Deliverability Status of the Generating Facility corresponding to the Interconnection Request will convert to Energy-Only Deliverability Status.

#### **6.7.5 Alignment with Power Purchase Agreements**

An Interconnection Customer with an executed GIA and an executed, regulator-approved power purchase agreement may request to automatically extend the GIA Commercial Operation Date to align with its power purchase agreement for that Generating Facility, including any extension or amendment. Interconnection Customers requesting alignment must (1) provide a copy of the power purchase agreement and evidence of regulatory approval, and (2) confirm the power purchase agreement's standing and details in the annual TP Deliverability affidavit process. Requests to align the Commercial Operation Date with power purchase agreements are not exempt from the commercial viability criteria provisions in Section 6.7.4, where applicable.

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#### **6.8.3 Only Substantial Errors or Omissions Adjust Posting Dates**

Only substantial errors and omissions related to the Phase I and Phase II study reports can result in adjustments to Interconnection Financial Security posting due dates. Once the initial and second Interconnection Financial Security posting due dates as described in this section have passed, the error or omission provisions described in this Section 6.8.3 no longer apply. Unless the error or omission is ~~a-substantial-error~~, resulting in the issuance of a revised final Interconnection Study report, the correction of an error or omission ~~shall will~~ not ~~operate to~~ delay any deadline for posting Interconnection Financial Security set forth in Section 11. In the case of a substantial error or omission resulting in the issuance of a revised final Phase I or Phase II Interconnection Study report, the deadline for posting Interconnection Financial Security shall be extended as set forth in Section 11. In addition to issuing a revised final report, the CAISO will promptly notify the Interconnection Customer of any revised posting amount and extended due date occasioned by a substantial error or omission.

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

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## Section 7      **Activities in Preparation for Phase II**

Within ten (10) Business Days following the Phase I Interconnection Study Results Meeting, the Interconnection Customer shall submit to the CAISO the completed form of Appendix B (Data Form to Be Provided by the Interconnection Customer Prior to Commencement of the Phase II Interconnection Study) to the Generator Interconnection Study Process Agreement. Within such Appendix B, ~~the Interconnection Customer shall provide the information in Sections 7.1 and, if the for~~ Interconnection Customers seeking Full or Partial Deliverability Capacity, will provide the information in 7.2 below:

### 7.1      ~~**[Not Used] Confirmation or Modification of Deliverability Status**~~

~~Within such Appendix B, the Interconnection Customer shall either~~

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

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

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

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

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

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

### 7.2      **Full/Partial Capacity Deliverability Options for Interconnection Customers**

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

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

Option (A), which means that the Generating Facility requires TP Deliverability to be able to continue to Commercial Operation. If the Interconnection Customer selects Option (A), then the Interconnection Customer shall be required to make an initial posting of Interconnection Financial Security under Section 11.2 for the cost responsibility assigned to it in the Phase I Interconnection Study for RNUs and LDNUs; or,

Option (B), which means that the Interconnection Customer will assume -cost responsibility for Delivery Network Upgrades (both ADNUs and LDNUs, to the extent applicable) without cash repayment under Section 14.2.1 to the extent that sufficient TP Deliverability is not allocated to the Generating Facility to provide its requested Deliverability Status. If the Interconnection Customer selects Option (B) then the Interconnection Customer shall be required to make an initial posting of Interconnection Financial Security under Section 11.2 for the cost responsibility assigned to it in the Phase I Interconnection Study for RNUs, LDNUs and ADNUs. To qualify to receive any allocation of TP Deliverability, Interconnection Customers selecting Option (B) must still meet the minimum criteria identified in Section 8.9.2.

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**7.4.3** Such changes to plans of service in Queue Clusters earlier than the current Interconnection Study Cycle will also serve as the basis for potential adjustments to the maximum cost responsibility for Network Upgrades for Interconnection Customers in such earlier Queue Clusters, as follows:

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

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

- (ii) If an Interconnection Customer's maximum cost responsibility for Network Upgrades is adjusted downward pursuant to (i) above, and a subsequent reassessment identifies a change on the CAISO's system that occurs after the completion of the Interconnection Customer's Interconnection Studies and requires additional or expanded Network Upgrades, resulting in an increase in the Interconnection Customer's estimated cost responsibility for Network Upgrades above the maximum cost responsibility as adjusted based on the results of a prior reassessment, then the Interconnection Customer's maximum cost responsibility for Network Upgrades will be the estimated cost responsibility determined in the subsequent reassessment, so long as this amount does not exceed the maximum cost responsibility originally established by the Interconnection Customer's Interconnection Studies. In such cases, where the estimated cost responsibility determined in the subsequent reassessment exceeds the maximum cost responsibility as adjusted based on the results of a prior reassessment, the Interconnection Customer's maximum cost responsibility for Network Upgrades shall be the maximum cost responsibility established by its Interconnection Studies.

The posted Interconnection Financial Security required of the Interconnection Customer for Network Upgrades shall be adjusted to correspond to ~~each change to~~

~~any increase in~~ the Interconnection Customer's estimated cost responsibility ~~resulting from a reassessment based on the Interconnection Financial Security posting rules set forth in the applicable CAISO interconnection procedures. An any time after but no later than sixty (60) calendar days after issuance of a reassessment report. The CAISO will notify an~~ Interconnection Customer that receives a downward adjustment to its current maximum cost responsibility pursuant to this Section, and the Interconnection Customer may choose to ~~decline the corresponding adjustment to its adjust its posted~~ Interconnection Financial Security ~~requirement by so notifying the CAISO in writing~~ within ~~ten (10)-sixty (60) calendar~~ days of the issuance of the reassessment report. ~~that resulted in the downward adjustment of the Interconnection Customer's maximum cost responsibility.~~

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

If the CAISO determines, under Section 8.9.1 above, that no TP Deliverability exists for allocation to the current Queue Cluster, then no allocation of TP Deliverability shall be made to the current Queue Cluster. If TP Deliverability is available for allocation, then the CAISO will allocate such capacity to eligible Generating Facilities.

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

The CAISO shall allocate available TP Deliverability to Option (A) and Option (B) Generating Facilities according to the Interconnection Customers' demonstration of having met the criteria listed below for all or a portion of the full MW generating capacity of the Generating Facility as specified in the Interconnection Request. Where a criterion is met by a portion of the full MW generating capacity of the Generating Facility, the eligibility score associated with that criterion shall apply to the portion that meets the criterion. The demonstration must relate to the same proposed Generating Facility as described in Appendix A to the Interconnection Request. The Generating Facility shall be assigned a numerical score reflecting the Interconnection Customer's demonstration of having met the criteria below under the methodology set forth in the Business Practice Manual. At a minimum, the Generating Facility must meet (1)d and either (2)a or (2)d.

- (1) Permitting status. An Interconnection Customer's Generating Facility must meet at least one of the following:
  - a. The Interconnection Customer has received its final governmental permit or authorization allowing the Generating Facility to commence construction.
  - b. The Interconnection Customer has received a draft environmental report document (or equivalent environmental permitting document) indicating likely approval of the requested permit and/or which indicates that the permitting authority has not found an environmental impact which would likely prevent the permit approval.

- c. The Interconnection Customer has applied for the necessary governmental permits or authorizations and the authority has deemed such documentation as data adequate for the authority to initiate its review process.
  - d. The Interconnection Customer has applied for the necessary governmental permit or authorization for the construction.
- (2) Project financing status. An Interconnection Customer's Generating Facility must meet at least one of the following criteria:

- a. The Generating Facility will be balance-sheet financed or has otherwise received a commitment of project financing, and the Interconnection Customer represents to the CAISO that either it has a regulator-approved power purchase agreement or that the Interconnection Customer is proceeding to commercial operation without a power purchase agreement.

Interconnection Customers that attest to this status at any time will be precluded from exercising rights in accordance with Section 11.4.1(a) as a condition for partial recovery of the Network Upgrade Interconnection Financial Security.

- b. The Interconnection Customer has an executed and regulator-approved power purchase agreement.
- c. The Interconnection Customer has an executed power purchase agreement but such agreement has not yet received regulatory approval.
- d. The Interconnection Customer does not have an executed power purchase agreement but the Interconnection Customer is included on an active short list or other commercially recognized method of preferential ranking of power providers by a prospective purchaser Load Serving Entity.

(3) Land acquisition

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

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

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## 8.9.5

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

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

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

An Interconnection Customer that selects option (iii) or (iv) above may, at the time it selects the option, elect to reduce the generating capacity of its Generating Facility.

[Interconnection Customers accepting a partial allocation of TP Deliverability may pursue additional deliverability through the Annual Full Capacity Deliverability Option under Section 9.2.](#)

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## 11.2.2

Timing of Postings. The postings set forth in this Section shall be made [on or before any time after the issuance of the final Phase I Interconnection Study report but no later than ninety \(90\) calendar days after issuance of the final Phase I Interconnection Study report for Interconnection Customers in a Queue Cluster, or on or before sixty \(60\) calendar](#)

days after the CAISO provides the results of the System Impact Study for Interconnection Customers in the Independent Study Process.

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

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

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### 11.3.1.2 Timing of Posting

~~The second postings shall be made on or before postings set forth in this Section for Interconnection Customers in a Queue Cluster shall be made any time after issuance of the final Phase II Interconnection Study report but no later than one hundred eighty (180) calendar days after issuance of the final Phase II Interconnection Study report. The postings for Interconnection Customers in a Queue Cluster, or on or before the Independent Study Process shall be made any time after the issuance of the final System Impact and Facilities Study report under the Independent Study Process but no later than one hundred twenty (120) calendar days after the CAISO provides the results of the System Impact and Facilities Study for Interconnection Customers in the Independent Study.~~

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

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

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### 11.3.1.4.4 Posting Related to Interconnection Customer's Stand Alone Network Upgrades

If the Interconnection Customer desires to self-build Stand Alone Network Upgrades consistent with its interconnection study reports, the Interconnection Customer must post the Interconnection Financial Security for the Stand Alone Network Upgrades in its Interconnection Financial Security posting. The Interconnection Customer may request to build the Stand Alone Network Upgrades in the Generator Interconnection Agreement negotiation process, and if the Participating TO and the CAISO agree, the interconnection study reports and the second posting will be revised accordingly once the

Generator Interconnection Agreement has been fully executed and documents the Stand Alone Network Upgrades. If the Participating TO and the CAISO agree to allow the Interconnection Customer to build a Stand Alone Network Upgrade in an executed Generator Interconnection Agreement, the Interconnection Customer's maximum cost responsibility will be reduced by the cost of the Stand Alone Network Upgrade and both the original and revised maximum cost responsibility will be documented in the Generation Interconnection Agreement.

If at any time the responsibility for constructing the Stand Alone Network Upgrade, or a portion thereof, reverts to the Participating TO, the Interconnection Customer will be required to revise its Interconnection Financial Security posting within thirty (30) calendar days to reflect that the Participating TO will build the Stand Alone Network Upgrade. The Interconnection Customer's maximum cost responsibility also will be revised to reflect that the Participating TO will build the Stand Alone Network Upgrade. Failure to make a timely posting adjustment will result in the withdrawal of the Interconnection Request in accordance with Section 3.8. If an Interconnection Customer has been allowed to reduce its Interconnection Financial Security posting following the execution of its Generator Interconnection Agreement and subsequently withdraws, the amount of the Interconnection Financial Security that is determined to be refundable under Section 11.4.2 will be reduced by the amount of the Interconnection Financial Security posting the Interconnection Customer avoided through the self-build option.

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### 11.3.2 Third Posting

~~On or before~~ After the second posting for a Queue Cluster has been made but no later than the start of Construction Activities for Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer, whichever is earlier, the Interconnection Customer shall modify the two separate Interconnection Financial Security instruments posted pursuant to Section 11.3.1.

After the first posting for Independent Study Process Customers has been made but no later than the start of Construction Activities for Network Upgrades or Participating TO's Interconnection Facilities on behalf of the Interconnection Customer, whichever is earlier, the Interconnection Customer shall modify the two separate Interconnection Financial Security instruments posted pursuant to Section 11.3.1.

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

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

(a) ~~(a)~~ Failure to Secure a Power Purchase Agreement. At the time of withdrawal of the Interconnection Request or termination of the GIA, the Interconnection Customer demonstrates to the CAISO that it has failed to secure an acceptable power purchase agreement for the Energy or capacity of the

Generating Facility after a good faith effort to do so. A good faith effort can be established by demonstrating participation in a competitive solicitation process or bilateral negotiations with an entity other than an Affiliate that progressed, at minimum, to the mutual exchange by all counter-parties of proposed term sheets.

Interconnection Customers that attested on the TP Deliverability Affidavit under Section 8.9.2, part (2), subpart (a) are ineligible to claim this condition for partial recovery of Interconnection Financial Security.

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

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

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

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

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

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

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

- a. the Interconnection Financial Security plus (any other provided security plus any separately provided capital) less (all costs and expenses incurred or irrevocably committed to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer) and less (any posting reduction due to the Interconnection Customer's election to self-build Stand Alone Network Upgrades), or
- b. the Interconnection Financial Security plus (any other provided security plus any separately provided capital) minus the lesser of fifty (50) percent of the value of the posted Interconnection Financial Security for Network Upgrades or \$20,000 per requested and approved, pre-downsized megawatt of the Generating Facility Capacity.

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

#### **13.1 Tender**

- 13.1.1 ~~If the Interconnection Customer requested Full Capacity Deliverability Status or Partial Deliverability Status, then within thirty (30) Calendar Days after the CAISO provides the updated Phase II Interconnection Study report (or by an earlier date, if all parties agree) which includes the allocation of TP Deliverability to the Interconnection Customer, the applicable Participating TO shall~~ The applicable Participating TO will tender a draft GIA,

~~together with draft appendices. If the Interconnection Customer requested Energy-Only Deliverability Status, then within thirty (30) Calendar Days following the results meeting for the final Phase II Interconnection Study (or by an earlier date, if all parties agree), Facilities Study, or system impact and facilities study, the, to the CAISO and the Interconnection Customer no later than the sum of (i) one hundred eighty (180) calendar days and (ii) the estimated time to construct the Interconnection Facilities and Network Upgrades indicated in the applicable study report needed by this or any other dependent project, prior to the In-Service Date. The applicable Participating TO shall tender a draft GIA, together with draft appendices, may tender the draft GIA any time after the Phase II Study report is issued and before the determined tender date on its own accord or at the request of either the CAISO or the Interconnection Customer. The draft GIA shall will be in the form of the FERC-approved form of GIA set forth in CAISO Tariff Appendix EE or Appendix FF, as applicable. The Interconnection Customer shall provide written comments, or notification of no comments, to the draft appendices to the applicable Participating TO(s) and the CAISO within (30) calendar days of receipt.~~

- 13.1.2** Consistent with Section 13.1.1, when the transmission system of a Participating TO, in which the Point of Interconnection is not located, is affected, such Participating TO shall tender a separate agreement, in the form of the GIA, as appropriately modified.

## **13.2 Negotiation**

~~Notwithstanding Section 13.1, at the request of the Interconnection Customer, the applicable Participating TO(s) and CAISO shall begin negotiations with the Interconnection Customer concerning the appendices to the GIA at any time after the CAISO provides the Interconnection Customer with the final Phase II Interconnection Study report. The applicable Participating TO(s) and the CAISO and the Interconnection Customer shall will negotiate concerning any disputed provisions of the appendices to the draft GIA for not more than one hundred twenty (120) calendar days after the CAISO Participating TO provides the Interconnection Customer with the final Phase II Interconnection Study report, or the system impact and facilities study report and the CAISO with the draft GIA. If the Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft GIA, pursuant to Section 13.1 and Within seven (7) calendar days of such request, the Interconnection Customer will request submission of the unexecuted GIA with FERC or initiate Dispute Resolution procedures pursuant to Section 15.5. If the Interconnection Customer requests termination of the negotiations, but, within one hundred twenty (120) calendar days after issuance of the final Phase II Interconnection Study report, but fails to request either the filing submission of the unexecuted GIA or to initiate Dispute Resolution within seven (7) calendar days, it shall will be deemed to have withdrawn its Interconnection Request.~~

~~Neither the CAISO nor the Participating TO may declare an impasse until one hundred twenty (120) calendar days after the draft GIA was tendered. If the CAISO or the Participating TO declares an impasse, that party will file the GIA unexecuted with FERC within twenty one (21) calendar days.~~

Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed and returned the GIA, requested filing of an unexecuted GIA, or initiated Dispute Resolution procedures pursuant to Section 15.5 within one hundred twenty (120) calendar days after issuance of the final Phase II Interconnection Study report draft GIA, it shall be deemed to have withdrawn its Interconnection Request. The CAISO shall will provide to the Interconnection Customer a final GIA within ten (10) Business Days after the completion of the negotiation process and receipt of all requested information.

**13.2.1** Any time after the Phase II Study report is issued, if the Interconnection Customer's In-Service Date is not achievable based on the estimated time (i) to construct the longest lead Network Upgrade, Interconnection Facility, or Generating Facility as set forth in the Interconnection Customer's study reports, and (ii) the time needed to negotiate the GIA, the Interconnection Request shall be deemed withdrawn pursuant to Section 3.8.

\*\*\*\*

#### **14.2.4 Limited Operation Study**

**14.2.4.1** Pursuant to Article 5.9 of the Large Generator Interconnection Agreement set forth in Appendices V, BB, CC, and EE, Generating Facilities may request a limited operation study if any of the Participating TO's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Generating Unit. The Participating TO and/or the CAISO, as applicable, will, upon the request and at the expense of the Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Generating Unit and the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Participating TO's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice. The Participating TO and the CAISO will permit the Interconnection Customer to operate the Generating Unit and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.

**14.2.4.2** The Generating Unit owner will provide the CAISO a \$10,000 deposit for the limited operation study with the request. Except as provided below, any limited operation study will be concluded, and a response provided to the Generating Unit owner in writing, within forty-five (45) calendar days from when the CAISO receives all of the following: the Generating Unit owner's written approval of the limited operation study plan, technical data required to assess the request, and the \$10,000 deposit. If the limited operation study cannot be completed within that time period, the CAISO will notify the Generating Unit owner and provide an estimated completion date and an explanation of the reasons why additional time is required.

**14.2.4.3** The Generating Unit owner will be responsible for the actual costs incurred by the CAISO and the Participating TO(s) in conducting the modification assessment. If the actual costs of the limited operation study are less than the deposit provided by the Generating Unit owner, the Generating Unit owner will be refunded the balance. If the actual costs of the limited operation study are greater than the deposit provided by the Generating Unit owner, the Generating Unit owner shall pay the balance within thirty (30) days of being invoiced. The CAISO will coordinate the request with the Participating TO(s). The Participating TO(s) will invoice the CAISO for any limited operation study work within seventy-five (75) calendar days of completion of the study, and, within thirty (30) days of payment of the Participating TO(s) invoice, the CAISO will issue an invoice or refund to the Generating Unit owner, as applicable, based upon such submitted Participating TO invoices and the CAISO's costs for the assessment.

\*\*\*\*

**GENERATOR INTERCONNECTION STUDY PROCESS AGREEMENT  
FOR QUEUE CLUSTERS**

\*\*\*\*

**Appendix B**

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

Generating Facility size (MW): \_\_\_\_\_

Provide two copies of this completed form and other required plans and diagrams in accordance with Section 8.1 of the GIDAP.

Provide location plan and one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

One set of metering is required for each generation connection to the new bus or existing CAISO Controlled Grid station. Number of generation connections: \_\_\_\_\_

On the one line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)

On the one line indicate the location of auxiliary power. (Minimum load on CT/PT)

Will an alternate source of auxiliary power be available during CT/PT maintenance? \_\_\_\_\_ Yes  
\_\_\_\_\_ No

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation?      Yes      No  
(Please indicate on one line).

What type of control system or PLC will be located at the Interconnection Customer's Generating Facility?

\_\_\_\_\_

What protocol does the control system or PLC use?

\_\_\_\_\_

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.

Physical dimensions of the proposed interconnection station:

Bus length from generation to interconnection station:

Line length from interconnection station to the Participating TO's transmission line.

Tower number observed in the field. (Painted on tower leg)\*

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

\* To be completed in coordination with the Participating TO or CAISO.

Is the Generating Facility in the Participating TO's service area?

Yes      No

Local service provider for auxiliary and other power: \_\_\_\_\_

Point of Interconnection: \_\_\_\_\_

Please provide proposed schedule dates:

Environmental survey start: \_\_\_\_\_

Environmental impact report submittal: \_\_\_\_\_

Procurement of project equipment: \_\_\_\_\_

Begin Construction Date: \_\_\_\_\_

~~Generator step-up transformer~~ In-Service Date: \_\_\_\_\_  
~~receives back feed power~~

~~Generation Testing~~ Trial Operation Date: \_\_\_\_\_

Commercial Operation Date: \_\_\_\_\_

Level of Deliverability: Choose one of the following:

\_\_\_\_\_ Energy Only

\_\_\_\_\_ Full Capacity

\_\_\_\_\_ Partial Capacity for \_\_\_\_\_ MWs

TP Deliverability: Choose one of the following:

\_\_\_\_\_ Option (A), which means that the Generating Facility requires TP Deliverability to be able to continue to commercial operation.

\_\_\_\_\_ Option (B), which means that the Interconnection Customer will continue to commercial operation without an allocation of TP Deliverability.

Please provide any additional modification request pursuant to Section 6.7.2.2 of Appendix DD:

\*\*\*\*

**Appendix 6  
INDEPENDENT STUDY PROCESS STUDY AGREEMENT**

\*\*\*\*

**Appendix B Data Form, Pre-System Impact and Facilities Study**

**DATA FORM TO BE PROVIDED BY THE INTERCONNECTION CUSTOMER  
PRIOR TO COMMENCEMENT OF THE SYSTEM IMPACT AND FACILITIES STUDY**

Generating Facility size (MW): \_\_\_\_\_

Provide two copies of this completed form and other required plans and diagrams in accordance with Section 4.5 of the GIDAP.

Provide location plan and one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

One set of metering is required for each generation connection to the new bus or existing CAISO Controlled Grid station. Number of generation connections: \_\_\_\_\_

On the one line indicate the generation capacity attached at each metering location. (Maximum load on CT/PT)

On the one line indicate the location of auxiliary power. (Minimum load on CT/PT)

Will an alternate source of auxiliary power be available during CT/PT maintenance?                      Yes  
\_\_\_\_\_ No

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation?              Yes              No  
(Please indicate on one line).

What type of control system or PLC will be located at the Interconnection Customer's Generating Facility?

\_\_\_\_\_

What protocol does the control system or PLC use?

\_\_\_\_\_

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.

Physical dimensions of the proposed interconnection station:

Bus length from generation to interconnection station:

Line length from interconnection station to the Participating TO's transmission line.

Tower number observed in the field. (Painted on tower leg)\*

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

\* To be completed in coordination with the Participating TO or CAISO.

Is the Generating Facility in the Participating TO's service area?

Yes      No

Local service provider for auxiliary and other power: \_\_\_\_\_

Please provide proposed schedule dates:

Environmental survey start: \_\_\_\_\_

Environmental impact report submittal: \_\_\_\_\_

Procurement of project equipment: \_\_\_\_\_

Begin Construction Date: \_\_\_\_\_

~~Generator step-up transformer In-Service Date: \_\_\_\_\_~~  
~~receives back feed power~~

~~Generation Testing Trial Operation Date: \_\_\_\_\_~~

Commercial Operation Date: \_\_\_\_\_

Level of Deliverability Status: Choose one of the following:

\_\_\_\_\_ Energy-Only

\_\_\_\_\_ Full Capacity

\_\_\_\_\_ Partial Capacity (expressed in fraction of Full Capacity)

Please provide any additional modification request pursuant to Section 6.7.2.2 of Appendix DD.

\*\*\*\*

## Appendix EE

### Large Generator Interconnection Agreement

\*\*\*\*

**5.2 General Conditions Applicable to Option to Build.** If the Interconnection Customer assumes responsibility for the design, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, or assumes responsibility for any stand-alone task, such as telecommunications, environmental, or real-estate related work:

(1) within six (6) months of the execution of this LGIA, or at a later date agreed to by the Parties, the Interconnection Customer will submit to the CAISO and the Participating TO a milestone schedule for the design, procurement, and construction of the Stand Alone Network Upgrades, or any stand-alone task assumed by the Interconnection Customer. The milestone schedule will be required to support the Interconnection Customer's Commercial Operation Date, and any Appendix B Milestones will be amended to include the milestone schedule for the Stand Alone Network Upgrades;

~~(42)~~ the Interconnection Customer shall engineer, procure equipment, and construct the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the Participating TO;

~~(23)~~ The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which the Participating TO would be subject in the engineering, procurement or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

~~(34)~~ the Participating TO shall review, and the Interconnection Customer shall obtain the Participating TO's approval of, the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, which approval shall not be unreasonably withheld, and the CAISO may, at its option, review the engineering design, equipment acceptance tests, and the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

~~(45)~~ prior to commencement of construction, the Interconnection Customer shall provide to the Participating TO, with a copy to the CAISO for informational purposes, a schedule for construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, and shall promptly respond to requests for information from the Participating TO;

~~(56)~~ at any time during construction, the Participating TO shall have the right to gain unrestricted access to the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;

~~(67)~~ at any time during construction, should any phase of the engineering, equipment

procurement, or construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by the Participating TO, the Interconnection Customer shall be obligated to remedy deficiencies in that portion of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades;

(78) the Interconnection Customer shall indemnify the CAISO and Participating TO for claims arising from the Interconnection Customer's construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 Indemnity;

(89) The Interconnection Customer shall transfer control of the Participating TO's Interconnection Facilities to the Participating TO and shall transfer Operational Control of Stand Alone Network Upgrades to the CAISO;

(910) Unless the Parties otherwise agree, the Interconnection Customer shall transfer ownership of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO. As soon as reasonably practicable, but within twelve months after completion of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, the Interconnection Customer shall provide an invoice of the final cost of the construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the Participating TO, which invoice shall set forth such costs in sufficient detail to enable the Participating TO to reflect the proper costs of such facilities in its transmission rate base and to identify the investment upon which refunds will be provided;

(4011) the Participating TO shall accept for operation and maintenance the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and

(4412) The Interconnection Customer's engineering, procurement and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of the "Option to Build" conditions set forth in Appendix C. Interconnection Customer shall deliver to the Participating TO "as-built" drawings, information, and any other documents that are reasonably required by the Participating TO to assure that the Interconnection Facilities and Stand-Alone Network Upgrades are built to the standards and specifications required by the Participating TO.

\*\*\*\*

**18.3 Insurance.** As indicated below, the designated Party shall, at its own expense, maintain in force throughout the periods noted in this LGIA, and until released by the other Parties, the following minimum insurance coverages, with insurers rated no less than A- (with a minimum size rating of VII) by Bests' Insurance Guide and Key Ratings and authorized to do business in the state where the Point of Interconnection is located, except in the case of any insurance required to be carried by the CAISO, the State of California:

**18.3.1 ~~Employer's Liability and Workers' Compensation Insurance~~ and Employers'**

**Liability.** The Participating TO and the Interconnection Customer shall maintain such coverage from the commencement of any Construction Activities providing statutory benefits for ~~workers compensation~~ Workers Compensation coverage and coverage amounts of no less than One Million Dollars (\$1,000,000) for employer's liability for each employee for bodily injury by accident and One Million Dollars (\$1,000,000) for each employee for bodily injury by disease in accordance with the laws and regulations of the state in which the Point of Interconnection is located. The Participating TO shall provide the Interconnection Customer with evidence of such insurance coverage within thirty (30) ~~days~~ Calendar Days of any request by the Interconnection Customer. The Interconnection Customer shall provide evidence of such insurance thirty (30) ~~days~~ Calendar Days prior to entry by any employee or contractor or other person acting on the Interconnection Customer's behalf onto any construction site to perform any work related to the Interconnection Facilities or Generating Facility.

**18.3.2 Commercial General Liability Insurance.** The Participating TO and the Interconnection Customer shall maintain commercial general liability insurance coverage commencing within thirty (30) ~~days~~ Calendar Days of the ~~effective date~~ Effective Date of this LGIA, including coverage for premises and operations, bodily injury (including death), personal injury, ~~broad form~~ property damage, ~~broad form blanket contractual liability coverage (including coverage for the contractual indemnification)~~, products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability and (i) liability of Participating TO and the Interconnection Customer that would be imposed without the LGIA, or (ii) liability assumed by the Participating TO and the Interconnection Customer in a contract or agreement that is an "insured contract" under commercial general liability insurance policy. Such insurance shall include no cross liability exclusions or separation of insured clause endorsement exclusions, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate ~~combined single limit for personal injury, bodily injury, including death and property damage~~. If the activities of the Interconnection Customer are being conducted through the actions of an Affiliate, then the Interconnection Customer may satisfy the insurance requirements of this Section 18.3.2 by providing evidence of insurance coverage carried by such Affiliate and showing the Participating TO and the CAISO as an additional insured only with respect to the LGIA, together with the Interconnection Customer's written representation to the Participating TO and the CAISO that the insured Affiliate is conducting all of the necessary pre-construction work. Within thirty (30) ~~days~~ Calendar Days prior to the entry of any person on behalf of the Interconnection Customer onto any construction site to perform work related to the Interconnection Facilities or Generating Facility, the Interconnection Customer shall replace any evidence of Affiliate Insurance with evidence of such insurance carried by the Interconnection Customer, naming the Participating TO and CAISO as additional insured only with respect to the LGIA.

**18.3.3 Business Automobile Liability Insurance.** Prior to the entry of any such vehicles on any construction site in connection with work done by or on behalf of the Interconnection Customer, the Interconnection Customer shall provide evidence of coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage. ~~Upon the request of the Participating TO, the~~ The Interconnection Customer shall ~~name include~~ the Participating TO and the CAISO as ~~an~~ additional insured with respect to the LGIA on any such policies.

**18.3.4 Excess ~~Public~~ Liability Insurance.** Commencing at the time of entry of any person

on its behalf upon any construction site for the Network Upgrades, Interconnection Facilities, or Generating Facility, the Participating TO and the Interconnection Customer shall maintain ~~excess public liability~~ Excess Liability insurance over and above the Employer's Liability Commercial General Liability and Business Automobile Liability Insurance coverage, with a minimum ~~combined single~~ limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate. Such insurance carried by the Participating TO shall ~~name-include~~ the Interconnection Customer and CAISO as ~~an~~ additional insured with respect to the LGIA, and such insurance carried by the Interconnection Customer shall ~~name-include~~ the Participating TO and CAISO as an additional insured with respect to the LGIA. The requirements of Section 18.3.2 and 18.3.4 may be met by any combination of general and excess liability insurance.

- 18.3.5** The Commercial General Liability Insurance, Business Automobile Insurance and Excess ~~Public~~-Liability Insurance policies shall ~~name-include~~ the other Parties identified in the sections above, their parents, ~~associated and Affiliate companies and their subsidiaries,~~ respective directors, officers, agents, servants and employees ("Other Party Group") and the CAISO as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group ~~and provide thirty (30) Calendar Days advance written notice to the Other Party Group of cancellation in coverage or condition.~~ If any Party can reasonably demonstrate that coverage policies containing provisions for insurer waiver of subrogation rights, or advance ~~written~~ notice are not commercially available, then the Parties shall meet and confer and mutually determine to (i) establish replacement or equivalent terms in lieu of subrogation or notice or (ii) waive the requirements that coverage(s) include such subrogation provision or require advance written notice from such insurers.
- 18.3.6** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess ~~Public~~-Liability Insurance policies shall contain provisions that specify that the policies are primary and ~~shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered, non-contributory.~~ Each Party shall be responsible for its respective deductibles or self-insured retentions.
- 18.3.7** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess ~~Public~~-Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of ~~tail coverage or~~ extended reporting period coverage if agreed by the Parties.
- 18.3.8** ~~[Not Used.]The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this LGIA.~~
- 18.3.9** Within ten-Thirty (31-0) Calendar Days following execution of prior to the start of any work at the construction site related to Interconnection Facilities or Generating Facility under this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) Calendar Days thereafter, ~~each Party~~ the Participating TO and the Interconnection Customer shall provide certification of a certificate of insurance for all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.

**18.3.10** Notwithstanding the foregoing, each Party may self-insure

a) to meet the minimum insurance requirements of Article 18.3.1, to the extent that it maintains a self-insurance program that is a qualified self-insurer within the state in which the Point of Interconnection is located, under the laws and regulations of such state; and

b) to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9.

c) in the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.

**18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this LGIA greater than \$25,000, including within the scope of coverage of such insurance whether or not such coverage is sought.

**Attachment C – Draft Final Proposal**  
**Tariff Amendment to Implement**  
**2015 Interconnection Process Enhancements**

**California Independent System Operator Corporation**



# **Interconnection Process Enhancements (IPE) 2015**

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## **Draft Final Proposal**

July 6, 2015

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# Interconnection Process Enhancements 2015

## Draft Final Proposal

### 1 Executive Summary

The Interconnection Process Enhancements (“IPE”) 2015 initiative is the latest in a series of stakeholder processes that the California Independent System Operator Corporation (“CAISO”) has conducted over the past several years to continuously review and improve the generator interconnection process and associated generator interconnection agreements. Similar to the previous iteration of the IPE initiative, IPE 2015 includes several topics that the CAISO is proposing to improve or clarify the interconnection process. There are a total of eleven improvements proposed for this year’s initiative. Topics range from clarifications, to re-setting deposit amounts based on experience, to significant changes to the negotiation of Generator Interconnection Agreements (“GIA”). The CAISO hopes to complete the stakeholder process for all topics included in this initiative and obtain Board approval in September 2015.

### 2 Introduction

The CAISO posted an issue paper/straw proposal on March 23, 2015 and a revised straw proposal on May 11, 2015 consisting of the eleven items listed in Table 1 below. To make its proposals more clear, the CAISO included proposed draft tariff language for each topic in these proposals.<sup>1</sup>

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<sup>1</sup> The tariff language is “draft” tariff language. Stakeholders may submit comments or proposed edits and the CAISO may revise it. As with all draft tariff language in the stakeholder process, the CAISO reserves the right to revise the tariff language, including up to the time of filing at the Federal Energy Regulatory Commission.

Topic No.	Topic Description
1	Affected Systems
2	Time-In-Queue Limitations
3	Negotiation of Generator Interconnection Agreements
4	Deposits Interconnection Request Study Deposits Limited Operation Study Deposits Modification Deposits Repowering Deposits
5	Stand-Alone Network Upgrades and Self-Build Option
6	Allowable Modifications Between Phase I and Phase II Study Results
7	Conditions for Issuance of Study Reports
8	Generator Interconnection Agreement Insurance
9	Interconnection Financial Security Process Clarifications Posting Clarifications TP Deliverability Affidavit Impacts
10	Forfeiture of Funds for Withdrawal During Downsizing Process
11	TP Deliverability Option B Clarifications

### **3 Revisions to the May 11<sup>th</sup> Revised Straw Proposal**

Below is a brief summary of the CAISO’s revisions to each topic based on stakeholder comments on the May 11<sup>th</sup> revised straw proposal.<sup>2</sup> A complete discussion of stakeholder comments and the CAISO’s responses follows. Topics 4 and 9 did not have any revisions to the proposals included in the March 23<sup>rd</sup> Issue Paper/Straw Proposal.

#### **Topic 1 – Affected Systems**

The CAISO proposes to modify the draft tariff language further as follows:

- clarify the actions the Affected System Operator may take upon receipt of the CAISO notice;

---

<sup>2</sup> The CAISO received comments on the revised straw proposal from California Wind Energy Association (“CalWEA”), City and County of San Francisco (“CCSF”), Di Capo Legal Advisors (“DLA”), EDF Renewable Energy (“EDF”), First Solar, Independent Energy Producers (“IEP”), Large-scale Solar Association (“LSA”), Modesto Irrigation District (“MID”), NRG Energy (“NRG”), Pacific Gas and Electric Company (“PG&E”), Southern California Edison (“SCE”), Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California (“Six Cities”), , S-Power (“sPower”).

- correct tariff language inadvertently left in the Revised Straw Proposal to accurately reflect the proposed sixty (60) days that Affected System Operators should have to determine if they want to identify themselves as Affected Systems;
- add the ability for an Affected System to identify itself outside the timeline established if the CAISO determines facts have changed; and
- include the definition of Identified Affected System in Appendix A of the CAISO tariff.

## **Topic 2 – Time-In-Queue Limitations**

The CAISO proposes to modify the draft tariff language further to include:

- an allowance for COD extensions where an Interconnection Customer has an executed Power Purchase Agreement (“PPA”) with final regulatory approval;
- a one-year period before converting a project to Energy-Only in the event that failure to meet commercial viability criteria is due to the lack of a PPA;
- creation of a new tariff section to specifically address milestone modifications and time-in-queue limitations;
- clarification on how the CAISO will modify executed GIAs for Interconnection Customers losing FCDS or PCDS;
- clarification that Site Exclusivity requirement for the commercial viability criteria is 100%; and
- a requirement for specific permitting details during the annual review of commercial viability.

## **Topic 3 – Negotiation of Generator Interconnection Agreements**

The CAISO proposes to modify the draft tariff language further to include:

- clarification that the longest-lead facility could be for the subject project or another queued project;
- an additional 30 days to the negotiation period; and
- clarification that the Participating TO and the CAISO must proceed with an unexecuted filing at FERC within 21 days of declaring an impasse.

## **Topic 5 – Stand-Alone Network Upgrades and Self-Build Option**

The CAISO’s draft final proposal clarifies that allowing an Interconnection Customer to build a Stand Alone Network Upgrade will not impact the Interconnection Customer’s maximum cost responsibility, including any impact to the individual Network Upgrade costs used to calculate the Interconnection Customer’s maximum cost responsibility.

### **Topic 6 – Allowable Modifications between Phase I and Phase II Study Results**

The CAISO did not change the revised straw proposal regarding allowable modifications between Phase I and Phase II study results.

### **Topic 7 – Conditions for Issuance of Study Reports**

The CAISO did not change the revised straw proposal regarding conditions for the issuance of study reports.

### **Topic 8 – Generator Interconnection Agreement Insurance**

The CAISO did not make substantive changes to the proposal, but made minor edits to the tariff language to provide consistency with insurance industry terminology.

### **Topic 10 – Forfeiture of Funds for Withdrawal during Downsizing Process.**

The CAISO did not change the revised straw proposal, but clarified its intent to apply the forfeiture terms to the 2015 downsizing window.

### **Topic 11 – TP Deliverability Option B Clarifications**

The CAISO did not change the revised straw proposal regarding TP deliverability option B clarifications.

## 4 Stakeholder Process Next Steps

Table 2 summarizes the anticipated stakeholder process schedule for the IPE 2015 initiative.

Table 2 – Stakeholder process schedule		
Step	Date	Milestone
Draft Final Proposal	July 6, 2015	Draft Final Proposal Posted
	July 13, 2015	Stakeholder meeting (web conference)
	July 27, 2015	Stakeholder comments due
Final Proposal to Board	September 17-18, 2015	Board of Governors Meeting

## 5 Topics

### 5.1 Topic 1 – Affected Systems

#### 5.1.1 Overview

In the 2014 stakeholder process to clarify the affected system coordination language in the Business Practice Manual (“BPM”) for the Generator Interconnection and Deliverability Allocation Procedures (“GIDAP”), the CAISO committed to the following:

*The CAISO understands that the Interconnection Customers desire a definitive time by which an electric system operator identifies themselves as an Affected System. The CAISO does not currently have tariff authority to provide this definitive time. The CAISO proposes to include in the IPE a topic that would propose a tariff amendment establishing a timeframe and process similar to the WECC Project Coordination and Path Rating Process.*

This proposal is the result of that commitment. As discussed at the onset of this initiative, 2015 Interconnection Process Enhancements was designated as a discretionary initiative in the 2015 Stakeholder Initiatives Catalog and was ranked in the seventh group from the top and therefore did not meet the threshold for being considered as a CAISO stakeholder initiative in 2015 by the policy team. However, because the implementing business units had tariff changes that needed to be discussed with stakeholders and implemented as soon as possible, the implementing business units, and not policy, have conducted this initiative. Because this stakeholder initiative

is being run outside the standard policy process all of the topics have been narrowed to only what needs to be done this year.

### 5.1.2 *Stakeholder Input*

The CAISO received ten comments regarding the revised affected system proposal. Four comments supported the revised proposal, four comments supported the proposal with qualifications, one comment was neutral, and one comment expressed concerns with the revised proposal.

CalWEA and IEP reiterated their concerns over the CAISO's need for reciprocity agreements with electrical system operators around the CAISO footprint. Absent the agreements, they believe there is a risk to developers in the form of delayed analyses and mitigation measures that are unreasonable or not least-cost. Similarly, PG&E and SCE stated that the CAISO should have enforceable agreements with affected systems to ensure appropriate, enforceable mechanisms, including cost responsibility for mitigation. As an alternative to the CAISO's proposed tariff revisions, SCE recommended a more coordinated process with a clear delineation of roles and responsibilities, including amended BAA agreements or new reciprocity agreements.

To be sure, the CAISO is not unsympathetic to these concerns and is open to developing affected system agreements in the future if affected systems are willing. The instant initiative is merely the *next* step in developing the CAISO's process for affected systems. It is not the final step. The CAISO understands that there are—and always will be—risks and uncertainty for the developer. However, FERC approval of the proposed tariff for this topic will provide Interconnection Customers with less risk and uncertainty. Developers will have a FERC-approved recourse where any affected system fails to coordinate with the CAISO and participate in the CAISO's affected system process.

To date, the CAISO has worked with Interconnection Customers and Affected System Operators when issues arise. In the majority of instances all issues have been resolved without delay to the project. But these disputes have been the result of reasoned settlement among the parties. The CAISO has no authority over an Affected System Operator to require certain actions, including the execution of reciprocity agreements. Nor does the CAISO have the ability to tell an Affected System Operator how to do its study, what assumptions should be used, or what mitigations should cost. The reliability of the transmission system is paramount, and the CAISO simply is unable to ignore its neighbors because they are not willing to enter into a reciprocal agreement with CAISO obligating both parties to certain study timelines and guidelines for the development of the needed system upgrades. As DLA noted in its comments:

[N]eighboring balancing systems are akin to “independent nation states” that operate in a “confederated” world. This is reflected in the standardized Order 2003 tariff language, which uses words like “coordinate” and “cooperate.” To the extent that influence can be asserted over a neighboring balancing authority to carry out its affected systems obligations, the available tools are generally NERC/WECC reliability standards and open access obligations arising out of reciprocity and regional planning. In all likelihood, this means that the ISO’s best approach is to integrate the critical time input needs from the affected systems into timeframes and processes related to transmission-related activities such as the path rating example referenced in the issue paper. Unfortunately, this effort is longer-term, but greater opportunities present themselves as neighboring balancing authorities join EIM.

Consistent with this framework, the CAISO’s proposed tariff language states that if the Affected System does not identify itself within a 60-day period, the CAISO will assume that the system is not an Affected System, absent changed circumstances discussed below.

DLA also commented that it is unsure whether the CAISO’s proposed language accurately tracks interconnection study practice. The CAISO believes that it does, and intends to include Affected System information in the Phase I Study Report, Phase II Study Report, and the letter sent to each Affected System. However, the intent of the proposed tariff language is that, regardless of whether the CAISO believes there may be an impact on the Affected System, the Affected System Operator must agree and identify itself during the 60-day period.

DLA also noted that Affected System concerns typically present themselves in three forms. The affective system: 1) is “radio silent” (takes no action); 2) does not act within timeframes that are meaningful to the CAISO or interconnection customer; or 3) presents costs and/or mitigation measures that the Interconnection Customer asserts do not reasonably represent the true costs attributable to any system impact. DLA states that the CAISO’s proposal may not address the latter two scenarios. The CAISO disagrees, and believes that the proposal addresses all three scenarios to the extent possible. If the Affected System does not act within the times specified, then the CAISO will not delay synchronization of the Interconnection Customer’s project unless factual circumstances have changed, as discussed below. If the mitigation costs and/or measures are unreasonable, then existing processes are in place. The Interconnection Customer can engage the CAISO in the discussions with the Affected System Operator, and the CAISO will continue to help resolve any issue up to the point that it can. If the Interconnection Customer believes that proposed mitigation measures remain unreasonable, then just like today, the Interconnection Customer’s remedy is to appeal to the Affected System’s regulatory authority.

DLA also raised concern over cases where an Affected System Operator presented itself beyond the 60-day period, the CAISO would reply that the system “was out of luck.” DLA stated that this approach could be problematic for the Interconnection Customer. For example, this could expose the Interconnection Customer to litigation risk: if the Affected System protested the GIA at FERC when the GIA was filed through either a formal filing or listing on the electronic quarterly report (“EQR”). The CAISO again disagrees. If the FERC approves the tariff filing as proposed, the Interconnection Customer and the CAISO would point to the approved tariff language in its reply to a GIA protest, regardless of whether the GIA is filed as a conformed pro forma agreement under the EQR process or filed formally with FERC, and be able to demonstrate the communications between the CAISO and Affected System Operator.

IEP asked the CAISO to consider the instant proposal as a successful, interim step in a longer process, and that the CAISO consider moving Affected Systems into its own process, independent of the ongoing IPE initiative in order to provide the focus that this issue requires. The CAISO notes that it already had an Affected System Impacts of Generator Interconnection stakeholder process that began in August 2013 and culminated in a GIDAP BPM amendment in September 4, 2014. The only reason for the Affected System topic in the IPE 2015 initiative is to address the gap identified at the CAISO Governing Board meeting to establish a definitive time by which an electric system operator identifies itself as an Affected System. Nevertheless, the CAISO recognizes that another, separate initiative may be necessary in the future.

First Solar concurred with the comments filed by LSA regarding Affected Systems. LSA believes the CAISO should modify the proposal to: (1) require entities to state why they believe that they are Affected Systems; (2) clarify that new rules adopted here would supersede earlier rules in pre-CAISO agreements; and (3) remove the Affected Systems status of entities that were identified in CAISO studies if reassessment analyses show that they are no longer affected.

First, LSA believes the CAISO should require not only self-identification of Affected Systems, but a statement (to the best knowledge of each entity) of how it believes that it is affected. While the CAISO is sympathetic to this proposal, it does not believe it is feasible for the Affected Systems. Given that the Interconnection Customer needs to pay for studies before results can be valid, requiring an Affected System to state why it is affected is inconsistent with the Affected System construct. The Affected System construct was established in the previous Affected System process in 2013-2014 whereby the Interconnection Customers wanted to know who they need to work with as early in the process as possible to ensure that generator development timelines are

being met. The CAISO agreed to take on that responsibility and proactively now contacts Affected Systems.

Second, LSA requested that the CAISO clarify that these new rules would be effective for new Interconnection Requests (“IR”) once they are approved by FERC, regardless of other rules in pre-CAISO agreements. LSA is correct. The proposed tariff language will amend Appendix DD of the CAISO tariff and will be effective going forward from the established effective date only.

Third, LSA commented that the CAISO’s process should allow for removal of Affected Systems status based on reassessment process results if the initial designation resulted from CAISO studies and not self-identification. Project withdrawals before the second IFS posting can be significant, and the CAISO acknowledges reduced impacts of the cluster on its system through removal of earlier-identified Network Upgrades that are no longer needed. Re-examination of the impacts on Affected Systems should be a part of the reassessment process, to the same extent that such impacts are examined for the CAISO system. However, LSA misunderstands how Affected Systems are identified. The CAISO determines the Potentially Affected Systems based on the project’s point of interconnection and Affected Systems that are electrically close to that point. Project withdrawals and reassessments generally would not impact the determination of Potentially Affected Systems for each project.

LSA also provided broader comments related to Affected Systems issues that go beyond the CAISO’s proposal in this initiative. LSA notes that the proposal does not address a significant problem: identification of mitigation costs allocated by those systems to new generation projects late in the interconnection process (as well as the related issues of inconsistent study methodologies and assumptions). LSA believes the CAISO committed to conduct a “full stakeholder process” to better coordinate (and potentially combine) interconnection studies by the CAISO and Affected Systems entities, but that commitment has not yet been met. LSA has suggested several process improvements, similar to those used at the WECC level, that would involve Affected Systems in the study process and reflect their concerns; however, the CAISO has not adopted those recommendations.

The CAISO made the following commitment regarding Affected Systems:

*The CAISO understands that the Interconnection Customers desire a definitive time by which an electric system operator identifies themselves as an Affected System. The CAISO does not currently have tariff authority to provide this definitive time. The CAISO proposes to include in the IPE a topic that would propose a tariff amendment establishing a timeframe and process similar to the WECC Project Coordination and Path Rating Process.*

The instant tariff amendment establishes a specific timeframe for electric system operators to identify themselves, and fulfills the CAISO's immediate commitment. As the CAISO has reiterated, the CAISO is open to refining this process in the future as stakeholders and Affected Systems desire.

Further, the CAISO has listened to stakeholder concerns about Affected Systems and in the past year has overhauled its Affected System process completely. Now the CAISO proactively invites all potentially Affected Systems to scoping meetings for every project; provides the results of the Phase I and Phase II studies to all potentially Affected Systems that have executed the non-disclosure agreement; and invites all potentially Affected Systems to the Phase I and Phase II results meeting for every project.

Moreover, the CAISO has offered its planning coordinator services, which includes generator interconnection services to other entities within the CAISO's balancing authority area including Affected Systems with little response. To date, no one has requested the CAISO perform generator interconnection studies on its behalf.

While the CAISO understands that LSA believes that interactions with Affected Systems should not be the responsibility of each individual Interconnection Customer and generation project, the Federal Power Act simply does not give FERC—and therefore the CAISO—sufficient authority. The CAISO has included in its FERC jurisdictional interconnection agreements in Appendix V and later Appendices the obligation that the Interconnection Customer is responsible for resolution of Affected System issues and FERC has found that obligation to be just and reasonable.

MID supported the CAISO's proposed extension of time and was "neutral" with respect to the remainder of the proposal. HHWP, also known as CCSF, is concerned that the MID comments of April 10th have not been addressed. Both MID and CCSF, however, support the CAISO's limiting the scope of this effort to just the timing of the identification of Affected Systems. MID and CCSF asserted that any expansion of scope, as suggested by other stakeholders, should be considered in separate stakeholder processes. The primary concern of MID and CCSF is that the Affected System coordination as currently written could supersede existing agreements, such as MID's Interconnection Agreement ("IA") with Pacific Gas and Electric Company ("PG&E"). While the CAISO now better understands MID's position, because the CAISO does not know the terms and conditions of every contract that each Affected System may have with other parties, allowing the proposed exception language in the CAISO tariff is not feasible.

MID also requested that the CAISO affirm that it actively confirms receipt of Affected System notices, either through certified mail or by confirming that it checks the read-

message reply. The CAISO can affirm that it both confirms receipt of such notices. All letters to Affected Systems are sent via FedEx and if a letter is returned due to unknown recipient or receipt not accepted, then the CAISO reaches out to the Affected System point of contact and then resends the letter. For all email the CAISO checks to ensure that the read-message reply is received.

MID also raised a concern that the CAISO should permit Affected Systems to identify themselves for purposes of the CAISO study processes after the deadline, if the CAISO has not identified such systems as Affected Systems initially, and such systems later learn facts suggesting they will be impacted, or if the CAISO later finds that such systems should have been identified (or circumstances have changed that such systems should be identified as Affected Systems). MID further urged the CAISO to develop tariff language that would allow systems to be classified as Affected Systems after the notice deadline under circumstances of later-discovered facts. Otherwise, under circumstances where the CAISO would agree that the system should have been identified as an Affected System, the CAISO could be prevented from doing so. In such case, the option of seeking a waiver from the Federal Energy Regulatory Commission (“FERC”) to classify a system as an Affected System after the deadline is a poor one, as it brings a high degree of uncertainty into the process, and may delay the process for all participants. While the CAISO believes that this is a highly unlikely scenario—because the criteria to be a Potentially Affected System is so broad—MID makes a point that if there were a scenario where circumstances change, there could be complications in classifying Identify Affected Systems. The CAISO therefore proposes to add language to provide for this limited exception where circumstances change and present exigent impacts on an Affected System.

MID also expressed some confusion between the proposed tariff language and the definition of “Identified Affected System.” The CAISO addresses this concern by including the proposed definition of Affected System and Affected System in Appendix A of the CAISO tariff as follows:

- Affected System

An electric system other than the CAISO Controlled Grid that may be affected by the proposed interconnection, including the Participating TOs’ electric systems that are not part of the CAISO Controlled Grid.

- Affected System Operator

The entity that operates an Affected System.

In the proposal, the CAISO will provide notice to all Affected System Operators, but only those that reply and request to identify themselves as Affected Systems become

Identified Affected System Operators. Interconnection Customers therefore will only need to work with *Identified* Affected Systems. In any case, the CAISO here adopts several textual clarifications proposed by MID.

Six Cities noted that there is still a reference to the initially-proposed thirty-day response period in Section 3.7 of Appendix DD. The CAISO has fixed this oversight.

### 5.1.3 *Changes from the Revised Straw Proposal*

The CAISO proposes the following revisions:

- adding language to clarify the actions the Affected System Operator may take upon receipt of the CAISO notice;
- changing the second reference for the timeline for an affected system to identify itself from 30 to 60 days;
- adding the ability for an Affected System to identify itself outside the timeline established if factual circumstances change; and
- including the definition of Identified Affected System in Appendix A of the CAISO tariff.

### 5.1.4 *Revised Proposed Tariff Language*

The following are the proposed edits to Section 3.7 of Appendix DD and Appendix A of the CAISO tariff. Changes from the revised proposal are highlighted in yellow:

#### **3.7 Coordination With Affected Systems**

The CAISO will notify the Affected System Operators that are potentially affected by the Interconnection Customer's Interconnection Request or Group Study within which the Interconnection Customer's Interconnection Request will be studied. The CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators, to the extent possible, and, if possible, the CAISO will include those results (if available) in its applicable Interconnection Study within the time frame specified in this GIDAP. The CAISO will include such Affected System Operators in all meetings held with the Interconnection Customer as required by this GIDAP. The Interconnection Customer will cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems, including providing consent to CAISO's identification to Interconnection Customer's name, Generating Facility project name, and release of information which the Interconnection Customer provided as part of its Interconnection Request to the Affected System, and participating in any coordinating activities and communications undertaken by the Affected System or CAISO. The CAISO will provide notice to the Affected System Operators that are potentially affected by the Interconnection Customer's Interconnection Request or Group Study, within thirty (30) calendar days after determining which projects in each study cluster have posted their initial Interconnection Financial Security. Within sixty (60) calendar days of notification from the CAISO, the Affected System Operator shall advise the CAISO in writing that either: 1) the CAISO should consider the electric system to be an Identified Affected System; or 2) the electric system **should is not be considered an Identified Affected System.** If the electrical system operator does not make an affirmative representation within **sixty (60)** calendar days of notification, the CAISO will assume that

the electric system is not an Affected System. If an electric system operator comes forward after the established timeline as an Affected System, any mitigation required for a project identified by the Affected System will be the responsibility of the Affected System and not the CAISO, the Participating Transmission Owner(s), or the Interconnection Customer, except that the CAISO may waive this timeline and deem the electric system operator as an Identified Affected System if facts and circumstances are later discovered that indicate an electric system operator may be a potentially Affected System. In such cases, the CAISO will coordinate with the Interconnection Customer and the electric system operator to develop an expedited timeline to determine whether the electric system operator is an Affected System. The CAISO will then notify the Interconnection Customer as soon as practical of the new Identified Affected System. If required by the Identified Affected System, the Interconnection Customer will signing separate study agreements with Identified Affected System owners and paying for necessary studies. An entity which may be an Identified Affected System shall cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Identified Affected Systems.

## Appendix A – New Definition

### Identified Affected System –

An Affected System Operator who, as described in Section 3.7 of Appendix DD, either (1) responded affirmatively to the initial CAISO notification, or (2) was later deemed by the CAISO an Identified Affected System after a change in facts and circumstances.

## 5.2 Topic 2 – Time-In-Queue Limitations

### 5.2.1 Overview

When Interconnection Customers request an extension to a Generating Facility’s Commercial Operation Date (“COD”) the CAISO evaluates the request under the Material Modification Assessment (“MMA”) process. Currently, the In-Service Date (“ISD”) for Generating Facilities studied in the serial study process 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.<sup>3</sup>

In order to support viable Generating Facilities in the Generator Interconnection Queue and avoid unnecessary Network Upgrades, the CAISO proposes requiring Generating Facilities that are holding capacity that could be used by later-queued projects be required to meet and maintain certain commercial viability criteria in order to extend their ISD or COD beyond the 7/10 year thresholds. These criteria will be applied to Generating Facilities that may request milestone extensions beyond the 7/10 year thresholds in the future. The CAISO proposes to approve milestone extensions beyond

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<sup>3</sup> See Appendix U, Section 3.5.1.1; Appendix Y, Section 3.5.1.4; Appendix DD, Section 3.5.1.4; as applicable.

the 7/10 year thresholds, only on the Interconnection Customer's demonstration that the Generating Facility meets the following commercial viability criteria:

- Having, at a minimum, applied for the necessary governmental permits or authorizations and that the permitting authority has deemed such documentation "as data adequate" for the authority to initiate its review process;
- Having an executed power purchase agreement, attesting that the Generating Facilities will be balance-sheet financed, or otherwise receiving a binding commitment of project financing;
- Demonstrating Site Exclusivity for 100% of the property (in lieu of a Site Exclusivity Deposit);
- Having executed a Generator Interconnection Agreement ("GIA"); and
- Being in good standing with its GIA such that neither the Participating TO nor the CAISO has provided the Interconnection Customer with a Notice of Breach of the GIA (where the breach has not been cured or the Interconnection Customer has not commenced sufficient curative actions).

In order to ensure that Generating Facilities maintain the level of commercial viability upon which the COD extension approval was conditioned, the CAISO will perform an annual review of the Generating Facility's commercial viability during the transmission plan deliverability allocation process. Failure to maintain commercial viability will result in loss of Full Capacity Deliverability Service ("FCDS") or Partial Capacity Deliverability Status ("PCDS").

Generating Facilities requesting a COD extension beyond the 7/10 years thresholds, and that either are serial or requested FCDS or PCDS, reserve transmission capacity that could be used by other Generating Facilities. If such Generating Facilities do not meet the commercial viability criteria, they will not be deemed withdrawn from the Generator Interconnection Queue. Instead, the Generating Facility's deliverability status will be changed to Energy-Only. If FCDS or PCDS is still desired for the Generating Facility, the Interconnection Customer will have to pursue that option through the Annual Full Capacity Deliverability Option in accordance with Section 9.2 of Appendix DD.

Generating Facilities studied under the serial study process also will be subject to these requirements. Some of the serial studies were completed prior to the CAISO process of distinguishing Reliability Network Upgrades from Deliverability Network Upgrades. Because the serial study process did not contemplate the separation of Network Upgrades into the categories of Reliability Network Upgrades and Deliverability Network

Upgrades, Generating Facilities studied under the serial study process that are subject to the consequences of failure to meet commercial viability criteria may also be required to undergo re-study in accordance with Sections 7.6 and/or 8.5 of CAISO tariff Appendix U to determine what Network Upgrades and corresponding GIA amendments will be required to interconnect their proposed Generating Facility as Energy-Only.

Generating Facilities in Cluster 7 and beyond whose Phase II study results identify a longest-lead Network Upgrade required for the project that is beyond the 7-year threshold are entitled to a limited exception to the commercial viability criteria. Such Generating Facilities requesting COD modification within six (6) months of the CAISO's publishing the Phase II results are eligible for this exception. This six-month timeline allows ample time for TP Deliverability allocation activities, the MMA process, and GIA negotiation, and it places a needed boundary on the exception. Additionally, the exception to the commercial viability criteria explicitly excludes report addendums and revisions to the Phase II that are required as an outcome of customer-initiated modifications to its Interconnection Request.

### **5.2.2 Stakeholder Input**

The CAISO received nine comments regarding the time-in-queue proposal: four comments supported the proposal, two comments supported the proposal with qualifications, two comments opposed the proposal, and one comment took no position. Stakeholder comments addressed several concepts:

- 1) Participating-TO requested delays
- 2) PPA-based COD extensions
- 3) Exemption for Energy-Only Generating Facilities
- 4) The reasonableness of the commercial viability criteria
- 5) Total years in queue
- 6) Serial Generating Facilities and Re-Studies
- 7) Loss of FCDS for Generators with executed GIAs
- 8) Treatment of suspension
- 9) Site Exclusivity
- 10) Permits
- 11) Time in queue and the CPUC's Long Term Procurement Plan ("LTTP")

The CAISO addresses each concept below.

#### **Participating-TO Requested Delays**

CalWEA, DLA, and LSA requested an exception to the commercial viability criteria for COD extensions that are caused by Participating TO construction delays of

Interconnection Facilities and Network Upgrades. As stated in the revised straw proposal, the CAISO agrees that Generating facilities are not obligated (and sometimes not able) to synchronize to the grid in advance of the longest lead Reliability Network Upgrade or Interconnection Facilities. However, the challenge with allowing an exception to the commercial viability criteria because the Participating TO's construction is delayed is that the Interconnection Customer is often the original cause of the delay. For example, the Interconnection Customer may deliberately delay the execution of the GIA, which delays the financing of Network Upgrades, which delays construction. For this reason the CAISO has proposed improvements to the GIA tendering and negotiation processes in topic 3 of this initiative. Together with this proposal, Interconnection Customers should be motivated and able to align their transmission construction timelines.

Further, the CAISO takes this opportunity to clarify that commercial viability criteria is only triggered by an Interconnection Customer's request for COD modification (through the MMA process); *not* by Participating TO-initiated delay requests. The CAISO acknowledges that the BPM for Generator Management speaks to Participating-TO-initiated requests only briefly. Before year-end, the CAISO intends to initiate a Proposed Revision Request ("PRR") in the CAISO's Business Practice Manual Change Management process to explain the details of Participating TO-initiated modification requests. Specifically, if the Participating TO notifies the CAISO that a required milestone extension is 1) the earliest achievable In-Service Date for the Generating Facility; and 2) not caused by the Interconnection Customer's failure to execute a GIA or begin payment for the construction of Network Upgrades, then the request will be processed as a Participating-TO-initiated delay, which will not invoke the commercial viability criteria.

### **PPA-based COD Extensions**

The CAISO accepts with qualifications the suggestion from First Solar, LSA, and EDF-RE to allow Interconnection Customers to align their CODs with an executed PPA. The CAISO proposes to allow COD extensions where an Interconnection Customer has an executed PPA that has obtained final regulatory approval. In such cases, the GIA COD will be extended automatically to match the PPA COD. An executed GIA is required to exercise this provision. "PPA COD" will be defined as the commercial operation date provided for in the executed PPA, inclusive of all extensions provided in the PPA. In addition, the PPA needs to "match" the project, that is, generation developers will only be able to use one PPA for one project, and demonstrate that the project described in the PPA is the same project described in the interconnection request.

To exercise this provision, the Interconnection Customer shall be required to:

- demonstrate commercial viability if the COD is beyond the 7/10 year threshold
- provide a copy of the PPA and evidence of regulatory approval (sensitive financial information may be redacted)
- confirm the PPA’s standing and details in the annual Transmission Plan Deliverability affidavit process

The CAISO declines First Solar’s suggestion that Generating Facilities with PPAs should be exempt from commercial viability criteria. The CAISO has observed many instances where having a PPA does not make a Generating Facility commercially viable such that the Generating Facility actually proceeds with construction or commercial operation.

### **Exemption for Energy-Only Generating Facilities**

LSA requested that Generating Facilities not holding capacity that could be used by later-queued Generating Facilities—and therefore not triggering unneeded upgrades—be exempt from the commercial viability criteria. The CAISO agrees, and clarifies that this was always the intent of the proposal.<sup>4</sup> The CAISO nevertheless clarifies the exemption in the proposed draft tariff language. However, Energy-Only Generating Facilities cannot stay in the queue forever and must meet all the terms and conditions of the CAISO tariff and GIA.

### **Reasonableness of the Commercial Viability Criteria**

First Solar and LSA commented that some elements of the commercial viability criteria may be unreasonable. They argue that requiring Interconnection Customers prove “engineering, procurement or construction” will take longer than 7/10 year threshold is not supported by FERC or the CAISO tariff, and is overly burdensome; and that limiting COD extensions because a Generating Facility is reserving capacity that could be used by other generating facilities is not a sufficient reason to impose viability criteria.

On the other hand, SCE and PG&E indicated that the proposal may not be robust enough to solve the problem of non-viable Generating Facilities lingering in the queue. Specifically, SCE noted that when the CAISO allows for exception to the commercial viability criteria, that the COD extension should be “limited in timeframe and not a blanket to extend out beyond the time necessary to construct the upgrade.” The CAISO agrees that any exception to the commercial viability criteria is not carte blanche to remain in queue indefinitely, and that the CAISO will monitor for misuse of any exception policies by virtue of the tariff requirement that each COD modification gets its own thorough initial review and on-going annual reviews through the affidavit process.

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<sup>4</sup> Section 4.2.3 Process Graphic IPE 2015 Issue Paper/ Straw Proposal May 23, 2015

With respect to First Solar and LSA comments on the “engineering, procurement or construction” language, the comments conflate two issues: 1) COD extensions within the 7/10 limit, which are analyzed under MMA alone (where the CAISO applies the First-Solar-mentioned FERC tests); and 2) COD extensions beyond the 7/10 limit, which face MMA analysis *and* require the CAISO and the Participating TO’s consent to go beyond the 7/10 limit. The “engineering, procurement or construction” language is in the CAISO’s FERC-approved tariff and has been since Appendix U.<sup>5</sup> There is nothing in the CAISO’s tariff language or FERC precedent that supports an interpretation limiting the “engineering, permitting, and construction” restriction to the initial validation of the Interconnection Request.

Regarding First Solar’s BPM arguments, the tariff and FERC Order No. 2003 state that where a Generating Facility seeks to extend its COD (by suspension and/or modification) beyond the 7/10 year mark, then the Generating Facility must request CAISO and Participating TO acceptance, “such acceptance not to be unreasonably withheld.” Under this authority, the BPM merely explains where the CAISO and Participating TO will withhold acceptance. The entire purpose of this proposal is to refine this policy and bring greater transparency to the process. The CAISO agrees with stakeholders that it is reasonable to extend the COD of a commercially viable Generating Facility. To date, however, there has been little consensus on what constitutes viability. The CAISO’s ultimate intent in this proposal is to do so. Accordingly, the CAISO accepts with qualifications First Solar’s suggestion to restructure the proposed tariff language and, rather than adding language to the existing sections, create a new section. The new section will specifically address milestone modification and time-in-queue. The new section does not provide the framework for all proposed modifications of Interconnection Requests. Other modification request types (inverter, transformer, technology, POI, etc.) are beyond the scope of this review.

To be sure, the CAISO seeks to motivate Interconnection Customers to build projects expeditiously. The CAISO believes—and will argue at FERC—that Generating Facilities lingering in the queue for more than 7/10 years adversely affect ratepayers and developers. Non-viable Generating Facilities horde deliverability, disrupt lower-queued Generating Facility timelines, and cause the need for additional Deliverability Network Upgrades. After 7/ 10 years, Generating Facilities have had ample time to meet the proposed commercial viability standards. While the CAISO disagrees with First Solar regarding the applicability of its FERC-approved tariff language regarding “engineering,

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<sup>5</sup> Appendix U, Section 3.5.1; Appendix Y, Section 3.5.1.4 and Appendix DD, Section 3.5.1.4.

permitting, and construction,” the CAISO believes that the commercial viability criteria negates the need for this other criterion, and therefore has removed it for modification requests. Interconnection Requests requesting CODs beyond 7 years from the outset still will need to demonstrate engineering, permitting, or construction constraints.

### **Total Time in Queue**

The CAISO declines First Solar and LSA’s suggestion that the 7-year rule for cluster study process Generating Facilities should be extended to 10 years. After 7 years, Generating Facilities have had ample time to satisfy the commercial viability criteria.

First Solar commented that Interconnection Customers should already have 10 years in queue, because “under the GIP, Interconnection Customers have the right to extend COD for up to 3 years. Accordingly, the time-in-queue limitation should be 10 years, not 7.” This is inaccurate. An Interconnection Customer may *suspend* its Generating Facility for up to 3 years within the 7/10 year threshold, but it is still subject to the 7/10 year threshold and the need for CAISO/Participating TO consent to go beyond, such consent not be unreasonably withheld. FERC, in fact, only added the consent provision when commenters in the Order No. 2003 rulemaking sought clarification on what to do where a project approaching its time limit tried to suspend.<sup>6</sup> Suspension is addressed in greater detail below.

### **Serial Generating Facilities and Re-Studies**

The proposed tariff language for this topic outlines that Generating Facilities in the serial study process may be required to undergo a re-study pursuant to LGIP Section 6.4 for Interconnection Feasibility Study, Section 7.6 for System Impact Study, and/or Section 8.5 for a Facilities Study to identify the Network Upgrades required for the Energy-Only interconnection. CalWEA requested that Serial Generating Facilities converted to Energy-Only status have the option to decline the re-study and choose to finance their original Network Upgrades. The CAISO does not support providing serial Generating Facilities this option. Giving serial Generating Facilities that do not meet the commercial viability standards the option of financing their originally required Network Upgrades subverts the CAISO’s goal of protecting transmission ratepayers from paying for new transmission infrastructure that may never be needed. The CAISO also questions whether the option would be unnecessary, as Interconnection Customers willing to finance their Network Upgrades also could choose to balance-sheet finance their projects, thereby meeting the commercial viability criteria and avoiding conversion to Energy-Only status. The removal of FCDS is not a punitive measure Interconnection

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<sup>6</sup> See Order No. 2003 at PP 172-76.

Customers must endure to stay in the queue, but a protection for transmission ratepayers. Moreover, in cases where projects have been in the queue beyond 7/10 years, re-study generally is required simply because the project is so old that there have been system changes that need to be incorporated into the project assessment to determine if the project is still technically feasible. CalWEA's comments contained several other questions about process and requirements for re-studies. In response to those questions, the CAISO provides the following clarifications:

- Re-studies are neither optional nor performed merely at the request of the Interconnection Customer.<sup>7</sup> Consistent with the reasons provided in the tariff, the CAISO and Participating TO will determine, on a case by case basis, if a serial Generating Facility's conversion to Energy-Only status necessitates a re-study.
- Customers subject to re-study may choose to either 1) terminate the study or withdraw the Interconnection Request; or 2) continue the study and provide a \$10,000 deposit toward the actual costs of the study.
- Assumptions used in the re-study are generally informed by two questions: What generation projects are already online and what are their assigned transmission upgrades? What generation projects are earlier in the queue that are not online and what are their assigned transmission upgrades?

#### **Loss of FCDS for Generators with executed GIAs**

First Solar noted that the CAISO's proposal may result in the loss of FCDS or PCDS, but does not indicate how this would occur for Generating Facilities with executed GIAs. The CAISO will provide draft tariff language to make the conversion process transparent and automatic in the future. Nevertheless, the existing *pro forma* GIAs do not mention Deliverability Status specifically. However, if a project has an executed GIA that does mention Deliverability Status and this project seeks a COD extension beyond its 7/10 year threshold (and the milestones in its GIA) without the ability to meet the commercial viability criteria, the CAISO will not find it reasonable to consent unless that project is converted to Energy-Only Status and its GIA is amended accordingly. As stated above, the existing tariff already provides the 7/10 year limit and the need for CAISO and Participating TO consent. This proposal only makes it transparent when the CAISO will consider providing such consent unreasonable.

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<sup>7</sup> Appendix U, Sections 6.4, 7.6 and 8.5.

### **Treatment of Suspension**

SCE requested clarification on the treatment of GIA suspension. SCE notes that “suspensions result in a corresponding suspension to all obligations under the GIA. Such actions could potentially result in delays to the Network Upgrades lead times for reasons that are directly linked to Interconnection Customer actions.” The CAISO clarifies that a suspension pursuant to section 5.16 of the LGIA 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 does not automatically provide for a corresponding extension to the COD. Therefore, if a requested suspension will require a corresponding extension to the COD, the Interconnection Customer needs to submit an MMA request, and if the MMA request is beyond the 7/10 year threshold, the request will be subject to the commercial viability criteria.

### **Site Exclusivity**

Six Cities noted a possible inconsistency in the proposed tariff language regarding Site Exclusivity. Additionally, the proposed modifications listed in First Solar’s comments list Site Exclusivity as “Demonstrating Site Exclusivity in lieu of any Site Exclusivity Deposit.” As outlined in the CAISO response to stakeholder comments in the Revised Straw Proposal, the CAISO intends to increase the Site Exclusivity requirements for the commercial viability criteria such that Interconnection Customers must demonstrate 100% of the property necessary to construct the facility through the Generating Facility’s Commercial Operation Date. In other words, a Site Exclusivity Deposit will *not* satisfy this criterion. The CAISO has included the clarification in the draft tariff language.

## **Permits**

SCE provides the following comments on the permitting aspect of the commercial viability:

*The commercial viability criteria concerning necessary governmental permits should be revised by adding at the end of the first bullet on page 13 of the Revised Straw Proposal, “maintains such application open for the duration of the review process and the final disposition of the application did not result in a denial,” to ensure that the permit application is not later withdrawn. SCE has identified a few projects whereby the interconnection customer has “applied for the necessary governmental permits or authorizations and that the permitting authority has deemed such documentation ‘as data adequate’ for the authority to initiate its review process,” thus satisfying the proposed minimum requirement, but the interconnection customers later withdrew such applications because it was understood that the projects would not obtain approval.*

The CAISO appreciates the core concern in SCE’s comments, namely, that the evidence used to verify a Generating Facility’s commercial viability is provided in good faith. However, the CAISO also notes that the requirement that “the final disposition of the application did not result in a denial” may be beyond the Interconnection Customer’s control for legitimate reasons. Instead, the CAISO proposes that the Interconnection Customer be required to provide specific permitting details during the annual review of its commercial viability, including the permit’s unique application or approval numbers.

## **Time in Queue and the CPUC’s LTPP**

IEP supports the proposal and provides the following comments on the CAISO’s overall process considerations.

*IEP also restates its desire that the ISO’s rulemaking and practices are certified by the ISO to not run counter to timelines and commercial restrictions in place via the LTPP. IEP understands and appreciates that the ISO is sensitive to and collaborates with other regulatory bodies on rules and timelines such as the LTPP. In as much as Topic 2 and other issues the ISO may desire to move through the initiative process may also warrant thoughtful planning in order to be complementary with procurement rules, IEP asks the ISO to consider an ongoing process with stakeholder involvement that aims to create, maintain, and inform about alignment with the realities of the procurement process.*

The CAISO appreciates IEP’s comments. The CAISO considers the impacts to timelines of the LTPP when proposing Generator Interconnection Process reforms. No changes proposed as a part of this topic contradict the planning and procurement process

alignment of the CAISO, CEC, and CPUC.<sup>8</sup> In this Draft Final Proposal the CAISO has considered stakeholder concerns regarding certain commercial “realities” during the PPA application process, and proposed some additional flexibility to accommodate and complement the PPA process. The CAISO appreciates IEP’s suggestion that the CAISO “consider an ongoing process with stakeholder involvement that aims to create, maintain, and inform about alignment with the realities of the procurement process” and invites IEP to submit a proposal for such reform through discussions during the CAISO’s next stakeholder initiatives catalog process, which informs the priority of ongoing and potential enhancements to the CAISO market design, infrastructure planning and generation interconnection process.<sup>9</sup> The CAISO also notes that a stakeholder process reevaluating procurement and resource adequacy may be inevitable if a new transmission owner seeks to join the CAISO, and IEP would be able to comment there.

### 5.2.3 *Changes from the Revised Straw Proposal*

The CAISO proposes the following changes to the revised straw proposal.

#### **1) PPA COD Modification Criteria**

The CAISO proposes to allow COD extensions where an Interconnection Customer has an executed PPA that has obtained final regulatory approval. In such cases, the GIA COD will be extended automatically to match the PPA COD. Such extensions will not be exempt from the commercial viability criteria. The CAISO has observed many instances where having a PPA does not make a project commercially viable such that the project actually proceeds with construction or commercial operation.

An executed GIA is required to exercise this provision. “PPA COD” shall be defined as the commercial operation date provided for in the executed PPA, inclusive of all extensions provided for per the terms of the PPA.

To exercise this provision, the Interconnection Customer will be required to:

- demonstrate commercial viability if the COD is beyond the 7/10 year threshold;
- provide a copy of the PPA and evidence of regulatory approval (sensitive financial information may be redacted); and

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<sup>8</sup> [http://www.caiso.com/Documents/TPP-LTPP-IEPR\\_AlignmentDiagram.pdf](http://www.caiso.com/Documents/TPP-LTPP-IEPR_AlignmentDiagram.pdf)

<sup>9</sup> <http://www.caiso.com/informed/Pages/StakeholderProcesses/StakeholderInitiativesCatalogProcess.aspx>

- confirm the PPA’s standing and details in the annual Transmission Plan Deliverability affidavit process.

Interconnection Customers extending CODs to align with PPAs will *not* need to demonstrate engineering, permitting, or construction constraints.

**2) Consequences of Failure to Meet Commercial Viability Criteria**

In the event that the sole reason a Generating Facility does not meet the commercial viability criteria is failure to secure a PPA, the CAISO proposes to wait one year before converting the Generating Facility to Energy-Only. This will afford the Generating Facility one additional year to procure a PPA. The one-year period will begin the day the customer submits the MMA request for the COD extension.

**3) Restructuring the Draft Tariff Language**

Rather than adding language to the sections as presented in the Revised Straw Proposal, the CAISO proposes instead to create new tariff sections to specifically address milestone modification and time-in-queue. Draft tariff language is presented in detail in section 5.2.4 of this Draft Final Proposal.

**4) Loss of FCDS for Generators with Executed GIAs**

As a result of failing to meet the commercial viability criteria, Interconnection Customers with executed GIAs may lose FCDS or PCDS. The CAISO’s previous proposals did not explicitly outline how the CAISO would effectuate that loss of FCDS or PCDS. The CAISO provides draft tariff language to address the conversion to Energy-Only Deliverability Status. The pro forma GIA appendices do not mention Deliverability Status specifically; however, if a project has an executed GIA that does mention Deliverability Status and this project seeks a COD extension beyond its 7/10 year threshold (and the milestones in its GIA) without the ability to meet the commercial viability criteria, the CAISO will not find it reasonable to consent unless that project is converted to Energy-Only Status and its GIA is amended accordingly.

**5) Site Exclusivity**

The CAISO intends to increase the Site Exclusivity requirements for the commercial viability criteria such that customers must demonstrate that it has rights to 100% of the property necessary to construct the facility and the duration of the Site Exclusivity extends to the Generating Facility’s Commercial Operation Date. As such, a Site Exclusivity Deposit is not sufficient to satisfy this

criterion. The CAISO has included clarifications to language proposed for Appendix S, Appendix U, and Appendix U to match the Site Exclusivity language proposed in Appendix Y.

## **6) Permits**

The CAISO proposes that the Interconnection Customer be required to provide specific permitting details during the MMA review process and, if the COD extension is approved, during the annual review of its commercial viability, including the permit's unique application and approval numbers, so that the CAISO and Participating TO may know that the Interconnection Customer is pursuing permitting approval in good faith.

### **5.2.4 Revised Proposed Tariff Language**

The CAISO is proposing to modify tariff language regarding time in the queue as follows. The language will be added to the tariff in a new section that specifically addresses Time in Queue and Milestone Modifications, and be applied in Appendix, S, U, Y, and DD as applicable. Final determinations on tariff language for this section will be reviewed through the CAISO's tariff development process. Changes from the revised straw proposal are highlighted in yellow, language that was moved from other sections in previous iterations of this proposal, but not otherwise changed, is green font:

#### **New Section in Appendix, S, U, Y, and DD as applicable**

##### **Milestone Modification, Time in Queue, and Commercial Viability Criteria**

The modified Commercial Operation Date of the new Generating Facility or increase in capacity of the existing Generating Facility shall not exceed [ten/seven] years from the date the Interconnection Request is received by the CAISO, unless the Interconnection Customer demonstrates that the Generating Facility is commercially viable. The CAISO's agreement to an extension of the proposed Commercial Operation Date does not relieve the Interconnection Customer from compliance with the requirements of any of the criteria in [Section 8.9.3] for retention of TP Deliverability.

The CAISO's agreement to an extension of the proposed Commercial Operation Date is predicated on the Generating Facility **meeting and maintaining** the criteria on which commercial viability is based. Commercial viability shall be defined as:

- a. **Providing proof of** having, at a minimum, applied for the necessary governmental permits or authorizations and that the permitting authority has deemed such documentation "as data adequate" for the authority to initiate its review process;
- b. **Providing proof of** having an executed and **regulator-approved** power purchase agreement, attesting that the Generating Facilities will be balance-sheet financed, or otherwise receiving a binding commitment of project financing;
- c. **Demonstrating Site Exclusivity for 100% of the property necessary to construct the facility through the Commercial Operation Date requested in**

the modification request. A Site Exclusivity Deposit does not satisfy this criterion:

- d. Having an executed Generator Interconnection Agreement (“GIA”); and
- e. Being in good standing with its GIA such that neither the Participating TO nor the CAISO has provided the Interconnection Customer with a Notice of Breach of the GIA (where the breach has not been cured or the Interconnection Customer has not commenced sufficient curative actions).

If the Interconnection Customer fails to meet the commercial viability criteria but informs the CAISO that it intends to proceed with the modified Commercial Operation Date, the Generating Facility’s Deliverability Status will be Energy-Only Deliverability Status.

If a Generating Facility satisfies all the commercial viability criteria except criterion [6.9.2.4(b)], 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 one year after the Interconnection Customer exceeds [ten/seven] years from the date the Interconnection Request is received, whichever occurs later. Interconnection Customers exercising this provision must continue to meet all other commercial viability criteria.

Generating Facilities in Cluster 7 and beyond whose Phase II Interconnection Study report requires a timeline beyond the 7-year threshold are exempt from the commercial viability criteria in this section provided that the COD modification is made within six (6) months of the CAISO’s publishing the Phase II Interconnection Study report. This exemption is inapplicable to report addendums or revisions required by a request from an Interconnection Customer for any reason

**[New subsection:] Alignment with Power Purchase Agreements**

An Interconnection Customer with an executed GIA and an executed regulator-approved power purchase agreement may request to automatically extend the GIA Commercial Operation Date to match the beginning of the power purchase agreement Commercial Operation Date. Such requests are not exempt from the commercial viability criteria provisions in [Section #]. The CAISO will consider the power purchase agreement Commercial Operation Date to be the Commercial Operation Date provided for in the executed power purchase agreement, inclusive of all extensions provided for per the terms of the power purchase agreement. To exercise this provision, the Interconnection Customer must (1) provide a copy of the power purchase agreement and evidence of regulatory approval, and (2) confirm the power purchase agreement’s standing and details in the annual Transmission Plan Deliverability affidavit process.

**[New subsection:] Annual Assessment**

The CAISO will perform an annual review of the Generating Facility’s commercial viability. If the Interconnection Customer fails to maintain the level of commercial viability on which the Commercial Operation Date approval was based, the Deliverability Status of the Generating Facility corresponding to the Interconnection Request shall convert to Energy-Only Deliverability Status.

## 5.3 Topic 3– Negotiation of Generator Interconnection Agreements

### 5.3.1 Overview

The Interconnection Customer’s GIA currently is tendered 30 days after either the Phase II study report is published for Energy-Only projects or after the TP Deliverability is determined for all other projects. This timing often conflicts with the Interconnection Customer’s actual need for an effective GIA. To address this conflict, the CAISO proposes to revise the start of the negotiation timeline by tendering the draft GIA based on the Generating Facility’s In-Service Date for the project and the longest lead-time it takes to construct all required and dependent facilities (plus sufficient time to negotiate and execute the GIA).

In addition, under current negotiation provisions, only the Interconnection Customer can declare that negotiations of the GIA are at an impasse. This is problematic because GIAs are three-party agreements. The CAISO proposes to add tariff language clarifying that any party may declare that negotiations are at an impasse.

Finally, existing tariff provisions do not require an Interconnection Customer to keep the ISD and COD up-to-date. Reconciling these dates typically occurs during the GIA negotiation; however, in many cases the Interconnection Customer remains in the interconnection queue or attempts to negotiate its GIA with milestones or a COD that has already passed. The CAISO is proposing to hold Interconnection Customers responsible for extending their ISDs and CODs as appropriate while in the ISO interconnection queue.

### 5.3.2 Stakeholder Input

#### *Tender*

The CAISO received comments from six parties regarding the proposal for the tendering of GIAs. Five commenters supported the proposal and one opposed. CalWEA requested clarification that all parties have four months to negotiate the GIA. The CAISO tariff currently requires negotiation to conclude within 120 days, and that requirement extends to all three parties (CAISO, Participating TO, and the Interconnection Customer). This proposal does not change the 120-day requirement for any party. In previous versions of this proposal, the CAISO considered the turn-time requirement recommended by CalWEA (one week), but ultimately concluded that thoughtful negotiation requires more than a one-week response deadline for all parties. CalWEA also noted that there are often delays in GIA execution. The CAISO acknowledges that delayed execution was a problem in the past. However, the CAISO’s newly

implemented electronic GIA distribution and execution process eliminated execution delays. The CAISO appreciates the comments, and made no changes to the existing language to address the concerns raised by CalWEA.

First Solar and LSA expressed concern with impacts to later queued projects. The CAISO appreciates and adopts the suggested language clarifying that the longest lead facility could be from the same or a different queue project.

SCE opposed the proposal because SCE does not see how the proposed change will result in GIA negotiations proceeding in a timelier manner. The proposal attempts to take advantage of the Interconnection Customer's interests by beginning negotiation when the Interconnection Customer needs the agreement for its project. The CAISO understands that too many agreements are not negotiated in a timely manner. With the proposed change the CAISO expects agreement negotiations to proceed more efficiently. The CAISO will contemplate further revisions to increase agreement negotiation efficiencies. SCE also asserted that the timeline as proposed will increase the likelihood that study results will become outdated. The CAISO disagrees that a later tendering will result in study results becoming outdated. Any delay in negotiation of the GIA does not change the project's milestones as identified in the Phase II study report. This proposal only moves the GIA tendering closer to those milestone dates that have already been identified. SCE also stated that the GIA milestones add 30 days of additional time before the Participating TO may begin construction of any required Interconnection Facilities and Network Upgrades. The CAISO agrees, and has revised the proposal to add 30 days to the negotiation timeline.

### ***Negotiation***

The CAISO received a total of six comments regarding the declaration of an impasse during negotiation of the GIA. Four comments supported the proposal and two comments opposed. IEP and PG&E supported the proposal without qualification. DLA supported and raised concern that the Interconnection Customer could disadvantage itself by declaring an impasse before the CAISO or the Participating TO. The CAISO disagrees: If the Interconnection Customer declares an impasse, it must request relief from FERC or initiate dispute resolution. However, if the Interconnection Customer waits for the CAISO or the Participating TO to declare an impasse, it does not have to take action itself. The CAISO is not proposing to change the proposal as there are benefits to allowing the customer to get resolution on disputed provisions without waiting for the 120-day negotiation period to expire. However, the CAISO is adding clarification that the CAISO and the Participating TO must file the unexecuted GIA with FERC within 21 days of declaring an impasse. DLA also requested that the CAISO clarify the business practices associated with the declaration of an impasse. The CAISO agrees

to clarify that once a party declares an impasse, all negotiation of the GIA ends and resolution of any outstanding issues occurs through an unexecuted filing with FERC or dispute resolution. The Generator Interconnection Business Practice Manuals will incorporate this clarification.

The Six Cities supported the proposal and suggested some clarifying edits to alleviate some confusion caused by the original wording. The CAISO agrees and has incorporated the suggested clarifications into the proposal.

First Solar and LSA opposed the proposal, indicating that too many terms and conditions of the GIA are not revisable during negotiation. Actual terms of GIAs are not addressed in this topic, and current practice already provides Interconnection Customers with avenues to negotiate and dispute any provision. First Solar and LSA also propose the inclusion of a definition of impasse. The CAISO agrees and the Generator Interconnection Business Practice Manuals will outline what the CAISO will consider an impasse, consistent with First Solar and LSA's proposal.

#### ***Outdated Interconnection Request***

The CAISO received no comments regarding outdated Interconnection Requests.

### ***5.3.3 Changes from the Revised Straw Proposal***

#### ***Tender***

- The CAISO added language to clarify that the longest lead facility could be for the subject project or another project.
- The CAISO added 30 additional days to the negotiation period to account for GIA milestones that delay the Participating TO's ability to begin construction of Interconnection Facilities and Network Upgrades.

#### ***Negotiation***

- The CAISO added language to clarify that the Participating TO and the CAISO must proceed with an unexecuted filing within 21 days of declaring an impasse.
- The CAISO reworded the negotiation provisions for clarity.

#### ***Outdated Interconnection Request***

The CAISO did not change the proposal regarding outdated Interconnection Requests.

### ***5.3.4 Revised Proposed Tariff Language***

Below are the proposed changes to section 13 of Appendix DD. Corresponding changes will modify section 4.8 of Appendix UU, section 4.3 of Appendix W, and section 11 of

Appendix Y. Revisions between the Issue paper/straw proposal and the revised proposal are highlighted in yellow:

## Section 13 Generator Interconnection Agreement (GIA)

### 13.1 Tender

#### 13.1.1

The applicable Participating TO shall tender a draft GIA, together with draft appendices, to the CAISO and Interconnection Customer no later than the sum of (i) ~~150~~ 180 calendar days and (ii) the estimated time to construct the Interconnection Facilities and Network Upgrades indicated in the applicable study report ~~needed by this or any other dependent project~~, prior to the In-Service Date. The applicable Participating TO may tender the draft GIA any time after the Phase II Study report is issued and before the determined tender date on its own accord or at the request of either the CAISO or the Interconnection Customer, or as agreed by the Interconnection Customer, the Participating TO and the CAISO. The draft GIA shall be in the form of the FERC-approved form of GIA set forth in CAISO tariff Appendix EE or Appendix FF, as applicable.

~~If the Interconnection Customer requested Full Capacity Deliverability Status or Partial Deliverability Status, then within thirty (30) Calendar Days after the CAISO provides the updated Phase II Interconnection Study report (or by an earlier date, if all parties agree) which includes the allocation of TP Deliverability to the Interconnection Customer, the applicable Participating TO shall tender a draft GIA, together with draft appendices. If the Interconnection Customer requested Energy Only Deliverability Status, then within thirty (30) Calendar Days following the results meeting for the final Phase II Interconnection Study (or by an earlier date, if all parties agree), Facilities Study, or system impact and facilities study, the applicable Participating TO shall tender a draft GIA, together with draft appendices. The draft GIA shall be in the form of the FERC-approved form of GIA set forth in CAISO Tariff Appendix EE or Appendix FF, as applicable. The Interconnection Customer shall provide written comments, or notification of no comments, to the draft appendices to the applicable Participating TO(s) and the CAISO within (30) calendar days of receipt.~~

### 13.2 Negotiation

Notwithstanding Section 13.1, at the request of the Interconnection Customer, the applicable Participating TO(s) and CAISO shall begin negotiations with the Interconnection Customer concerning the appendices to the GIA at any time after the CAISO provides the Interconnection Customer with the final Phase II Interconnection Study report. The applicable Participating TO(s) and CAISO and the Interconnection Customer shall negotiate concerning any disputed provisions of the appendices to the draft GIA for not more than one hundred twenty (120) calendar days after the Participating TO CAISO provides the Interconnection Customer and CAISO with the draft GIA final Phase II Interconnection Study report, or the system impact and facilities study report. If the Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft GIA pursuant to Section 13.1. Upon such request, the Interconnection Customer will, within seven calendar days after requesting termination of negotiations, either (i) and request submission of the unexecuted GIA with FERC or (ii) initiate Dispute Resolution procedures pursuant to Section 15.5. If the Interconnection Customer requests termination of the negotiations, but, within one hundred twenty (120) calendar days after the draft GIA was tendered pursuant to Section 13.1 issuance of the final Phase II Interconnection Study report, but fails to either (i) request either the filing of the unexecuted GIA with FERC within seven calendar days or (ii) initiate Dispute Resolution

procedures pursuant to Section 15.5 within seven (7) calendar days, it shall be deemed to have withdrawn its Interconnection Request. Neither the CAISO nor the Participating TO may declare an impasse until 120 calendar days after the draft GIA was tendered. If the CAISO or the Participating TO declares an impasse, that party will file the GIA unexecuted with FERC within 21 calendar days. Neither the CAISO nor the Participating TO may declare an impasse before one hundred twenty (120) calendar days after the draft GIA was tendered. Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed and returned the GIA, requested filing of an unexecuted GIA, or initiated Dispute Resolution procedures pursuant to Section 15.5 within one hundred twenty (120) calendar days after issuance of the ~~draft GIA final Phase II Interconnection Study report~~, it shall be deemed to have withdrawn its Interconnection Request. The CAISO shall provide to the Interconnection Customer a final GIA within ten (10) Business Days after the completion of the negotiation process and receipt of all requested information.

## 5.4 Topic 4 –Deposits

The CAISO did not modify the proposal from the March 23, 2015 Issue Paper/Straw Proposal.

## 5.5 Topic 5 - Stand-Alone Network Upgrades and Self-Build Option

### 5.5.1 Overview

When an Interconnection Customer is assigned one hundred percent of the cost responsibility of a Network Upgrade and no other Interconnection Customer has the Network Upgrade identified as a requirement for its project, the Network Upgrade may qualify as a Stand Alone Network Upgrade (“SANU”).

Current policy allows for an Interconnection Customer building SANUs to forgo posting Interconnection Financial Security (“IFS”) for the SANU because only the Participating TO is able to draw from IFS postings. The CAISO proposes language intended to clarify the process and outline explicit financial obligations for Interconnection Customers that elect to self-build a SANU.

### 5.5.2 Stakeholder Input

The CAISO received a total of seven comments regarding this topic. Six Cities, CalWEA, and SCE supported the revised proposal, and four commenters supported with qualifications. LSA and First Solar supported the proposal with one clarification. They asserted that the proposal should clarify that both the IFS posting and the project cost cap (maximum cost responsibility) should be adjusted to reflect any SANUs in the executed GIA. Conversely, DLA supported the proposal but requested that the CAISO clarify that customer elections to build SANUs shall have no bearing on the maximum

cost responsibility. The CAISO agrees with DLA that past precedent should be maintained and that an Interconnection Customer's choice to build a SANU should have no impact on the associated maximum cost responsibility. If an Interconnection Customer does not perform on the construction of the SANU and the responsibility to construct reverts back to the Participating TO, the Interconnection Customer is required to repost IFS for the SANU and the maximum cost responsibility needs to retain the SANU costs to communicate that possibility. In exercising the option to self-build a SANU, there will be no increase, decrease, or impact to any individual Network Upgrade cost used to calculate the Interconnection Customer's maximum cost responsibility.

PG&E supported the revised proposal with qualification, recommending that the second financial security posting never be reduced below the first financial security posting amount, thereby removing any potential opportunity for gaming the IFS process. The CAISO is concerned that adding further restrictions to changing the IFS amounts in an attempt to limit any potential gaming of the process would harm an Interconnection Customer ability to use the process legitimately. Furthermore, the CAISO believes that the requirement to document the construction milestones of the SANU in the GIA provides adequate protection from gaming the process. Therefore, the CAISO is not changing the proposal to further restrict making changing to the IFS posting amounts.

### *5.5.3 Changes from the Revised Straw Proposal*

The CAISO has modified the proposal in order to clarify that allowing an Interconnection Customer to build a SANU will have no impact on the Interconnection Customer's maximum cost responsibility, including any impact to the individual Network Upgrade costs used to calculate the Interconnection Customer's maximum cost responsibility.

### *5.5.4 Revised Proposed Tariff Language*

The following is a revised new subsection appended after section 11.3.1.4.3 of Appendix DD. The changes from the previous version are highlighted in yellow:

#### **11.3.1.4.4 Posting Related to Interconnection Customer's Opting to build Stand Alone Network Upgrade(s)**

If an Interconnection Customer's Phase-II study report identifies Stand Alone Network Upgrades and the Interconnection Customer desires to self-build the Stand Alone Network Upgrades, the Interconnection Customer must post the Interconnection Financial Security for the Stand Alone Network Upgrades in its second posting. The Interconnection Customer may request to build the Stand Alone Network Upgrades in the Generator interconnection Agreement negotiation process, and if the Participating TO and the CAISO agree, the second posting will be reduced accordingly. The Interconnection Customer will not be allowed to revise its second posting amount until the Generation Interconnection Agreement documents the Stand Alone Network Upgrades and has been fully executed. **Allowing an Interconnection Customer to build a Stand Alone Network Upgrade will have no**

impact on the Interconnection Customer's maximum cost responsibility, including any impact to the individual Network Upgrade costs used to calculate the Interconnection Customer's maximum cost responsibility.

If at any time the responsibility for constructing the Stand Alone Network Upgrade reverts back to the Participating TO, the Interconnection Customer will be required to revise its second Interconnection Financial Security posting back to the second posting amount prior to the execution of the Generator Interconnection Agreement within thirty (30) calendar days of determining that the Participating TO will build the Stand Alone Network Upgrade. Failure to make a timely posting adjustment will result in the withdrawal of the Interconnection Request in accordance with Section 3.8. If an Interconnection Customer has been allowed to reduce its second posting following the execution of its Generator Interconnection Agreement and subsequently withdraws, the amount of the Interconnection Financial Security that is determined to be refundable under Section 11.4.2 will be reduced by the amount of the Interconnection Financial Security posting the Interconnection Customer avoided through the self-build option.

The following are proposed edit for Section 11.4.2.2 (a) of Appendix DD:

- a. the Interconnection Financial Security plus (any other provided security plus any separately provided capital) less (all costs and expenses incurred or irrevocably committed to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, and less any posting amount reduction due to Interconnection Customer's election to self build Stand Alone Network Upgrades.), or...

The following are proposed edits to Article 5.2 of Appendix EE:

### **5.2 General Conditions Applicable to Option to Build.**

If the Interconnection Customer assumes responsibility for the design, procurement, and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, or assumes responsibility for any stand-alone task, such as telecommunications, environmental, or real-estate related work, (1) within six (6) months of the execution of this LGIA, or at a later date agreed to by the Parties, the Interconnection Customer shall submit to the CAISO and the Participating TO a milestone schedule for the design, procurement, and construction of the Stand Alone Network Upgrades, or any stand-alone task assumed by the Interconnection Customer. The milestone schedule will be required to support the Interconnection Customer's Commercial Operation Date. The Appendix B Milestones will be amended to include the milestone schedule for the Stand Alone Network Upgrade.

## **5.6 Topic 6 - Allowable Modifications between Phase I and Phase II Study Results**

### **5.6.1 Overview**

The CAISO has proposed that the allowable modifications between Phase I and Phase II include modifications to the Commercial Operation Date.<sup>10</sup>

### **5.6.2 Stakeholder Input**

The CAISO received comments in support of the revised straw proposal from LSA and PG&E.

### **5.6.3 Changes from the Revised Straw Proposal**

The CAISO did not change the revised straw proposal regarding modifications between Phase I and Phase II study results.

## **5.7 Topic 7 – Conditions for Issuance of Study Reports**

The CAISO uses addenda to final interconnection study reports to correct non-substantial errors or omissions. However, other circumstances may trigger other needed updates to the final interconnection study. The CAISO proposes to ensure that such updates are documented properly and to clarify how they may impact the Interconnection Financial Security posting requirements and maximum cost responsibility.

### **5.7.1 Stakeholder Input**

The CAISO received a total of three comments regarding this proposal. As described below, one comment supported the proposal, one comment did not oppose, and one comment expressed a concern.

PG&E supported the proposal. LSA did not oppose the proposal after the CAISO made clarifications. CalWEA was concerned that a Participating-TO-requested modification may increase the cost of the Interconnection Facilities and Network Upgrades. The facilities reassessment reports issued for approved modifications are not addenda or revision to the final Phase II interconnection study reports. The CAISO has clarified that the Network Upgrade cost responsibility of the Interconnection Customer for a generator interconnection project, as the result of the facilities reassessment, would not

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<sup>10</sup> Commercial Operation Date, along with the related In-Service Date and Trial Operation Date, are elements of the Generator Interconnection Study Process Agreement's Appendix B.

exceed the project’s maximum cost responsibility. The proposed tariff language includes reference to Section 7.4.3 of Appendix DD as to how the maximum cost responsibility could be adjusted after the Phase I and Phase II interconnection studies, but this proposal does not change Section 7.4.3.

### ***5.7.2 Changes from the Revised Straw Proposal***

The CAISO did not change the revised straw proposal regarding conditions for issuance of study reports.

## **5.8 Topic 8 - Generator Interconnection Agreement Insurance**

### ***5.8.1 Overview***

The current insurance provisions of the LGIA describe the types of insurance coverage the Participating TO, the CAISO, and the Interconnection Customer must secure. Based on discussions with Interconnection Customers and industry insurance carriers, some of the existing insurance coverage provisions of the LGIA are anachronistic or no longer available. The changes proposed seek to update insurance terms and conditions to current industry standards.

### ***5.8.2 Stakeholder Input***

LSA, PG&E, and SCE provided comments on the revised straw proposal. LSA and PG&E supported the proposal. SCE provided comments that were generally for clarification and to update terminology to be consistent with insurance industry standards. The CAISO generally accepts the changes proposed by SCE.

### ***5.8.3 Changes from the Revised Straw Proposal***

The CAISO proposes to remove the term “broad form blanket contractual liability coverage” from the tariff language because the term is outdated. Language consistent with current insurance industry terminology has been added in its place. The CAISO also proposes to establish a minimum threshold of \$25,000 for reporting to each party accidents or occurrences that result in injuries or property damage.

### ***5.8.4 Revised Proposed Tariff Language***

The CAISO proposes to revise section 18.3 of Appendix EE as follows. Changes between the straw proposal and the revised proposal are highlighted in yellow. Similar changes also would be included in Article 18.3 of Appendices V, BB, and CC.

**18.3.1 ~~Employer's Liability and Workers' Compensation Insurance~~ and Employers' Liability.** The Participating TO and the Interconnection Customer shall maintain

such coverage from the commencement of any Construction Activities providing statutory benefits for Workers Compensation coverage and coverage amounts of no less than One Million Dollars (\$1,000,000) for employer's liability for each employee for bodily injury by accident and **One Million Dollars (\$1,000,000) for each employee for bodily injury by disease** in accordance with the laws and regulations of the state in which the Point of Interconnection is located. The Participating TO shall provide the Interconnection Customer with evidence of such insurance coverage within thirty (30) Calendar Days of any request by the Interconnection Customer. The Interconnection Customer shall provide evidence of such insurance thirty (30) Calendar Days prior to entry by any employee or contractor or other person acting on the Interconnection Customer's behalf onto any construction site to perform any work related to the Interconnection Facilities or Generating Facility.

**18.3.2 Commercial General Liability Insurance.** The Participating TO and the Interconnection Customer shall maintain commercial general liability insurance **coverage** commencing within thirty (30) **Calendar Days** of the effective date of this LGIA, including **coverage for** premises and operations, **bodily injury (including death)** personal injury, ~~broad form~~ property damage, ~~broad form blanket contractual liability coverage (including coverage for the contractual indemnification)~~, products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, ~~coverage for pollution to the extent normally available and punitive damages to the extent normally available~~ **and (i) liability of Participating TO and the Interconnection Customer that would be imposed without the LGIA, or (ii) liability assumed by the Participating TO and the Interconnection Customer in a contract or agreement that is an "insured contract" under commercial general liability insurance policy. Such insurance shall include a no** cross liability ~~endorsement exclusions~~ or separation of insured clause endorsement exclusions, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate ~~combined single limit for personal injury, bodily injury, including death and property damage.~~ If the activities of the Interconnection Customer are being conducted through the actions of an Affiliate, then the Interconnection Customer may satisfy the insurance requirements of this Section 18.3.2 by providing evidence of insurance coverage carried by such Affiliate and showing the Participating TO and CAISO as an additional insured only with respect to the LGIA, together with the Interconnection Customer's written representation to the Participating TO and the CAISO that the insured Affiliate is conducting all of the necessary preconstruction work. Within thirty (30) **Calendar Days** prior to the entry of any person on behalf of the Interconnection Customer onto any construction site to perform work related to the Interconnection Facilities or Generating Facility, the Interconnection Customer shall replace any evidence of Affiliate Insurance with evidence of such insurance carried by the Interconnection Customer, naming the Participating TO and CAISO as additional insured only with respect to the LGIA.

**18.3.3 Business Automobile Liability Insurance.** Prior to the entry of any such vehicles on any construction site in connection with work done by or on behalf of the Interconnection Customer, the Interconnection Customer shall provide evidence of coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage. ~~Upon the request of the Participating TO, the The~~

Interconnection Customer shall ~~include name~~ the Participating TO and CAISO as ~~an~~-additional insured with respect to the LGIA on any such policies.

**18.3.4 Excess Public Liability Insurance.** Commencing at the time of entry of any person on its behalf upon any construction site for the Network Upgrades, Interconnection Facilities, or Generating Facility, the Participating TO and the Interconnection Customer shall maintain Excess ~~excess public Liability liability~~ insurance over and above the Employer's Liability Commercial General Liability and Business Automobile Liability Insurance coverage, with a minimum ~~combined~~ ~~single~~ limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate. Such insurance carried by the Participating TO shall ~~name~~ include the Interconnection Customer and CAISO as ~~an~~-additional insured with respect to the LGIA, and such insurance carried by the Interconnection Customer shall include ~~name~~ the Participating TO and CAISO as ~~an~~ additional insured with respect to the LGIA. The requirements of Section 18.3.2 and 18.3.4 may be met by any combination of general and excess liability insurance.

**18.3.5** The Commercial General Liability Insurance, Business Automobile Insurance and Excess ~~Public~~ Liability Insurance policies shall ~~name~~ include the other Parties identified in the sections above, their parents, their subsidiaries, associated and Affiliate companies ~~and their~~ respective directors, officers, agents, servants and employees ("Other Party Group") and the CAISO as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group ~~and provide thirty (30) Calendar Days advance written notice to the Other Party Group of cancellation in coverage or condition.~~ If any Party can reasonably demonstrate that coverage policies containing provisions for insurer waiver of subrogation rights, or advance notice are not commercially available, then the Parties shall meet and confer and mutually determine to (i) establish replacement or equivalent terms in lieu of subrogation or notice or (ii) waive the requirements that coverage(s) include such subrogation provision or require advance written notice from such insurers.

**18.3.6** The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess ~~Public~~ Liability Insurance policies shall contain provisions that specify that the policies are primary and non-contributory, ~~and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered.~~ Each Party shall be responsible for its respective deductibles or self-insured retentions.

18.3.7 The Commercial General Liability Insurance, Business Automobile Liability Insurance and Excess ~~Public~~ Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may in the form of ~~tail coverage or~~ extended reporting period coverage if agreed by the Parties.

**18.3.9** ~~Within ten (10) Calendar Days~~ Thirty (30) Calendar Days prior to the start of any work at the construction site related to Interconnection Facilities or Generating Facility ~~following execution of~~ under this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any

event within ninety (90) Calendar Days thereafter, the Participating TO and the Interconnection Customer each Party shall provide a certificate of insurance for certification of all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.

**18.3.10** Notwithstanding the foregoing, each Party may self-insure

a) to meet the minimum insurance requirements of Article 18.3.1, to the extent that it maintains a self-insurance program that is a qualified self-insurer within the state in which the Point of Interconnection is located, under the laws and regulations of such state; and

b) to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program; provided that, such Party's senior unsecured debt or issuer rating is BBB-, or better, as rated by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior unsecured debt rating and issuer rating are both unrated by Standard & Poor's or are both rated at less than BBB- by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9.

c) in the event that a Party is permitted to self-insure pursuant to this Article 18.3.10, it shall notify the other Parties that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.

**18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage greater than \$25,000, including within the scope of coverage of such insurance whether or not such coverage is sought.

## 5.9 Topic 9 - Interconnection Financial Security

The CAISO did not modify the proposal from the March 23, 2015 Issue Paper/Straw Proposal.

## 5.10 Topic 10 - Forfeiture of Funds for Withdrawal during Downsizing Process

### 5.10.1 Overview

The current tariff provisions on the Generator Downsizing Process set forth in section 7.5 of Appendix DD have resulted in conflicting interpretations regarding when an Interconnection Customer may withdraw its Interconnection Request based upon the downsized capacity it applied for in the Generator Downsizing Process. To clarify this perceived ambiguity, the CAISO proposes to bolster its current language to more explicitly require Interconnection Requests in the Generator Downsizing Process to

remain in the downsizing process until completion of the downsizing study. This approach is consistent with the CAISO's original intent, and it allows time for the technical analysis needed to determine which Network Upgrades are still necessary for remaining Interconnection Customers. Of course, to avoid unnecessary costs for Network Upgrades, the CAISO will continue its practice of notifying the relevant Participating TO once a downsizing request has been validated so that, to the extent possible, work on Network Upgrades can be suspended.

#### *5.10.2 Stakeholder Input*

The CAISO received eight comments regarding the changes to the downsizing process. Six Cities, PG&E, SCE, and DLA supported the proposal, three comments opposed the proposal, and CalWEA took no position.

IEP does not support the current proposal. IEP suggests that the proposal be limited to situations where the downsizing customers have shared Network Upgrades and when the withdrawal has cost impacts with the non-downsizing customer. In cases where there is no cost impact to other customers, IEP believes that the forfeiture amount should be based on the new downsized capacity. The CAISO disagrees. First, the CAISO believes that downsizing should be used to downsize project and not merely to reduce forfeitures at withdrawal. Second, due to the complexity of separating projects on the basis of having shared or stand-alone Network Upgrades, the CAISO does not agree with the proposed revision. Third, IEP's suggestion does not address the fact that later queued projects may depend on SANUs for their projects where Network Upgrades that were originally stand-alone can become needed by later queued projects.

NRG also does not support the current proposal. NRG offered a similar suggestion as IEP's: only projects that share Network Upgrades should have their forfeited financial security amounts based on the pre-downsizing capacity, and those projects that do not share Network Upgrades should have their forfeited financial security based on the downsized capacity. In addition, NRG asks that projects with shared Network Upgrades have the amount forfeited capped at the portion of costs associated with the shared Network Upgrade. NRG also asks that changes to the forfeiture of financial security for downsized projects happen after the upcoming downsizing window has been completed.

The CAISO disagrees with these proposed revisions for the same reasons as explained to above. Furthermore, the CAISO will have the revised tariff language be effective for the Downsizing window that opens October 15, 2015. Current Interconnection Customers' efforts to use the Downsizing process as a means to reduce their IFS forfeiture upon withdrawal have complicated many network upgrades. The past practice of allowing

the Downsizing process to be used as a means to reduce an interconnection financial security forfeiture does not justify its continued for that purpose. The CAISO intends to end this practice as soon as possible.

SPower does not agree with the current proposal and comments that the CAISO set a precedent by allowing projects to withdraw prior to the completion of the downsizing process and using the new downsized capacity in the partial recovery of the IFS. SPower commented that a current generator in queue has the ability to use the downsizing process as a means to avoid significant amounts of forfeited interconnection financial security. SPower asks that this proposal not be applied until the 2017 generator downsizing window. SPower also asks that the downsizing generator not be required to stay in the downsizing study with the caveat that the interconnection financial security not be released until the completion of the study. The CAISO does not agree with SPower's proposed revisions for the same reasons as explained above.

### ***5.10.3 Changes from the Revised Straw Proposal***

The CAISO did not modify the proposal from the Revised Issue Paper.

## **5.11 Topic 11 –TP Deliverability Option B Clarifications**

### ***5.11.1 Overview***

The interconnection process requires Interconnection Customers requesting TP Deliverability to select allocation Option A or B after their Phase I Interconnection Study Results Meeting. Option A allows Generating Facilities that have requested but who do not receive TP Deliverability to withdraw, convert to Energy-Only, or park their Interconnection Request pursuant to Section 8.9.4 of Appendix DD. An Interconnection Customer choosing Option B, on the other hand, represents that if it does not receive a deliverability allocation, it will assume cost responsibility for all Delivery Network Upgrades (both Area and Local) without cash repayment under section 14.3.2 of Appendix DD.

Recently, several Interconnection Customers have chosen TP Deliverability Option B even though there were no Area Delivery Network Upgrades (“ADNU”) identified in their Phase I Interconnection Study reports. The ability to select Option B in such a case may be misleading, because the selection will not provide value to the Interconnection Customer, and actually limits its ability to move forward if the Generating Facility does not qualify to receive a TP Deliverability allocation in their cluster's allocation cycle following the Phase II studies.

The CAISO proposes to clarify that if Interconnection Customers select Option B in cases where their Phase II Interconnection Study reports show no ADNUs and their Generating Facilities receive no TP Deliverability allocation, they should have the allocation option to change their deliverability status to Energy-Only or withdraw. Option B Generating Facilities with identified ADNUs that receive no TP Deliverability allocation may build the Delivery Network Upgrades, change to Energy-Only or withdraw. The CAISO further seeks to clarify that all Generating Facilities must still meet the minimum criteria identified in section 8.9.2 of Appendix DD to be eligible to receive a TP Deliverability allocation.

#### ***5.11.2 Stakeholder Input***

PG&E, SCE, IEP, and DLA fully supported the proposed changes from the revised straw proposal. Both LSA and First Solar supported the changes but also stated that Option B projects should be permitted to park. LSA identified that Option B projects might want to park for reasons other than upgrade costs and permitting issues. LSA further stated that an RPS increase to 50% should lead the CAISO to encourage developers to fund transmission upgrades; the current Option B terms are so onerous that few can realistically use it. The CAISO disagrees that parking should be permitted for Option B projects or that modifications would necessarily encourage developer funding of transmission upgrades. Parking was meant to provide Option A projects that cannot build ADNUs another opportunity to obtain an allocation of TP Deliverability. Option B projects have identified that they are willing to build any identified ADNUs regardless. Even Option B projects have to receive at least a partial allocation of TP Deliverability if Local Deliverability Network Upgrades are identified in order to proceed with Partial Capacity Deliverability Status. The CAISO anticipates adverse study implications if Option B projects were permitted to park. In the Phase II studies, the CAISO would have to include upgrades for ADNUs for parked Option B projects. These large ADNU upgrades require significant time to study and may inflate upgrade costs for other projects.

#### ***5.11.3 Changes from the Revised Straw Proposal***

The CAISO did not change the revised straw proposal regarding TP Deliverability Option B Clarifications.



California ISO

# **Interconnection Process Enhancements (IPE) 2015**

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## **Revised Draft Final Proposal**

August 27, 2015

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# Interconnection Process Enhancements 2015

## Revised Draft Final Proposal

### 1 Executive Summary

The Interconnection Process Enhancements (“IPE”) 2015 initiative is the latest in a series of stakeholder initiatives that the California Independent System Operator Corporation (“CAISO”) has conducted over the past several years to continuously review and improve the generator interconnection process and associated generator interconnection agreements. Similar to the previous iteration of the IPE initiative, IPE 2015 includes several topics that the CAISO is proposing to improve or clarify the administration of the interconnection process. There are a total of eleven improvements proposed for this year’s initiative. The CAISO is bringing nine of the eleven topics to the Board for approval in September 2015 and hopes to complete the stakeholder process for the remaining two topics and obtain Board approval for those in November 2015.

### 2 Introduction

The CAISO posted an issue paper/straw proposal on March 23, 2015, a revised straw proposal on May 11, 2015, and a draft final proposal on July 6, 2015 consisting of the eleven items listed in Table 1 below. To help make its proposals more clear, the CAISO included proposed draft tariff language topic in these proposals.<sup>1</sup>

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<sup>1</sup> The tariff language is “draft” tariff language. Stakeholders may submit comments or proposed edits and the CAISO may revise it. As with all draft tariff language in the stakeholder process, the CAISO reserves the right to revise the tariff language, including up to the time of filing at the Federal Energy Regulatory Commission.

Topic No.	Topic Description
1	Affected Systems
2	Time-In-Queue Limitations
3	Negotiation of Generator Interconnection Agreements
4	Deposits Interconnection Request Study Deposits Limited Operation Study Deposits Modification Deposits Repowering Deposits
5	Stand-Alone Network Upgrades and Self-Build Option
6	Allowable Modifications Between Phase I and Phase II Study Results
7	Conditions for Issuance of Study Reports
8	Generator Interconnection Agreement Insurance
9	Interconnection Financial Security Process Clarifications Posting Clarifications TP Deliverability Affidavit Impacts
10	Forfeiture of Funds for Withdrawal During Downsizing Process
11	TP Deliverability Option B Clarifications

### 3 Revisions to the July 6<sup>th</sup> Draft Final Proposal

Below is a brief summary of the CAISO’s revisions to Topic 1- Affected Systems, Topic 2 – Time in Queue Limitations and clarification on Topic 5 – Stand Alone Network Upgrades.<sup>2</sup> A complete discussion of stakeholder comments on these topics and the CAISO’s response follows. Topics 3-11 of this initiative will be brought to the September Board of Governors meeting for approval. The proposal for Topic 5 being brought to the Board will include clarifications proposed in this paper. Topics 1-2 have been revised and the CAISO hopes to bring these topics to the November Board of Governors meeting for approval.

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<sup>2</sup> The CAISO received comments on the draft final proposal from EDF Renewable Energy (“EDF-RE”), First Solar, Independent Energy Producers (“IEP”), Large-scale Solar Association (“LSA”), Modesto Irrigation District (“MID”), Pacific Gas and Electric Company (“PG&E”), Southern California Edison (“SCE”), Sempra US Gas and Power (“Sempra USGP”), Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California (“Six Cities”), S-Power (“sPower”).

## **Topic 1 – Affected Systems**

The CAISO here proposes to modify the draft tariff language as follows:

- clarify that, absent a legitimate reliability issue, the CAISO will not delay the synchronization or commercial operation of the Generating Facility where an Affected System identifies itself beyond its initial 60-day timeline.
- clarify that the only exceptions to the affected system’s initial 60-day timeline are: (i) the CAISO failed to identify a potentially Affected System in the first place; or (ii) the Interconnection Customer modified its project resulting in a material change impacting an Affected System.
- Include a clause that states “An Affected System’s mitigation remedies that may be available outside the CAISO Tariff are unaffected by this provision.”

## **Topic 2 – Time-In-Queue Limitations**

The CAISO proposes to modify the draft tariff language to clarify that if an Interconnection Customer has declared Commercial Operation for one or more Phases of the Generating Facility, or has declared commercial operation for markets for a portion of its capacity, and the Interconnection Customer elected Full Capacity Delivery Status (“FCDS”), then the CAISO will not convert to Energy-Only the portion of the project that is in-service and participating in the CAISO markets. Rather, the project will be converted to Partial Capacity Deliverability Status (“PCDS”) to the extent that undeveloped capacity remains in the queue. If the project downsizes to the capacity that was in-service and participating in the CAISO market, then the facility will have FCDS for that portion of the capacity.

The CAISO has also modified the proposal to require the Participating TO have an obligation to provide notice when Network Upgrade construction timelines have changed.

## **Topic 5 – Stand-Alone Network Upgrades and Self-Build Option**

The CAISO clarifies that for a self-build Stand Alone Network Upgrades (“SANU”), an Interconnection Customer’s maximum cost responsibility will be reduced by the cost of the SANU, while both the original and revised maximum cost responsibility will be documented in the Generation Interconnection Agreement. If at any time the responsibility for constructing the SANU reverts back to the Participating TO, the Interconnection Customer’s maximum cost responsibility will revert back to the original maximum cost responsibility that included the cost of the SANU.

## 4 Stakeholder Process Next Steps

Table 2 summarizes the anticipated stakeholder process schedule for the IPE 2015 initiative.

Table 2 – Stakeholder process schedule		
Step	Date	Milestone
Revised Draft Final Proposal for Topics 1-2, and clarification on Topic 5	August 27, 2015	Revised Draft Final Proposal Posted
	September 3, 2015	Stakeholder meeting (web conference)
	September 17, 2015	Stakeholder comments due
Tariff Language Review for Topics 3-11	September 14, 2015	Stakeholder meeting (web conference)
Final Proposal to Board for Topics 3-11	September 17-18, 2015	Board of Governors Meeting
Final Proposal to Board for Topics 1-2	November 4-5, 2015	Board of Governors Meeting

## 5 Topics

### 5.1 Topic 1 – Affected Systems

#### 5.1.1 Overview

In the 2014 stakeholder process to clarify the affected system coordination language in the Business Practice Manual (“BPM”) for the Generator Interconnection and Deliverability Allocation Procedures (“GIDAP”), the CAISO committed to the following:

*The CAISO understands that the Interconnection Customers desire a definitive time by which an electric system operator identifies themselves as an Affected System. The CAISO does not currently have tariff authority to provide this definitive time. The CAISO proposes to include in the IPE a topic that would propose a tariff amendment establishing a timeframe and process similar to the WECC Project Coordination and Path Rating Process.*

This proposal described above is the result of that commitment.

### 5.1.2 Stakeholder Input

The CAISO received nine comments on the draft final proposal for this topic. Two comments supported the revised draft proposal, three comments supported the proposal with qualifications, two comments supported the proposal with reservations, and two comments opposed the draft final proposal.

#### **Affected System coordination requirements**

EDF-RE responded that “the more recent CAISO policy change requiring each developer to obtain a waiver or Affected System mitigation agreement from any possible Affected System Operator before the CAISO will allow their project to operate has exacerbated the problem. Since that time, Affected Systems problems have become more numerous and significant, especially since those systems know that generators have only limited recourse to dispute unnecessary and/or costly mitigation payments.” This concern is based on a false premise. The Generator Interconnection Agreement (“GIA”) requirement for this coordination has existed since FERC Order No. 888 and is specifically stated in section 11.4.2 and Appendix A of the GIA. The Commission stated in FERC Order 888 that while it continues to treat interconnection and delivery as separate aspects of transmission service, and an Interconnection Customer may request Interconnection Service separately from transmission service (delivery of the Generating Facility's power output), in the majority of circumstances, interconnection alone is unlikely to affect the reliability of any neighboring Transmission System. However, in those rare instances in which the interconnection alone may cause a reliability problem on an Affected System, the Commission required network upgrades to protect an Affected System from any reliability problem.<sup>3</sup> Under Order No. 888, the Transmission Provider is required to assist the Transmission Customer in coordinating with the Affected System on any Network Upgrades needed to protect the reliability of that system.<sup>4</sup> FERC went on to state that it would allow the Transmission Provider to coordinate the timing of construction of Network Upgrades to its Transmission System with the construction required for the Affected System.<sup>5</sup> As provided in the pro forma

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<sup>3</sup> See Section 21 of the pro forma OATT from Order No. 888. See also Tampa Electric Co., 103 FERC ¶ 61,047 (2003), and Nevada Power, 97 FERC ¶ 61,227 (2001), reh'g denied, 99 FERC ¶ 61,347 (2002); but see American Electric Power Service Corporation, 102 FERC ¶ 61,336 (2003). FERC Order 2003 paragraph 118.

<sup>4</sup> Section 21.1 of the pro forma OATT from Order No. 888 states that: "The Transmission Provider will undertake reasonable efforts to assist the Transmission Customer in obtaining such arrangements, including without limitation, provided any information or data required by such other Transmission System pursuant to Good Utility Practice."

<sup>5</sup> Section 21.2 of the pro forma OATT from Order No. 888 states that: "Transmission Provider shall have the right to coordinate construction on its own system with the construction required by others. The

OATT from Order No. 888, the Commission's Dispute Resolution Service is available should the Interconnection Customer wish to challenge the Transmission Provider's decision to delay construction pending completion of the Affected System's upgrades.<sup>6</sup>

The CAISO's proposal provides a process for Affected System engagement and resolution of impacts as early as possible in the interconnection process. As Order 888 notes if a resolution cannot be timely determined then the Interconnection Customer can use the Commission's Dispute Resolution Service.

EDF-RE also raised concerns that the proposal did not require that the Affected System to explain how it would be impacted, commence or complete any studies by any particular time, address the reasonableness of the assumptions or conclusions of those studies, or constrain the timing or content of mitigation agreements. LSA raised a similar concern. While the CAISO is sympathetic to these concerns, there is little that the CAISO could do to address them as the Affected System is not a party to the CAISO tariff. While the CAISO proposes to proceed with the interconnection, unless there is a valid reliability issue the CAISO cannot mandate specific actions the Affected System must take as Affected Systems are not bound by the CAISO tariff.

#### **Identification of Affected System after 60 calendar days**

Nearly all of the parties that commented on this topic expressed concern that the exemption to the initial 60-day timeline in which Affected Systems could identify themselves has the potential to create an exception that would swallow the rule. Commenters proposed various suggestions to limit the exemption. The CAISO generally agrees with these comments. Accordingly, the CAISO proposes to limit Affected System exceptions to the initial 60-day timeline if: (i) the CAISO failed to identify a potentially Affected System in the first place; or (ii) the Interconnection Customer modified its project resulting in a material change impacting an Affected System. In addition, if a project converts from a WDAT interconnection queue to the CAISO interconnection queue, it would start the timeline for Affected Systems.<sup>7</sup>

Some commenters also requested that the CAISO preclude any exceptions to the initial 60-day timeline within a certain period, e.g., within a year prior to Commercial Operation Date ("COD") or after GIA execution. Because the CAISO has narrowed the available exceptions, this is not necessary.

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Transmission Provider, after consultation with the Transmission Customer and representatives of such other systems, may defer construction of its new transmission facilities, if the new transmission facilities on another system cannot be completed in a timely manner."

<sup>6</sup> Section 21.2 of the pro forma OATT from Order No. 888.

<sup>7</sup> The Participating TOs do not have an Affected System process for the distribution system.

Another commenter requested that the exception only be allowed for Affected Systems that had previously responded to the CAISO's notice within the window that the Affected System did not believe they were affected. With the CAISO's narrowing of the exception, this request has effectively been met. Because only an entity that was originally not notified is provided the exception, or due to a change in the project by the Interconnection Customer the entity that previous did not believe they were affected is provided the exception.

#### **Additional Affected System requirements**

LSA requested that Identified Affected Systems rescind their declarations that the entity is an Identified Affected System if it determines that it is no longer impacted by the generator interconnection and, therefore is not an Affected System. The CAISO believes that this rescission does not need to be specified in the tariff because if an Identified Affected System determines it is no longer impacted, or the impact has been mitigated, then the Identified Affected System so notifies the CAISO and Interconnection Customer. In that instance the Interconnection Customer has met the Affected System obligation, and the notification is a de facto rescission because the entity is no longer an Affected System.

LSA requested that the Affected System should describe how it is affected when it identifies itself. CAISO disagrees as this additional requirement is not realistic. With the revised process, the timeline for the Affected System to identify themselves is now approximately 90 calendar days after the first Interconnection Financial Security posting. The first Interconnection Financial Security posting is 90 calendar days after the Phase I study results are issued. At this point in time, the Affected System may have participated in a scoping and results meeting and, if requested, they have received the Phase I study results. The Interconnection Customer has likely not even contacted the Affected System to perform a study, which they have to pay for, nor is it likely that the Affected System has done any study work. Thus the identification at this early stage is more of an educated understanding of the system and not engineering proof. However, by identifying the Affected System so early in the interconnection process it will give the Interconnection Customer the opportunity to perform their own outreach to identify reliability issues on the affected system caused by their project early, which could then reduce project risk.

#### **Notification process**

IEP would prefer that the CAISO be required to notify all adjacent systems, regardless of whether they may be identified as an Affected System, and only allow exceptions to the 60-day timeline in the case of "material and unforeseen facts." The CAISO disagrees.

The CAISO determines which potential Affected Systems to notify based on the region where the project interconnects. It would be unreasonable to require, as an example, Bonneville Power Administration to respond to a request of interconnection to the ECO substation close to the Mexico border. The CAISO is thorough and as broad as reasonable in notifying potentially Affected Systems therefore the CAISO has proposed to limit the 60-day timeline exemption only to initial errors by the CAISO, and changes by the Interconnection Customer (most obviously, for example, changes to the Point of Interconnection). For reference, the Affected System Contact List can be found at: <http://www.caiso.com/planning/Pages/GeneratorInterconnection/Default.aspx>

### **Proposed expansion of initiative**

LSA requested a robust stakeholder process to discuss better coordination and potential combination of interconnection studies by the CAISO and Affected Systems. While the CAISO is sympathetic to this request, such a process would be premature. First, the CAISO could not require the Affected Systems to participate or agree to any change absent an obligation on the Affected System. Second, the interconnection studies of the CAISO and Affected Systems could not be combined without the CAISO assuming their NERC Planning Authority requirements. The CAISO has implemented an initiative to offer these services to Affected Systems however, to date, the CAISO has not taken on any generator interconnection study obligation.

SCE's preferred path is to have the CAISO amend the Adjacent Balancing Authority Operating Agreement ("ABAOA") or enter into new, legally binding agreements to ensure appropriate, enforceable mechanisms including cost responsibility for the mitigation that will be implemented. SCE wants a clear definition of roles and responsibilities. SCE understands that the Affected Systems need to be willing to negotiate the agreements. As the CAISO stated in the Revised Straw Proposal, the CAISO shares this goal and believes such a proposal could be a long-term objective if the Affected Systems were interested in developing this type of structure. However, to date, the Affected Systems the CAISO has worked with have different timelines and priorities, and have not been interested in developing a binding contract. However, the CAISO is willing to continue to look for ways to improve the affected system process over time.

LSA and sPower requested that the CAISO revise the financial security rules regarding non-refundable portion of financial security in the case of significant late upgrade costs are assigned by Affected Systems to the Interconnection Customer. LSA suggested modifying the posting requirements to allow for higher refunds of the amount of Interconnection Financial Security eligible for refund if the Affected System is identified late and the project wants to withdraw from the CAISO queue due to significant

Affected System costs. The CAISO tariff imposes financial security obligations on Interconnection Customers that apply to e Network Upgrades that the Participating TOs are building in support of their interconnection request and not for the cost of Affected System mitigation. The obligations between the Interconnection Customer and the Affected System are outside of the CAISO tariff. This would be a substantial change to the current construct of forfeiture of funds late in this stakeholder process and, if desired by stakeholders, should be addressed at a future stakeholder initiative.

### **Existing agreements**

LSA requested the CAISO clarify that the “new rules” would be in effect once FERC approves the tariff provisions. Specifically the “new rule” would apply to all Interconnection Customers who’s Synchronization Date is after the FERC approval date and if an Affected System identifies itself outside of the notification process proposed here. The notification process is already included in the Business Practice Manual for Generator Interconnection and Deliverability Allocation Procedures (GIDAP BPM) section 6.1.4.<sup>8</sup>

LSA is also requesting that the CAISO confirm that the new rules proposed here would “supersede” agreements between Affected Systems and parties besides the CAISO. On the other hand, MID disagrees that the CAISO rules could supersede such agreements. In short, the CAISO agrees with MID. The CAISO tariff cannot impose obligations on entities that are not subject to the CAISO tariff. Nor can the CAISO tariff supersede agreements where the CAISO is not even a party. The CAISO recognizes that this is an area that could benefit from generally applicable rules, such as those that can be developed in a FERC rulemaking. In the event a conflict or disagreement arises, the CAISO would work with all interested parties to try and develop a mutually acceptable solution.

To address this issue and prevent further dispute, the CAISO proposes to add a sentence to the end of the new provision stating that Affected System’s mitigation remedies that may be available outside the CAISO Tariff are unaffected by this provision.

### ***5.1.3 Changes from the Revised Straw Proposal***

The CAISO proposes the following revisions:

- Further clarification of what the CAISO will do if an Affected System identifies itself outside of the 60-day Affected System process.
- Narrow the exceptions to the initial identification process.

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<sup>8</sup> The tariff revision proposed here will expand the initial identification window from 30 days to 60 days.

- Confirm that third party agreements are not affected by this provision.

The following edits to Section 3.7 of Appendix DD and Appendix A of the CAISO tariff. Changes from the draft final proposal are highlighted in yellow:

### 3.7 Coordination With Affected Systems

The CAISO will notify the Affected System Operators that are potentially affected by the Interconnection Customer's Interconnection Request or Group Study within which the Interconnection Customer's Interconnection Request will be studied. The CAISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System Operators, to the extent possible, and, if possible, the CAISO will include those results (if available) in its applicable Interconnection Study within the time frame specified in this GIDAP. The CAISO will include such Affected System Operators in all meetings held with the Interconnection Customer as required by this GIDAP. The Interconnection Customer will cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Affected Systems, including providing consent to CAISO's identification to Interconnection Customer's name, Generating Facility project name, and release of information which the Interconnection Customer provided as part of its Interconnection Request to the Affected System, and participating in any coordinating activities and communications undertaken by the Affected System or CAISO. The CAISO will provide notice to the Affected System Operators that are potentially affected by the Interconnection Customer's Interconnection Request or Group Study, within thirty (30) calendar days after determining which projects in each study cluster have posted their initial Interconnection Financial Security. Within sixty (60) calendar days of notification from the CAISO, the Affected System Operator shall advise the CAISO in writing that either: 1) the CAISO should consider the electric system to be an Identified Affected System; or 2) the electric system should not be considered an Identified Affected System. If the electrical system operator does not make an affirmative representation within sixty (60) calendar days of notification, the CAISO will assume that the electric system is not an Affected System.

If an electric system operator comes forward after the established timeline as an Affected System, absent the Affected System identifying a legitimate reliability issue that the CAISO will confirm, the CAISO will not delay the synchronization or Commercial Operation of the Generating Facility due to a mitigation required by the Affected System. The CAISO will work with the Affected System and Interconnection Customer to establish temporary mitigations if possible for the identified reliability issue. Any mitigation the Affected System Operator feels is necessary required for a project identified by the Affected System will be the responsibility of the Affected System and not the CAISO, the Participating Transmission Owner(s), or the Interconnection Customer. except that The CAISO may waive this timeline and deem the electric system operator as an Identified Affected System if facts and circumstances are later discovered (i) the CAISO failed to identify the Affected System; or (ii) if the Interconnection Customer modifies its project such that indicate an electric system operator may becomes a potentially Affected System. In such cases, or where a project converts from a Wholesale Distribution Access Tariff to the CAISO Tariff, the CAISO will coordinate with the Interconnection Customer and the electric system operator to develop an expedited timeline to determine whether the electric system operator is an Affected System. The CAISO will then notify the Interconnection Customer as soon as practical of the new Identified Affected System. If required by the Identified Affected System, the Interconnection Customer will signing a separate study agreements with the Identified Affected System owners and paying for necessary studies. An entity which may be an Identified Affected Systems shall cooperate with the CAISO in all matters related to the conduct of studies and the determination of modifications to Identified Affected Systems. An Affected System's

mitigation remedies that may be available outside the CAISO Tariff are unaffected by this provision.

## Appendix A – New Definition

### Identified Affected System –

An Affected System Operator who, as described in Section 3.7 of Appendix DD, either (1) responded affirmatively to the initial CAISO notification, or (2) was later deemed by the CAISO an Identified Affected System after a change in facts and circumstances.

## 5.2 Topic 2 –Time-In-Queue Limitations

### 5.2.1 *Overview*

When Interconnection Customers request an extension to a Generating Facility’s COD, the CAISO evaluates the request under the Material Modification Assessment (“MMA”) process. Currently, the In-Service Date (“ISD”) for Generating Facilities studied in the serial study process 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.<sup>9</sup> Both study processes allow for extensions beyond the 7 to 10 year limits subject to agreement of both the CAISO and the applicable Participating TO.

In order to support viable Generating Facilities in the Generator Interconnection Queue and avoid unnecessary Network Upgrades, the CAISO proposes requiring Generating Facilities that are holding capacity that could be used by later-queued projects be required to meet and maintain certain commercial viability criteria in order to extend their ISD or COD beyond the 7/10 year thresholds. These criteria will be applied to Generating Facilities that may request milestone extensions beyond the 7/10 year thresholds in the future. The CAISO proposes to approve milestone extensions beyond the 7/10 year thresholds, only on the Interconnection Customer’s demonstration that the Generating Facility meets the following commercial viability criteria:

- Having, at a minimum, applied for the necessary governmental permits or authorizations and that the permitting authority has deemed such documentation “as data adequate” for the authority to initiate its review process;

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<sup>9</sup> See Appendix U, Section 3.5.1; Appendix Y, Section 3.5.1.4; Appendix DD, Section 3.5.1.4; as applicable.

- Having an executed power purchase agreement, attesting that the Generating Facilities will be balance-sheet financed, or otherwise receiving a binding commitment of project financing;
- Demonstrating Site Exclusivity for 100% of the property (in lieu of a Site Exclusivity Deposit);
- Having executed a GIA; and
- Being in good standing with its GIA such that neither the Participating TO nor the CAISO has provided the Interconnection Customer with a Notice of Breach of the GIA (where the breach has not been cured or the Interconnection Customer has not commenced sufficient curative actions).

In order to ensure that Generating Facilities maintain the level of commercial viability upon which the COD extension approval was conditioned, the CAISO will perform an annual review of the Generating Facility's commercial viability during the transmission plan deliverability allocation process. Failure to maintain commercial viability will result in loss of Full Capacity Deliverability Service ("FCDS") or Partial Capacity Deliverability Status ("PCDS"), as applicable.

Generating Facilities requesting a COD extension beyond the 7/10 years thresholds, and that either are serial or requested FCDS or PCDS, reserve transmission capacity that could be used by other Generating Facilities. If such Generating Facilities do not meet the commercial viability criteria, they will not be deemed withdrawn from the Generator Interconnection Queue. Instead, the Generating Facility's deliverability status will be changed to Energy-Only. If FCDS or PCDS is still desired for the Generating Facility, the Interconnection Customer will have to pursue that option through the Annual Full Capacity Deliverability Option in accordance with Section 9.2 of Appendix DD.

Generating Facilities studied under the serial study process also will be subject to these requirements. Some of the serial studies were completed prior to the CAISO process of distinguishing Reliability Network Upgrades from Deliverability Network Upgrades. Because the serial study process did not contemplate the separation of Network Upgrades into the categories of Reliability Network Upgrades and Deliverability Network Upgrades, Generating Facilities studied under the serial study process that are subject to the consequences of failure to meet commercial viability criteria may also be required to undergo re-study in accordance with Sections 7.6 and/or 8.5 of CAISO tariff Appendix U to determine what Network Upgrades and corresponding GIA amendments will be required to interconnect their proposed Generating Facility as Energy-Only.

Generating Facilities in cluster 7 and beyond whose Phase II study results identify a longest-lead Network Upgrade required for the project that is beyond the 7-year

threshold are entitled to a limited exception to the commercial viability criteria. Such Generating Facilities requesting COD modification within six (6) months of the CAISO's publishing the Phase II results are eligible for this exception. This six-month timeline allows ample time for TP Deliverability allocation activities, the MMA process, and GIA negotiation, and it places a needed boundary on the exception. Additionally, the exception to the commercial viability criteria explicitly excludes report addendums and revisions to the Phase II that are required as an outcome of customer-initiated modifications to its Interconnection Request.

### 5.2.2 *Stakeholder Input*

Stakeholders generally support the proposal to apply commercial viability criteria to projects requesting to go beyond the 7/10 year threshold. The CAISO received seven comments regarding the time-in-queue draft final proposal: three comments supported the proposal, three comments supported the proposal with qualifications, and one comment took no position. Stakeholder comments addressed several concepts and suggestions:

- 1) Restudies for serial projects
- 2) Allocating cost responsibility when a Generating Facility is converted to Energy-Only
- 3) Participating-TO requested delays
- 4) Applying commercial viability only to projects with shared Deliverability Network Upgrades
- 5) Conditional approval for Generating Facilities without regulatory approved Power Purchase Agreements ("PPA")
- 6) Increasing the grace period for projects without a PPA to two years
- 7) Allowing Generating Facility's failing commercial viability to be evaluated for deliverability with a later cluster study group
- 8) Clarifications to PPA matching requirement
- 9) Clarifications on the CAISO's current COD extension framework

The CAISO addresses the comments below:

#### **Restudies for serial projects**

EDF-RE and LSA expressed concern about the proposal's impacts to serial study process projects, specifically, that a project's conversion to Energy-Only may trigger cascading restudies. They also requested clarification on what assumptions are used for serial restudies.

As clarified in CAISO's draft final proposal, assumptions used for the restudy process, established in Appendix U of the tariff, are generally informed by two questions: 1) What generation projects are already online and what are their assigned transmission upgrades? and 2) what generation projects are earlier in the queue that are not online and what are their assigned transmission upgrades?

The CAISO appreciates stakeholders' concerns that projects' conversion to Energy-Only may trigger the need for some restudies, but the CAISO has evaluated the potential effects of this proposal and of the 271 projects in the queue, only 21 are serial projects with FCDS (7%). A review of these projects indicates that:

- All of these 21 projects have executed GIAs (which is one of the commercial viability criteria);
- The projects are situated in diverse locations across the grid (7 different counties and 17 unique Points of Interconnection), mitigating the potential for cascading re-studies; and
- Seven of the 21 projects are already partially online as a result of Phasing arrangements or having declared commercial operation for markets for a portion of its capacity.

Due to the limited impact potential, the CAISO does not believe that this concern merits a change to the proposal.

However, the CAISO notes that this topic has not addressed the implications for projects that have already declared COD for some of their capacity. The CAISO clarifies that if a Generating Facility has declared Commercial Operation for one or more Phases, or has declared commercial operation for markets for a portion of its capacity, the portion of capacity in the market will not be converted to Energy-Only status. Rather the project will be converted to PCDS, retaining deliverability for the portion of the project that is already online. Take, for example, a 200 MW FCDS project developed in 4 Phases of 50 MW. If the first 3 Phases are online (150 MW) and the Interconnection Customer requests a COD beyond the 7/10 year threshold for the final Phase of the project, the CAISO will require evidence of commercial viability for the final Phase. If the Interconnection Customer cannot demonstrate commercial viability for the Phase, the CAISO will convert the project to PCDS where 150 MW has TP Deliverability status and 50 MW is Energy-Only.<sup>10</sup> The CAISO, however, does not expect that these provisions will be frequently applied, as most projects that reach COD for any portion of their projects likely will be able to meet the commercial viability criteria. After their conversion to PCDS, generators may continue on to declare Commercial Operation for

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<sup>10</sup> See Appendix DD, Section 8.9.5

the remainder of their Generating Facility, or may enter into the next downsizing window to eliminate the undeveloped portion or Phase of their project, in which case the resource may be considered as having FCDS for the downsized project.

### **Allocating cost responsibility when a Generating Facility is converted to Energy-Only**

EDF-RE, PG&E, and LSA requested clarification on the treatment of cost responsibility and reimbursement for Deliverability Network Upgrades. The commenters requested clarification on two general scenarios posed by PG&E where Deliverability Network Upgrades are removed from project responsibility as a result of converting to Energy-Only or are otherwise no longer needed.

The CAISO appreciates stakeholders' concerns, and agrees that the questions are important, but it is essential to note that these are not new questions. Reallocation of costs for upgrades that are still needed (as a result of withdrawal or downsizing) are addressed in the reassessment provisions.<sup>11</sup> If an upgrade is no longer needed, then these upgrades can be removed from all interconnection customers' plans of service if the construction activities have not begun. Converting from FCDS to Energy-Only will be addressed pursuant to the same tariff provisions.

Similarly, a project that fails to meet or maintain commercial viability criteria and is converted to Energy-Only status is the functional equivalent of a project<sup>12</sup> that fails to meet the criteria for retention of TP Deliverability and is converted to Energy-Only Status.<sup>13</sup> The CAISO processes these changes—and changes to the CAISO transmission plan—in the annual reassessment process. The annual reassessment is an element of the GIDAP approved by FERC in 2012.

After review of the issues identified by stakeholders regarding reallocation, the CAISO's assessment is that the risks identified therein are existing risks of developing a Generating Facility, not risks created by the proposal. As discussed in greater detail below, all projects are only ever assigned costs which they actually trigger in their cluster study group, and cluster projects are further protected from extreme costs increases by their maximum cost responsibility.

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<sup>11</sup> See Appendix DD, Section 7.4

<sup>12</sup> Projects in the GIDAP are subject to CAISO Tariff Appendix DD, which requires that, once a Generating Facility is allocated TP Deliverability under Section 8.9.1, the Interconnection Customer annually must demonstrate that the Generating Facility meets certain criteria to retain its Deliverability

<sup>13</sup> The Transmission Plan Deliverability Retention and commercial viability policies are so similar that the CAISO has made use of the existing annual Transmission Plan Deliverability affidavit process to capture the annual verification process for commercial viability, and avoid creating additional or new reporting burdens for Interconnection Customers.

LSA 's comments raise specific concerns that "it would be highly inequitable for other projects in the same cluster as a project losing deliverability to pay more for still-needed upgrades, especially if later-queued clusters benefit from cancellation of their upgrades enabled by the deliverability withdrawal." The CAISO disagrees. As an initial matter, Interconnection Customers' that fund upgrades are paid for doing so at the FERC interest rate. Thus, while these customers may have higher upfront cash requirements, they are not ultimately paying more and may even benefit from the rate of return.

Moreover, this is the foundation of the cluster study approach as updated by the GIDAP. One of the reasons that the CAISO implemented a clustered study approach when it reformed the LGIP is the need to evaluate collective impacts to the grid, and to more equitably allocate the financial responsibility for required network upgrades to generators. If a project in a cluster is converted to Energy-Only, and it is determined that the cluster study group still triggers the Deliverability Network Upgrade, then the costs of the Deliverability Network Upgrade are rightly reallocated to the remaining projects in that study group subject to the maximum cost responsibility adopted by the GIDAP.

As described in the technical bulletin, *GIDAP Reassessment Process Reallocation of Cost Shares for Network Upgrades and Posting*<sup>14</sup>, the tariff does not restrict the CAISO and/or applicable Participating TO from reallocating the costs of Network Upgrades among customers in a study group, so long as such reallocation does not result in a customer being assigned costs greater than its maximum cost responsibility<sup>15</sup>. This applies to cluster projects with and without executed GIAs. The purpose of this maximum cost responsibility is to ensure that customers have certainty regarding their maximum cost exposure relatively early in the interconnection process. Provided the project declares Commercial Operation, the costs assigned for Network Upgrades are eligible for reimbursement. To the extent that reallocating the costs of a still needed Network Upgrades among customers in a study group up to their maximum cost responsibilities does not account for the entire costs of Network Upgrades, then the excess costs will be assumed by the applicable Participating TO. This assumption of excess costs by the applicable Participating TO is consistent with the risk that the Participating TOs faces under the current tariff due to defining the maximum cost responsibility as the lesser of

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<sup>14</sup> [http://www.caiso.com/Documents/TechnicalBulletin\\_GIDAP-ReassessmentProcessReallocation-CostShares-NetworkUpgrades-Posting.pdf](http://www.caiso.com/Documents/TechnicalBulletin_GIDAP-ReassessmentProcessReallocation-CostShares-NetworkUpgrades-Posting.pdf)

<sup>15</sup> The CAISO's interconnection procedures define a customer's maximum cost responsibility (often referred to as the "cost cap") as the lesser of the costs assigned to that customer in the Phase I and Phase II interconnection studies.

the costs assigned to customers in the Phase I and Phase II interconnection studies.<sup>16 17</sup> Upon completion of the Network Upgrade, the Participating TOs is eligible to pursue recovery for these costs.

Changes to serial study group projects are not processed as a part of the annual re-assessment process. Instead, for these projects, the CAISO and Participating TO may identify at any time, pre or post GIA execution, the need for a restudy. LSA's comments raise specific concerns that "it would be highly inequitable for Later-queued serial Group projects to bear additional upgrade costs because the project losing deliverability will no longer pay for a still-needed upgrade, especially if a later-queued project or cluster benefits from cancellation of its upgrade enabled by the deliverability withdrawal." The CAISO confirms that withdrawal of a previously queued serial project (complete withdraw or withdraw of the project's Deliverability) may indeed trickle upgrades down to later queued projects, and cause the need for serial projects to be restudied. This is part of the foundation of the serial study process, and this issue is one of the many reasons the CAISO transitioned from the serial study process to a cluster study process.

LSA also notes that because serial projects do not have cost caps, they are "unfairly" vulnerable to changes and extra costs. The CAISO observes that some Interconnection Customers believe that projects studied in the serial process are a more valuable asset than projects studied in a cluster process because serial projects have certain "grandfathered" rights or protections. The CAISO is agnostic to this value assessment. Projects studied in the serial process are certainly queued before the bulk of the projects in the generation interconnection queue, and in some areas that has benefit, but, for the reasons described above, Interconnection Customers for the 27 serial projects that remain in the generator interconnection queue will always have difficulty ascertaining the exact timing and costs for their project, as their cost responsibility can change and is not capped.

It is possible, in both the serial study process and the cluster study process, that as a result of project withdrawal (complete withdraw or withdraw of the project's Deliverability) Interconnection Customers or Participating TOs may have expended money on the engineering, procurement, or construction for Network Upgrades that are determined to be no longer needed. Stakeholders asked for clarification on recovery for

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<sup>16</sup> See *California Independent System Operator Corp.*, 124 FERC ¶ 61,292, at P 180 (2008) (finding that the tariff provisions are "reasonable to establish cost certainty and to equitably share cost responsibilities among interconnection customers and the PTOs [Participating TOs] during the interconnection process.").

<sup>17</sup> GIDAP Reassessment Process Reallocation of Cost Shares for Network Upgrades and Posting, [http://www.caiso.com/Documents/TechnicalBulletin\\_GIDAP-ReassessmentProcessReallocation-CostShares-NetworkUpgrades-Posting.pdf](http://www.caiso.com/Documents/TechnicalBulletin_GIDAP-ReassessmentProcessReallocation-CostShares-NetworkUpgrades-Posting.pdf)

costs spent on Deliverability Network Upgrades that are no longer needed. There are two potential mechanisms for recovery of costs spent on Deliverability Network Upgrades that are no longer needed; (1) for the Participating TO to seek and obtain abandoned plant recovery and (2) under section 11.4.1 of the LGIA, the Interconnection Customer may recover previously unreimbursed costs if conditions discussed in the GIA are met.

- Abandoned plant  
Participating TOs may petition FERC for abandoned plant recovery for up to 100% of prudently-incurred abandoned plant costs.
- Section 11.4.1 of the LGIA  
Alternatively, in the event that upgrades are not currently needed, but are again identified as needed in future clusters, Section 11.4.1 of the pro forma LGIA provides that the Participating TO will be responsible to reimburse the Project if a future Generating Facility utilizes the Network Upgrade. This provision protects projects with executed GIAs from paying for upgrades used by later queued projects. Projects who terminate their LGIAs are also protected by this provision per section 2.6 of the pro forma LGIA, which states that the LGIA shall continue in effect after termination to the extent necessary to provide for final billings and payments and for costs incurred hereunder, including billings and payments pursuant to this LGIA.

PG&E requested that the CAISO work through a few specific scenarios regarding cost recovery. PG&E does not specify, *but the CAISO assumes in all scenarios that both Project A and Project B have executed GIAs and have provided Written Notice to Proceed.*

**Scenario 1: Two FCDS projects (Project A and Project B) that are each allocated 50% of the cost of a Deliverability Network Upgrade. After construction of the Deliverability Network Upgrade is commenced Project A is converted to Energy-Only. Following Project A's conversion to Energy-Only, the Deliverability Network Upgrades are deemed no longer needed**

The CAISO confirms that Project A is responsible to pay for invoices for any costs the Participating TO has incurred on its behalf as of the date of conversion that are associated with constructing Deliverability Network Upgrades.

- Further, any financial security may be liquidated to reimburse all Participating TO costs and expenses incurred or irrevocably committed to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer.

For Project B, which is proceeding towards a COD with FCDS and which has maintained its commercial viability criteria, PG&E asks whether the costs incurred for Deliverability Network Upgrades by Project B can be paid by Project A, either directly through a cash payment or through a withholding of financial security. The answer is no, the recovery of such costs is through Section 11.4.1 of the LGIA for the Interconnection Customer and abandoned plant for the Participating TO. Similarly, withdrawing Interconnection Customers are not responsible for paying for costs incurred by the Participating TO on behalf of other Interconnection Customers for upgrades that are no longer needed

**Scenario 1B: Would the answers be any different if the Deliverability Network Upgrades were deemed still needed?**

Yes, the process and outcomes for still needed Deliverability Network Upgrades is different, but Project A is no longer responsible for costs of such upgrades beyond costs incurred on behalf of Projects A at the time of the conversion to Energy Only.

Project A is responsible to pay for invoices for any costs the Participating TO has incurred on its behalf as of the date of conversion that are associated with constructing Deliverability Network Upgrades.

For project B, which is proceeding towards a COD with FCDS and has maintained its commercial viability criteria, costs for the still needed Deliverability Network Upgrade will be reallocated, as appropriate, through the existing cluster reassessment process or a serial restudy.

**Scenario 2: If a FCDS project fully funded a Deliverability Network Upgrade and later converts to Energy-Only, would that project be reimbursed for the Deliverability Network Upgrade?**

Yes, if the project achieves COD and the Deliverability Network Upgrade is placed in-service, the project is eligible for reimbursement of those costs.

**Scenario 2 B: Would the answer change if the project withdraws after converting to Energy-Only?**

Yes when projects who do not achieve COD may ultimately be reimbursed if the upgrade is identified as needed in a future cluster pursuant to Section 11.4.1 of the LGIA.

**Participating-TO delays**

The CAISO proposes to more clearly define, in the BPM, when a COD extension is due to a Participating TO construction delay versus when a COD extension is an Interconnection

Customer-initiated material modification request subject to the commercial viability criteria. EDF-RE and LSA expressed concern that this clarification will create the circumstances for a Participating TO and Interconnection Customer to disagree about which party was responsible for negotiation delays many years before. To resolve their concern, EDF-RE and LSA both recommend that the CAISO limit the determination to only the immediate need for the COD extension. The CAISO disagrees for two reasons 1) a few very old projects have been in negotiations for numerous years, some as long as five years, that have not yet executed a GIA would be at risk of the commercial viability criteria if the project needed another COD extension and the cause of the delay is unclear; and 2) now is the time for such projects to obtain any needed COD extension exercising the existing tariff provisions before the commercial viability criteria is implemented and execute the GIA.

As a matter of customer service the CAISO will reach out to the projects identified as most likely affected by this clarification, and provide information about the forthcoming changes, and how the new time-in-queue policies may affect their deliverability.

Now is the time for projects to obtain COD extensions and/or execute GIAs beyond the 7/10 year threshold under current tariff provisions. It will take at least several months before this proposal could be approved by FERC. This is ample time for projects potentially affected by this proposal to execute a GIA with an achievable COD. The CAISO currently has procedures for approving COD extensions beyond the 7/10 year threshold. The BPM for Generator Management, Section 6, explains this policy:

*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.*

With respect to future projects and modifications, the clarifications proposed in Topic 3 should prevent the GIA negotiation period from going beyond a certain amount of time, which will also help prevent projects remaining in the queue indefinitely without a GIA.

In addition, the CAISO does not necessarily agree that Participating TOs currently have no tariff obligation to provide notice of delay to projects without GIAs, but the CAISO acknowledges that the obligation is not plainly stated in the tariff. As such, the CAISO proposes to clarify that obligation.

**Applying commercial viability only to projects with Deliverability Network Upgrades that could be used by later-queued projects**

LSA requested that commercial viability criteria should only apply to projects holding deliverability capacity that can be used by later-queued projects. The CAISO disagrees. The purpose of this proposal is to add features to aid the CAISO in administering the queue so as to encourage the timely development of projects and to eliminate the ability of projects to hold capacity that can be used by other projects. The CAISO notes that other ISOs have successfully petitioned FERC to include much less flexible time-in-queue provisions in their generation interconnection procedures.<sup>18</sup>

**Conditional approval for Generating Facilities without regulatory approved PPAs**

First Solar requested that the CAISO remove its requirement that a PPA have regulatory approval to satisfy commercial viability criteria. The CAISO disagreed, the CAISO has seen projects with executed PPAs fail to obtain regulatory approval or proceed to Commercial Operation and therefore regulatory approval is consistent with the CAISO's standard for TP Deliverability affidavit scoring.

EDF-RE requested that the CAISO grant "conditional approval to the COD extension on the basis of the executed PPA, with the conditional status removed upon regulatory approval." The CAISO agrees that projects failing to meet commercial viability criteria for failure to have an executed, regulatory approved PPA should have the opportunity to obtain regulatory approval of their PPA before being converted to Energy-Only. To that end, the CAISO added a one-year grace period in the draft final proposal. In the event that the sole reason a Generating Facility does not meet the commercial viability criteria is failure to secure a PPA, the CAISO proposes to wait one year before converting the Generating Facility to Energy-Only. The one-year period will allow ample time for regulatory approval of the PPA. The one-year period will begin the day the customer submits the MMA request for the COD extension. It should be noted that during this grace period, customers will still be responsible for payments toward Network Upgrades as outlined in their GIAs.

**Increasing the grace period for projects without a PPA to two years**

First Solar requested that the CAISO increase the one year grace period to two years to allow for additional time for a project to secure a PPA. The CAISO declines. At the end

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<sup>18</sup> For example, FERC Order Nos. ER12-309-000, ER12-309-001, ER12-309-002 approved changes to Midcontinent Independent System Operator's (MISO) Generator Interconnection Process that that neither suspension of obligations under a GIA nor extension of GIA milestones is permissible unless a defined "force majeure" event occurs.

of a one-year grace period to secure a PPA, the Interconnection Customer will have had at least 8 years to secure a PPA. The CAISO also notes that procurement cycles are not strictly “once a year” events, but rather, are authorized on an ongoing basis as needs are identified.

**Allowing Generating Facility’s failing commercial viability to be evaluated for deliverability with a later cluster study group**

In its comments EDF-RE proposed an alternative set of consequences for projects that fail to meet commercial viability criteria. EDF-RE requested that the CAISO provide customers an “Option 2”:

*Option 2: Retain FCDS status, continue to pay Deliverability Network Upgrade costs ... lose the deliverability for now, but be re-evaluated for deliverability with the last cluster before its COD, based on the GIDAP criteria in effect at that time. If there is insufficient deliverability to accommodate that cluster in the regular study process, the project would be subject to a reduced deliverability award commensurate with other projects in the study cluster with the same viability scoring.*

The CAISO tariff currently does not allow for a single request to be studied in more than one study process. However, the CAISO appreciates the core of EDF-RE’s request here, and believes that the draft final proposal addresses EDF-RE’s core concern that projects be allowed an opportunity to attempt to preserve their deliverability.

For projects failing to meet commercial viability criteria for failure to have an executed regulatory approved PPA, the CAISO proposes to wait one year before converting the Generating Facility to Energy-Only. During this year projects maintain their FCDS and continue to pay for their Deliverability Network Upgrades as outlined in their GIAs,<sup>19</sup> and have the opportunity to improve their project standing to meet commercial viability criteria.

Additionally, Energy-Only Interconnection Customers may pursue Deliverability through the Annual Full Capacity Deliverability Option in accordance with Section 9.2 of Appendix DD of the CAISO tariff.<sup>20</sup>

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<sup>19</sup> Projects with an open modification request and projects that elect to move forward under the one-year grace period are subject to the terms and conditions of their executed GIAs. As such, failure to meet the milestones (financial or otherwise), if not cured under the GIA, may result in a breach of the GIA.

<sup>20</sup> In the unlikely circumstance that the one-year grace period is ill-matched to the customer’s making a Annual Full Capacity Deliverability Option request during the annual request window in April, provided the Interconnection Customer submits the request in the next open request window, the CAISO will

### **Clarifications to PPA matching requirement**

First Solar requested clarification on how closely PPAs need to match GIAs to demonstrate that the project described in the PPA is the same project described in the GIA. First Solar is chiefly concerned that more than one PPA may be attached to one GIA. The CAISO clarifies it is acceptable and somewhat common for larger GIAs to be divided among more than one PPA. The PPA-to-GIA relationship may be many-to-one. The CAISO's intent is to ensure that Interconnection Customers are neither able to use one PPA to reserve capacity in the queue in excess of that PPA's capacity, nor use one PPA to sustain several projects throughout the queue. For example, a 20 MW PPA used to demonstrate commercial viability for a 20 MW cluster 4 project may not be used for TP Deliverability allocation for a 20 MW cluster 9 project. Or, a 20 MW PPA may not be used to demonstrate commercial viability for a 30 MW project, as such a large discrepancy is certainly more than can be reasonably expected to account for differences in transformer and line losses. At this time, the CAISO expects the PPA(s) provided as evidence of a project's commercial viability to align with the project's GIA with respect to the Point of Interconnection, MW capacity (allowing differences in utility defined project size pre-transformation and line losses), fuel type, technology, and site location.

### **Clarifications on the CAISO's current COD extension framework**

In its comments on the draft final proposal, LSA referenced its prior comments concerning whether the CAISO's application of current time limitations to COD extensions were supported in the tariff. The CAISO believes it addressed LSA's concerns with the current time-in-queue framework on page 21 of the draft final proposal; however, the CAISO notes that it did not identify LSA as having made some of the comments. A more detailed response to both items is captured in the draft final proposal, and a summary is provided below.

- 1) In LSA's comments on the Revised Straw Proposal, LSA raised the concern that the CAISO's current framework COD extension beyond 7/10 year threshold is "in the [tariff] sections addressing the initial submission of Interconnection Requests (IRs) and concern the content of those submittals." In response, in the draft final proposal, the CAISO accepted, with qualifications, the stakeholder suggestion to restructure the proposed tariff language and, rather than adding language to the

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extend the grace period to 10 Business Days after the project's receipt of the Annual Full Capacity Deliverability Option results.

existing sections regarding IR submission, create a tariff new section. The new section will specifically address milestone modification and time-in-queue.

- 2) LSA also asserted that “There is no support in the tariff for applying such [the CAISO’s current time-in-queue] limitations to later COD revisions, or for imposing additional requirements for COD extensions beyond those timeframes. Instead, the tariff (and relevant FERC rules) requires imposition of the material modification standard, and nothing more.” The CAISO disagrees. The CAISO’s current time-in-queue procedures are rooted in its FERC-approved tariff and FERC Order No. 2003. COD extensions beyond the 7/10 limit face MMA analysis and require the CAISO and the Participating TO’s consent to go beyond the 7/10 limit. The BPM outlines the CAISO’s criteria for consent. LSA’s interpretation is overly narrow, and FERC precedent does not support it.

At the conclusion of Topic 2 policy development, the CAISO will conduct a stakeholder process to finalize draft tariff language, and take such language to the FERC for approval. Upon FERC approval, the commercial viability proposal will supersede existing time in the queue policies.

### ***5.2.3 Changes from the Revised Straw Proposal***

The CAISO proposes the following changes to the revised straw proposal.

- 1) If a Generating Facility has declared Commercial Operation for one or more Phases, or has declared commercial operation for markets for a portion of its capacity, the CAISO will not convert to Energy-Only the portion of the project that has declared Commercial Operation. Rather, the project will be converted to PCDS.
- 2) The CAISO proposes that the Participating TO’s tariff obligation to provide notice that network upgrade construction timelines have changed be plainly stated in the tariff appendices that govern generator interconnection procedures.

### ***5.2.4 Revised Proposed Tariff Language***

The CAISO proposes to modify tariff language regarding time-in-queue as follows. The language will be added to Appendix, S, U, Y, and DD in a new section that specifically addresses Time-in-Queue and Milestone Modifications. Final determinations on tariff language for this section will be reviewed through the CAISO’s tariff development process. Changes from the revised straw proposal are highlighted in yellow:

**New Section in Appendix, S, U, Y, and DD as applicable**

**Milestone Modification, Time in Queue, and Commercial Viability Criteria**

The modified Commercial Operation Date of the new Generating Facility or increase in capacity of the existing Generating Facility shall not exceed [ten/seven] years from the date the Interconnection Request is received by the CAISO, unless the Interconnection Customer demonstrates that the Generating Facility is commercially viable. The CAISO's agreement to an extension of the proposed Commercial Operation Date does not relieve the Interconnection Customer from compliance with the requirements of any of the criteria in [Section 8.9.3] for retention of TP Deliverability.

The CAISO's agreement to an extension of the proposed Commercial Operation Date is predicated on the Generating Facility meeting and maintaining the criteria on which commercial viability is based. Commercial viability shall be defined as:

- a. Providing proof of having, at a minimum, applied for the necessary governmental permits or authorizations and that the permitting authority has deemed such documentation "as data adequate" for the authority to initiate its review process;
- b. Providing proof of having an executed and regulator-approved power purchase agreement, attesting that the Generating Facilities will be balance-sheet financed, or otherwise receiving a binding commitment of project financing;
- c. Demonstrating Site Exclusivity for 100% of the property necessary to construct the facility through the Commercial Operation Date requested in the modification request. A Site Exclusivity Deposit does not satisfy this criterion;
- d. Having an executed Generator Interconnection Agreement ("GIA"); and
- e. Being in good standing with its GIA such that neither the Participating TO nor the CAISO has provided the Interconnection Customer with a Notice of Breach of the GIA (where the breach has not been cured or the Interconnection Customer has not commenced sufficient curative actions).

If the Interconnection Customer fails to meet the commercial viability criteria but informs the CAISO that it intends to proceed with the modified Commercial Operation Date, the Generating Facility's Deliverability Status will be Energy-Only Deliverability Status.

If a Generating Facility satisfies all the commercial viability criteria except criterion [6.9.2.4(b)], 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 one year after the Interconnection Customer exceeds [ten/seven] years from the date the Interconnection Request is received, whichever occurs later. Interconnection Customers exercising this provision must continue to meet all other commercial viability criteria.

Generating Facilities in cluster 7 and beyond whose Phase II Interconnection Study report requires a timeline beyond the 7-year threshold are exempt from the commercial viability criteria in this section provided that the COD modification is made within six (6) months of the CAISO's publishing the Phase II Interconnection Study report. This exemption is inapplicable to report addendums or revisions required by a request from an Interconnection Customer for any reason

**[New subsection:] Alignment with Power Purchase Agreements**

An Interconnection Customer with an executed GIA and an executed regulator-approved power purchase agreement may request to automatically extend the GIA Commercial Operation Date to match the beginning of the power purchase agreement Commercial

Operation Date. Such requests are not exempt from the commercial viability criteria provisions in [Section #]. The CAISO will consider the power purchase agreement Commercial Operation Date to be the Commercial Operation Date provided for in the executed power purchase agreement, inclusive of all extensions provided for per the terms of the power purchase agreement. To exercise this provision, the Interconnection Customer must (1) provide a copy of the power purchase agreement and evidence of regulatory approval, and (2) confirm the power purchase agreement's standing and details in the annual TP Deliverability affidavit process.

**[New Subsection] Treatment of capacity that has already declared Commercial Operation**

If a Generating Facility has declared Commercial Operation for a portion of a Generating Facility, or one or more Phases of a Phased Generating Facility, the CAISO will not convert to Energy-Only the portion of the project that is in-service and operating in the CAISO markets. 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 unless and until the Generating Facility has gone through the downsizing process to reduce its capacity to the amount in in-service and operating in the CAISO markets, in which case the Generating Facility will have Full Capacity Deliverability Status..

**[New subsection:] Annual Assessment**

The CAISO will perform an annual review of the Generating Facility's commercial viability. If the Interconnection Customer fails to maintain the level of commercial viability on which the Commercial Operation Date approval was based, the Deliverability Status of the Generating Facility corresponding to the Interconnection Request shall convert to Energy-Only Deliverability Status.

## **5.3 Topic 5 - Stand-Alone Network Upgrades and Self-Build Option**

### **5.3.1 Overview**

When an Interconnection Customer is assigned one hundred percent of the cost responsibility of a Network Upgrade and no other Interconnection Customer has the Network Upgrade identified as a requirement for its project, the Network Upgrade may qualify as a Stand Alone Network Upgrade (“SANU”).

Current policy allows for an Interconnection Customer building SANUs to forgo posting Interconnection Financial Security (“IFS”) for the SANU because only the Participating TO is able to draw from IFS postings. The CAISO proposes language intended to clarify the process and outline explicit financial obligations for Interconnection Customers that elect to self-build a SANU.

### **5.3.2 Stakeholder Input**

Only four comments were received regarding the draft final proposal. EDF-RE, commenting for the first time, opposes the proposal. LSA opposes the proposal but

would support it in concept without the clarification that there would be no changes to the maximum cost responsibility included in the draft final proposal. PG&E and SCE supported the draft final proposal.

EDF-RE and LSA expressed concerns that the clarification of allowing an Interconnection Customer to build a SANU will have no impact on the Interconnection Customer's maximum cost responsibility could hurt the developer during the annual reassessment process by leaving more "headroom" for the reallocation of other upgrade costs in that process. The CAISO agrees with EDF-RE's and LSA's comment that there is a potential for unintended consequences related to the clarification in the Draft Final proposal. Not reducing the maximum cost responsibility for SANUs could in some cases be seen as an opportunity to increase an Interconnection Customer's cost allocation for a Network Upgrades beyond what is intended in the reassessment cost reallocation process. The CAISO's proposal to correct this is described under "Changes from the Revised Straw Proposal" below.

EDF-RE and LSA also had concerns that an Interconnection Customer would be required to make the initial and second IFS posting for the costs associated with the SANU (i.e., the Interconnection Customer would only be allowed to reduce the amount of the second posting related to the SANU after the GIA is fully executed). This requirement was added to the Revised Straw Proposal based on stakeholder concerns related to project withdrawals. PG&E had commented that when an Interconnection Customer elects to build a SANU and is allowed to reduce its IFS posting, the lower posting amount could be substantially less than the avoided posting amount for the SANU. In this case, if the Interconnection Customer withdraws without ever posting for the SANU, it could be difficult to recover any forfeiture that would be associated with the avoided posting. PG&E recommended that the second financial security posting never be reduced below the first financial security posting amount, thereby removing any potential opportunity for gaming the IFS process. SCE in its comments on the draft final proposal agreed with the requirement to only allow the IFS to reduce the amount of the second posting related to the SANU after the GIA is fully executed. SCE stated that doing so would mitigate situations where an interconnection customer electing to self-build a SANU withdraws and the actual posted IFS is lower than the IFS posting amount related to the SANU. Considering current and past comments, as well as CAISO experience with this issue, the CAISO believes the current proposal strikes the right balance.

### ***5.3.3 Changes from the Revised Straw Proposal***

The CAISO proposes that the Interconnection Customer's maximum cost responsibility will be reduced by the cost of the SANU and both the original and revised maximum cost responsibility will be documented in the GIA. If at any time the responsibility for

constructing the SANU reverts back to the Participating TO, the Interconnection Customer's maximum cost responsibility will revert back to the original maximum cost responsibility.

#### 5.3.4 *Revised Proposed Tariff Language*

The following is a revised new subsection appended after section 11.3.1.4.3 of Appendix DD. The changes from the previous version are highlighted in yellow:

##### **11.3.1.4.4 Posting Related to Interconnection Customer's Opting to build Stand Alone Network Upgrade(s)**

If an Interconnection Customer's Phase-II study report identifies Stand Alone Network Upgrades and the Interconnection Customer desires to self-build the Stand Alone Network Upgrades, the Interconnection Customer must post the Interconnection Financial Security for the Stand Alone Network Upgrades in its second posting. The Interconnection Customer may request to build the Stand Alone Network Upgrades in the Generator interconnection Agreement negotiation process, and if the Participating TO and the CAISO agree, the second posting will be reduced accordingly. The Interconnection Customer will not be allowed to revise its second posting amount until the Generation Interconnection Agreement documents the Stand Alone Network Upgrades and has been fully executed. If the Participating TO and the CAISO agree to allow the Interconnection Customer to build a Stand Alone Network Upgrade in an executed Generator interconnection Agreement the Interconnection Customer's maximum cost responsibility will be reduced by the cost of the Stand Alone Network Upgrade and both the original and revised maximum cost responsibility will be documented in the Generation Interconnection Agreement.

If at any time the responsibility for constructing the Stand Alone Network Upgrade reverts back to the Participating TO, the Interconnection Customer will be required to revise its second Interconnection Financial Security posting back to the second posting amount prior to the execution of the Generator Interconnection Agreement within thirty (30) calendar days of determining that the Participating TO will build the Stand Alone Network Upgrade and the Interconnection Customer's maximum cost responsibility will revert back to the original maximum cost responsibility. Failure to make a timely posting adjustment will result in the withdrawal of the Interconnection Request in accordance with Section 3.8. If an Interconnection Customer has been allowed to reduce its second posting following the execution of its Generator Interconnection Agreement and subsequently withdraws, the amount of the Interconnection Financial Security that is determined to be refundable under Section 11.4.2 will be reduced by the amount of the Interconnection Financial Security posting the Interconnection Customer avoided through the self-build option.

The following are proposed edit for Section 11.4.2.2 (a) of Appendix DD:

- a. the Interconnection Financial Security plus (any other provided security plus any separately provided capital) less (all costs and expenses incurred or irrevocably committed to finance Pre-Construction Activities for Network Upgrades on behalf of the Interconnection Customer, and less any posting amount reduction due to Interconnection Customer's election to self-build Stand Alone Network Upgrades.), or...

The following are proposed edits to Article 5.2 of Appendix EE:

**5.2 General Conditions Applicable to Option to Build.**

If the Interconnection Customer assumes responsibility for the design, procurement, and construction of the Participating TO's Interconnection Facilities and Stand Alone Network Upgrades, or assumes responsibility for any stand-alone task, such as telecommunications, environmental, or real-estate related work, (1) within six (6) months of the execution of this GIA, or at a later date agreed to by the Parties, the Interconnection Customer shall submit to the CAISO and the Participating TO a milestone schedule for the design, procurement, and construction of the Stand Alone Network Upgrades, or any stand-alone task assumed by the Interconnection Customer. The milestone schedule will be required to support the Interconnection Customer's Commercial Operation Date. The Appendix B Milestones will be amended to include the milestone schedule for the Stand Alone Network Upgrade.

**Attachment D – Board Memoranda**  
**Tariff Amendment to Implement**  
**2015 Interconnection Process Enhancements**

**California Independent System Operator Corporation**



# Memorandum

**To:** ISO Board of Governors

**From:** Keith Casey, Vice President, Market and Infrastructure Development

**Date:** September 10, 2015

**Re:** **Decision on interconnection process enhancements**

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*This memorandum requires Board action.*

## EXECUTIVE SUMMARY

California's ambitious renewable portfolio standards and environmental goals have resulted in significant development of new generation projects in recent years, especially new renewable solar and wind projects. The majority of project developers request interconnection to facilities under the operational control of the ISO. Over the years, the ISO has made numerous policy and process improvements to how it manages the interconnection study process and queue. These changes, many of which were designed to address specific concerns of renewable energy developers, have resulted in a very effective interconnection process. The ISO is now in a position of continuous improvement where certain refinements and clarifications to the interconnection process are required to manage projects in the current interconnection queue and to provide additional structure and clarification for projects seeking to interconnect in future queue clusters.

The ISO and its stakeholders identified a total of eleven (11) topics for inclusion in the interconnection process enhancements initiative this year. Two topics, "affected systems" and "time-in-queue limitations" are still being finalized in the stakeholder process and are expected to be brought to the Board in November. The other nine (9) topics have reached successful conclusion in the stakeholder process and are being presented here for Board consideration. The majority of these proposed tariff changes are i) clarifications consistent with ISO implementation; ii) changes to streamline processes and be more responsive to project needs; iii) changes to close some identified gaps in the current interconnection process; and iv) changes to reflect management of projects since the Generator Interconnection and Deliverability Allocation Procedures were put in place in 2012. The bulk of these proposed tariff changes are broadly supported by stakeholders. Remaining stakeholder concerns are

discussed later in this memo and summarized in the accompanying stakeholder matrix (Attachment A). The specific nine topics being presented here for Board consideration include the following:

1. Align the timeline for negotiation of generator interconnection agreements with interconnection customer proposed commercial operation date and construction timelines for network upgrades.
2. Provide interconnection customers with greater study cost certainty by modifying interconnection request study deposits to \$150,000 for both small and large generators from the current deposit requirement of \$50,000 plus \$1,000 per megawatt up to \$250,000 and adding study deposit requirements of \$10,000 for limited operation studies, repowering studies, and modifications requested after the commercial operation date.
3. Mitigate cost-shifting risks to participating transmission owners and interconnection customers by requiring security for self-build stand-alone network upgrades until the generator interconnection agreement is signed.
4. Expand project changes allowed between phase I and phase II studies to include in-service date, trial operation date, commercial operation date, and point of interconnection.
5. Allow the ISO to issue updates to the phase II study results for changes due to interconnection customer or participating transmission owner modification requests.
6. Update generator interconnection agreement insurance requirements and language to be consistent with current insurance industry standards.
7. Clarify the earliest date interconnection financial security postings may be made, when study report revisions associated with errors and omissions may adjust posting dates, how the ability to obtain interconnection financial security refunds associated with failure to secure a power purchase agreement applies to interconnection customers that have attested to balance sheet financing.
8. Clarify that the non-refundable portion of funds from withdrawn interconnection customers during the downsizing process is based on the pre-downsizing capacity of the project.
9. Clarify that projects electing transmission plan deliverability option B can proceed as energy-only deliverability status or withdraw.

Management recommends the following motion:

***Moved, that the ISO Board of Governors approves the proposed interconnection process enhancements, as described in the memorandum dated September 10, 2015; and***

***Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the proposed tariff change.***

## **DISCUSSION AND ANALYSIS**

The ISO currently has 273 active projects in the interconnection queue that have not achieved commercial operation. Ninety-nine (99) of these were submitted during the open application window in April of this year. The ISO has been more successful in moving projects to completion or withdrawal over the past several years with the formation of the queue management team. However, the queue continues to grow at a rapid pace given California's aggressive clean energy policies, particularly Governor Brown's 50% renewable energy goal by 2030. Continuous improvement in the form of policy modifications and clarifications to the interconnection process are required in order to maintain the ISO's ability to effectively manage the queue. To that end, Management is seeking Board approval of the following items:

**Negotiation timeline:** Currently the start of interconnection agreement negotiation is based on interconnection study timelines. The agreement is tendered within 30 days of the final results and intended to be negotiated and executed within 120 days. This timing often conflicts with the interconnection customer's actual need for an effective agreement because they typically have not secured a power purchase agreement or a commitment for financing at the time the interconnection study is completed. Currently the ISO has 38 projects that are in the queue (some since 2007), that have long ago received their study results and have yet to execute their generator interconnection agreement because the negotiations can be extended indefinitely by mutual agreement of the ISO and participating transmission owner, and such agreement cannot be unreasonably withheld. To address the conflict between the current timing of agreement tendering and negotiation versus when the interconnection customer needs an executed agreement for financing and construction of the project, Management proposes to start the negotiation timeline based on the project's in-service date and transmission construction timeline rather than so many days after posting of its final study report.

Management is also proposing to change the impasse clause in the tariff. The current tariff only allows the interconnection customer to declare that negotiations of the interconnection agreement are at an impasse, which then requires the participating transmission owner and ISO to file the agreement unexecuted with the Federal Energy Regulatory Commission. This is problematic because these agreements are three-party agreements among the ISO, participating transmission owner, and the interconnection customer, so the ISO and participating transmission owner also should have the same rights. Management therefore proposes to clarify that any party may declare that negotiations are at an impasse. The ISO and participating transmission owner may declare an impasse only after the 120-day negotiation period, and the interconnection

customer will have three weeks' notice before the participating transmission owner or the ISO files the agreement unexecuted at FERC.

The last clarification proposed for negotiating generator interconnection agreements is that the interconnection customer must keep its project's in-service date and commercial operation date viable. In many cases the interconnection customer remains in the interconnection queue with milestones or a commercial operation date that has already passed or has become infeasible. Management proposes to hold interconnection customers responsible for requesting extensions to their in-service date and commercial operation date, as appropriate, while in the ISO interconnection queue. The ISO will notify the interconnection customer that its project milestone dates are outdated and allow it time to enter the modification assessment process to request new dates. If the interconnection customer does not timely request a modification assessment, then based on existing tariff authority the ISO will notify the interconnection customer that the project will be deemed withdrawn. The proposal includes a thirty day cure period, after which the project will be withdrawn from the queue.

**Study Deposits:** With the implementation of the cluster study process, and the generator interconnection and deliverability allocation procedures, the current deposit for interconnection requests of \$50,000 plus \$1,000 per requested megawatt is insufficient to cover the actual interconnection study costs that are charged to interconnection customers at the end of the study process. This is particularly problematic for new developers with small generator projects that need significant guidance from the ISO and the participating transmission owner, resulting in a surprise invoice at the end of the study process because the developer posted a smaller deposit but ended up being charged a larger amount that reflects the actual study and consultation costs incurred for its project. Additionally the current deposit structure does not accurately reflect the current study cost allocation, which assigns costs equally to each project in a cluster. For these studies, size is irrelevant to, regardless of whether they are a small or large generator because the engineering work performed by the ISO and participating transmission owner staff is no different for a small versus a large project. The average study costs of a project for the most recently completed queue cluster was \$156,500, with a range of \$60,339 to \$233,749. The cost difference is not driven by the size of the project, it is driven by the length of time the project is in the study process (e.g. phase I or phase I and phase II) and the interconnection customer support provided by the ISO and participating transmission owner. Therefore, there is no justification for a lower deposit for small projects. Accordingly, the ISO proposes changing interconnection request study deposits to \$150,000 for all projects entering the queue. While slightly less than last year's average, the ISO believes this figure is reasonable based on efficiencies gained from the ISO and participating transmission owner's recent experience in cluster studies.

Current tariff provisions require the interconnection customer to pay for study costs based on the actual cost incurred by the ISO and participating transmission owner, including those for limited operation studies, repowering studies, and modifications that

are requested after the commercial operation date has passed. However, the ISO can only invoice interconnection customers after the studies have been completed. To provide consistency with the study deposit requirements for all other study work, the ISO proposes to require a \$10,000 study deposit for limited operation studies, repowering studies, and modifications after the commercial operation date.

**Self-build stand-alone network upgrades:** Self-build stand-alone network upgrades are upgrades that the interconnection customer itself may construct if they are not required for any other project and will not affect ISO operations. The ISO and the participating transmission owner must provide consent to any self-build stand-alone network upgrade. Current policy allows the interconnection customer to forgo posting financial security for self-build upgrades; however, this has proven problematic in two ways. First, interconnection customers often have used this ability to avoid posting financial security for the self-build stand-alone network upgrade, which results in a lower posting and therefore, if the project withdraws there is a lower amount of non-refundable security.

Second, if later queued projects are relying on the self-build stand-alone network upgrade as a critical base case assumption for their interconnection requirements and the interconnection customer that elected to self-build stand-alone network upgrade withdraws, the participating transmission owner must then upfront finance the network upgrade for the subsequent cluster without sufficient forfeited funds.<sup>1</sup> Therefore, the ISO proposes that the interconnection customer be required to post financial security for self-build stand-alone network upgrades until an interconnection agreement is executed. The ISO will incorporate in the interconnection agreement the cost responsibility for both the self-build stand-alone network upgrade and the participating transmission owner's financing the stand-alone network upgrade. This will allow the ISO and participating transmission owner to allocate financial risk and contemplate resolution in the agreement in case this issue should arise. This change creates a more level playing field among interconnection customers that propose to self-build stand-alone network upgrade and other interconnection customers.

**Allowable changes between phase I and phase II generator interconnection studies:** Currently, interconnection customers can only make limited types of changes between the phase I and the phase II study results without the need to enter into the material modification process. Management proposes to expand the scope of allowable changes to include in-service date, trial operation date, commercial operation date, and point of interconnection. This will allow the information going into the phase II studies to more accurately represent the project that will ultimately be built.

**Updates to the phase II study results:** The ISO currently does not have explicit authority to issue updates to the phase II study results for changes that are due to

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<sup>1</sup> This has been very problematic when the initial project is building its own switchyard to interconnect to the participating transmission owner facilities and a project in a subsequent cluster selects the switchyard as its point of interconnection.

interconnection customer or participating transmission owner modification requests, including project scope changes that happen after the study results have been published. The ISO only has the authority to issue updates for errors or omissions, and for system changes associated with the annual reassessment. This is problematic because changes resulting from an interconnection customer or participating transmission owner request can impact a project's maximum cost responsibility and financial security requirements. Without the ability to issue an update to the final study report, the ISO is not able to capture these cost changes in the agreement. Management therefore proposes to modify the tariff to allow updates to the phase II study results for changes due to interconnection customer or participating transmission owner modification requests.

**Generator interconnection agreement insurance:** Some of the existing insurance coverage provisions of the large generator interconnection agreement are commercially outdated or no longer available. The ISO proposes to update insurance terms and conditions that reflect current insurance industry standards.

**Interconnection Financial Security:** A number of changes have been requested by interconnection customers to clarify the security posting process. While the tariff is clear that postings are due no later than a specified number of days after study results are issued, there has been some confusion as to the earliest date that the posting can be made.<sup>2</sup> Management proposes to clarify that the earliest date a financial security posting can be made is upon issuance of the associated study report.

When interconnection studies are found to have errors or omissions, they can affect a project's maximum cost responsibility and financial security requirements or posting dates. There has been some confusion as to whether adjustments to the posting date applies to study report changes that occur after the initial and second postings have been made. Therefore, Management proposes to allow modification to financial security posting dates if errors or omissions are identified prior to the initial or second posting dates. The third (and final) posting occurs when construction of the network upgrades or interconnection facilities is started by the participating transmission owner and consequently the associated posting date cannot be impacted by report revisions.

Further, the amount of non-refundable interconnection financial security upon withdrawal is adjusted if an interconnection customer is unable to obtain a power purchase agreement. In reviewing the transmission plan deliverability process, Management has identified a gap in the tariff that has allowed interconnection customers to obtain higher refund amounts by claiming that they were unable to obtain a power purchase agreement when in fact they had previously attested that they were willing to self-finance the network upgrades and interconnection facilities for their project and proceed without a power purchase agreement. The ISO proposes to close this gap

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<sup>2</sup> The first posting is due on or before 90 days after issuance of the final phase I interconnection study report, and the second posting is due on or before 180 days after issuance of the final phase II interconnection study report.

by eliminating the ability of an interconnection customer that has attested to balance sheet financing in the transmission plan deliverability affidavit from obtaining interconnection financial security refunds associated with failure to secure a power purchase agreement.

**Forfeiture of funds for withdrawal during the downsizing process:** Current tariff language associated with the generator downsizing process has resulted in an unintended loophole regarding the amount of refundable financial security when an interconnection customer withdraws during or after the downsizing process. Consequently, some interconnection customers have used the downsizing process merely as a means to reduce their financial security before they withdraw. Management proposes to modify the tariff language to explicitly state that projects may not withdraw during the downsizing process, and refunds of interconnection financial security if a project withdraws after the downsizing study is completed will be based on the pre-downsized capacity of the project. This tariff change closes an unintended loophole and ensures that all withdrawing customers are treated similarly.

**Transmission plan deliverability option B clarification:** Before their phase II study, generators must elect to move forward only if they receive deliverability transmission planning deliverability allocation (Option A); or to move forward with the obligation to fund all deliverability upgrades if a transmission plan deliverability allocation is not received (Option B). Option A interconnection customers who do not receive deliverability are able to withdraw, convert to energy only, or park for one year until the next deliverability allocation. Currently, there are limitations on interconnection customers electing Option B that force them to withdraw under certain circumstances. Management proposes to relax some of these limitations and allow Option B interconnection customers also to proceed as energy only.

## **POSITIONS OF THE PARTIES**

The ISO conducted several rounds of stakeholder outreach on these topics consisting of an issue paper/straw proposal, revised straw proposal, and draft final proposal. Stakeholders were able to provide comments at each phase. Attachment A provides the specific dates of the initiative activities along with the final specific comments received from stakeholders and the ISO's response.

The bulk of the proposals that are the subject of this memo received broad stakeholder support. There was initial opposition to the self-build stand-alone network upgrade proposal from EDF Renewable Energy and the Large Scale Solar Association, who indicated that there should be cost cap modifications upon execution of the generator interconnection agreement. The ISO agreed and has provided this clarification in a revised draft final proposal.

Several parties, including S-Power, Large Scale Solar Association, Independent Energy Producers, and NRG Energy oppose the proposal for basing refundable portion of financial security based on pre-downsizing capacity in the event the customer withdraws

from the queue. These parties would prefer that the capacity be based on the post-downsizing capacity in certain situations and that implementation be delayed until after the 2015 annual downsizing process. The intent of the annual downsizing process—as developed in a past stakeholder process—is for projects to use the downsizing process to “right size” their projects and develop them and not merely to reduce the non-refundable portion of financial security prior to withdrawal. However, the tariff did not strictly preclude this practice and some customers used the downsizing process for the purpose of reducing the non-refundable portion of their financial security prior to withdrawal. Management is proposing to close this loophole so that all customers that withdraw will be subject to the same impact regardless of whether they have elected to go through the downsizing process. Accordingly, Management believes that implementation for the 2015 annual downsizing process is appropriate.

## **CONCLUSION**

Management recommends that the Board approve the nine changes proposed in this memorandum. These changes are generally supported by stakeholders and were refined to address many of their comments and concerns throughout the stakeholder process. The proposed modifications will greatly improve the ISO’s ability to administer the queue more efficiently as we move closer to meeting California’s ambitious renewable energy and environmental goals.



# Memorandum

**To:** ISO Board of Governors

**From:** Keith Casey, Vice President, Market and Infrastructure Development

**Date:** October 28, 2015

**Re:** Decision on interconnection process enhancements

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***This memorandum requires Board action.***

## EXECUTIVE SUMMARY

The ISO is pursuing several enhancements to the generator interconnection process as part of its continuous efforts in this area. The remaining two topics from this latest initiative, affected systems and time-in-queue limitations are presented here for Board decision. These two topics are:

1. Establishing a 60-day time limit for potentially affected system operators to respond affirmatively to ISO notification if they would like to be considered an identified affected system for a project in the ISO interconnection queue.
2. Establishing commercial viability criteria for projects to retain full deliverability status if they wish to remain in the interconnection queue beyond the established seven-year limits for cluster projects, or ten-year limits for serial projects.

Management recommends the following motion:

***Moved, that the ISO Board of Governors approves the proposed interconnection process enhancements, as described in the memorandum dated October 28, 2015; and***

***Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the proposed tariff change.***

## **DISCUSSION AND ANALYSIS**

The ISO currently has 264 active projects in the interconnection queue that have not achieved commercial operation. The queue continues to grow at a rapid pace because of California's aggressive clean energy policies, particularly California's goal of 50% renewable energy by 2030. Continuous improvement in the form of policy modifications and clarifications to the interconnection process are required in order to maintain the ISO's ability to manage the queue effectively. To that end, Management is seeking Board approval of the following items:

### **Affected systems:**

The 2014 stakeholder process to clarify affected system coordination resulted in Management's commitment to pursue the establishment of a timeframe for an electric system operator to identify itself as an affected system. That stakeholder process also resulted in Business Practice Manual revisions to provide ISO notification (rather than notification from the interconnection customers) to all potentially affected system operators. Once notified, potentially affected system operators must provide the ISO an affirmative response stating whether its system may be impacted by one of the identified generator interconnection projects. Once an affected system is identified, the ISO interconnection customer is required to resolve any issues with the affected system operator prior to initial synchronization. This generally consists of funding the affected system's study to see the impact on its system, and what mitigation the interconnection customer is responsible for, if any, prior to synchronization.

The ISO has no current tariff provision that would limit the time that a potentially affected system operator can respond to the ISO notification. Moreover, there is little to no guidance for the ISO where an affected system operator does not notify the ISO or impacted customers until very late in the interconnection process, which presents significant risk to developers. To resolve this issue, Management is proposing to incorporate a 60-day timeline for potentially affected system operators to affirmatively respond to the ISO notification. If a potentially affected system operator fails to provide an affirmative response (or responds that it is not affected), but then seeks to require mitigation later, the ISO will not delay initial synchronization or commercial operation of the generating facility unless it would present a legitimate reliability issue that the ISO can confirm. Instead, any required mitigation would be the responsibility of the affected system operator; and not the interconnection customer, participating transmission owner, or the ISO.

The ISO may recognize affected system operators beyond the time limit under very limited circumstances. Management worked with stakeholders to identify three such circumstances: (1) where the ISO failed to identify the potentially affected system in the first place; (2) if the interconnection customer modifies its project such that it would impact affected systems not previously affected; or (3) where a project transitions from a wholesale distribution access tariff to the ISO tariff. Under these circumstances, the

ISO will coordinate expeditiously with the interconnection customer and the affected system operator to determine if there are reliability issues that need to be mitigated.

**Time-in-queue limitations:**

Current tariff provisions allow projects in the cluster study process to remain in the interconnection queue for no more than seven years, and those in the serial study process for no more than ten years. However, both study processes allow for extensions beyond the 7- and 10-year limits where the ISO and the applicable participating transmission owner consent, such consent not to be unreasonably withheld. As such, lengthy extensions to projects that have already lingered in the queue have become common. These extensions can become problematic because the old projects often retain deliverability that is unavailable to later projects, and their latency frequently results in stale study reports.

Accordingly, Management proposes that interconnection customers with projects that have full capacity deliverability status and have delivery network upgrades or reliability upgrades be required to meet and maintain commercial viability criteria in order to retain their deliverability status beyond the 7- and 10-year thresholds. If they fail to meet these criteria but wish to remain in queue, they will be converted to energy only deliverability status.

The commercial viability criteria proposed is consistent with the criteria already in place for the transmission plan deliverability retention process, and includes:

- Having applied for the necessary governmental permits or authorizations;
- Having an executed power purchase agreement, attesting that the generating facilities will be balance-sheet financed, or otherwise receiving a binding commitment of project financing;
- Demonstrating site exclusivity for 100% of the property in lieu of a deposit;
- Having executed a generator interconnection agreement; and
- That generator interconnection agreement is in good standing.

The ISO will perform an annual review to verify that interconnection customers beyond the 7- and 10-year thresholds have maintained their commercial viability. If a delay beyond the thresholds is the result of a participating transmission owner-requested delay, the generating facility will not be subject to the commercial viability criteria. Moreover, if the sole reason a generating facility does not meet the commercial viability criteria is due to the lack of a power purchase agreement, that project will be granted a one-year extension to obtain a power purchase agreement before it may be converted to energy only deliverability status.

## POSITIONS OF THE PARTIES

The ISO conducted several rounds of stakeholder interaction on these topics, including a combined issue paper and straw proposal, a revised straw proposal, a draft final proposal, and a revised draft final proposal. Stakeholders were able to provide comments at each phase. A summary of the process is included in the attached stakeholder matrix.

All stakeholders generally support both proposals, however the Large-scale Solar Association (“LSA”) does so with some reservations. With regard to affected systems, LSA believes that the ISO should require identified affected systems to describe how they are impacted in their 60-day declarations so that interconnection customers can begin to consider potential solutions on their own. It is unlikely at the time of the 60-day declaration that an affected system would have study work completed that would enable it to describe impacts and instead, the identification would be based on an educated understanding of its’ system. LSA also would like limitations on affected systems’ rights to require mitigation if they are allowed to identify as an affected system late when the late identification is due to an interconnection customer’s request to modify its project. Management disagrees. An affected system can only make decisions based on project information provided to it. If an interconnection customer changes its project, an affected system that did not previously identify itself should be told of the project changes and that affected system operator should not be held responsible for mitigation on its system if the need for that mitigation is the result of a choice made by an interconnection customer.

With regard to time-in-queue, LSA is concerned that if a portion of a project is already online and a later phase is converted to energy only deliverability status, a conversion of the entire project to partial capacity deliverability status could jeopardize its power purchase agreement. Management disagrees. The CPUC determines qualifying capacity on a resource ID basis and therefore projects in this position can have multiple resource IDs for a single project, which provides a market resource configuration option that alleviates this concern. LSA also proposed a formal dispute resolution process when there are issues with the application of the commercial viability criteria. Because the tariff and the generation interconnection agreements already have a dispute resolution process, Management believes that the existing process should be used for all disputes.

In the case where a project is determined not to meet the commercially viable criteria and has reliability upgrades but no deliverability network upgrades, LSA asserts that the project’s deliverability network upgrade should not be taken away. Management disagrees. Given California’s renewable and environmental goals, interconnection customers should not be able to retain deliverability when they have not demonstrated their commercial viability. Additionally, LSA is concerned that network upgrades that are under construction or already in service may become unnecessary when a project converts to energy only. The current ISO reassessment process considers network upgrades that are in service as operational in transmission planning study base cases.

Network upgrades that are in permitting, design or under construction, but are not yet in service, are evaluated in the reassessment process to determine if they are still needed given changes in projects including withdrawals, downsizing and deliverability status. As such, Management does not share LSA's concerns.

## **CONCLUSION**

Management recommends that the Board approve the two changes proposed in this memorandum. These changes are generally supported by stakeholders and were refined to address many of their comments and concerns provided throughout the stakeholder process. The proposed modifications will greatly improve the ISO's ability to administer the generation interconnection queue more efficiently as we move closer to meeting California's ambitious renewable energy and environmental goals.

**Attachment E – List of Key Dates in the Stakeholder Process  
Tariff Amendment to Implement  
2015 Interconnection Process Enhancements**

**California Independent System Operator Corporation**

## List of Key Dates in the Stakeholder Process for this Tariff Amendment<sup>1</sup>

Date	Event
March 23, 2015	CAISO publishes Issue Paper and Straw Proposal
March 30, 2015	CAISO hosts stakeholder conference call and web conference on Issue Paper
April 13, 2015	Stakeholders submit written comments to Issue Paper
May 14, 2015	CAISO publishes Revised Straw Proposal
May 18, 2015	CAISO hosts stakeholder conference call and web conference on Revised Straw Proposal
June 2, 2015	Stakeholders submit written comments to Revised Straw Proposal
July 6, 2015	CAISO publishes Draft Final Proposal
July 13, 2015	CAISO hosts stakeholder conference call and web conference on Draft Final Proposal
July 28, 2015	Stakeholders submit written comments to Draft Final Proposal
August 21, 2015	CAISO publishes Draft Tariff Language on all topics except Affected Systems and commercial viability criteria <sup>2</sup>
August 27, 2015	CAISO publishes Revised Draft Final Proposal on Affected Systems, commercial viability criteria, and Stand-alone Network Upgrades
September 3, 2015	CAISO hosts stakeholder conference call and web conference on Revised Draft Final Proposal
September 4, 2015	Stakeholders submit written comments to August 21, 2015 Draft Tariff Language
September 14, 2015	CAISO hosts stakeholder conference call and web conference on Draft Tariff Language
September 16, 2015	CAISO publishes Revised Draft Tariff Language
September 17, 2015	Public CAISO Board of Governors CAISO Board of Governors meeting at which Board approves interconnection process enhancements <sup>3</sup>
September 18, 2015	Stakeholders submit written comments to Revised Draft Final Proposal
October 14, 2015	CAISO publishes Draft Tariff Language on Affected Systems and commercial viability criteria

<sup>1</sup> See <http://www.caiso.com/informed/Pages/StakeholderProcesses/InterconnectionProcessEnhancements2015.aspx> for links to all documents.

<sup>2</sup> Draft tariff language had already been included in all previous papers, but the CAISO still conducts a tariff development process after policy is settled.

<sup>3</sup> The Board did not review the Affected System or commercial viability proposals at this meeting.

October 28, 2015	Stakeholders submit written comments to October 14, 2015 Draft Tariff Language
November 2, 2015	CAISO hosts stakeholder conference call and web conference on Draft Tariff Language on Affected Systems and commercial viability criteria
November 4, 2015	Public CAISO Board of Governors meeting at which Board approves Affected Systems and commercial viability criteria
November 9, 2015	CAISO publishes Revised Draft Tariff Language on Affected Systems and commercial viability criteria

**Attachment F – Prepared Direct Testimony of Robert Emmert in support of Topic D (Deposits)**

**Tariff Amendment to Implement  
2015 Interconnection Process Enhancements**

**California Independent System Operator Corporation**

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**California Independent System            )    Docket No. ER16-\_\_\_\_-000  
Operator Corp.**

**PREPARED DIRECT TESTIMONY OF  
ROBERT EMMERT  
ON BEHALF OF THE  
CALIFORNIA INDEPENDENT SYSTEM  
OPERATOR CORPORATION**

**JANUARY 6, 2016**

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

1 **California Independent System ) Docket No. ER16-\_\_\_\_-000**  
2 **Operator Corp.**

**PREPARED DIRECT TESTIMONY OF  
ROBERT EMMERT  
ON BEHALF OF THE  
CALIFORNIA INDEPENDENT SYSTEM  
OPERATOR CORPORATION**

3 **Q. Please state your name, title, and business address.**

4 **A.** My name is Robert Emmert. I am employed as the Manager of  
5 Interconnection Resources for the California Independent System  
6 Operator Corporation (“CAISO”). My business address is 250  
7 Outcropping Way, Folsom, CA 95630.

8

9 **Q. Please describe your educational and professional background.**

10 **A.** I earned a Bachelor of Science degree in Mechanical Engineering from  
11 Oregon State University in 1979.

12 Prior to assuming my current position at the CAISO, I was Lead  
13 Interconnection Services Engineer and Senior Loads and Resources  
14 Engineer. In the capacity of the Lead Interconnection Services Engineer I  
15 led the processing and study of projects in the interconnection queue, and

1 provided direction and guidance to the project team on interconnection  
2 matters.

3 In the capacity of the Senior Loads and Resources Engineer I  
4 developed seasonal assessments, managed the ISO mid-term load  
5 forecasting process and resource tracking system, supported long-term  
6 resource procurement and resource adequacy proceedings, and acted as  
7 a subject-matter expert in policies related to generation resources,  
8 resource adequacy, and load forecasting issues.

9 Before joining the CAISO, I held various positions with the Platte  
10 River Power Authority and PacifiCorp, performing electric generation plant  
11 engineering, resource planning, renewable energy project development  
12 and marketing, electric rate design, strategic business planning, and  
13 natural gas supply and marketing.

14

15 **Q. What are your responsibilities as the CAISO's Manager of**  
16 **Interconnection Resources?**

17 **A.** My responsibilities include managing the department that oversees the  
18 interconnection request and interconnection study processes for  
19 customers seeking to interconnect to the CAISO Controlled Grid. I also  
20 lead interconnection stakeholder initiatives and manage the Loads and  
21 Resources team that produce seasonal loads and resources assessments  
22 and performs production cost modeling related to assessing resource  
23 adequacy and renewable integration requirements.

1

2 **Q. Have you previously submitted testimony to the Commission?**

3 **A.** No.

4

5 **Q. Will you be using any specialized terms in your testimony?**

6 **A.** Yes. Unless otherwise indicated, specialized terms in my testimony have  
7 the meanings set forth in the Master Definitions Supplement, Appendix A  
8 of the CAISO tariff.

9

10 **Q. What is the purpose of your testimony?**

11 **A.** The purpose of my testimony is to support the CAISO's proposed tariff  
12 revisions regarding interconnection study deposits: why the current  
13 deposit methodology is problematic, and why a flat deposit of \$150,000 is  
14 appropriate.

15

16 **I. Current Interconnection Study Deposit Methodology**

17 **Q. Please describe the CAISO tariff provisions relevant to this**  
18 **proceeding.**

19 **A.** Section 3.5.1 of Appendix DD sets forth the study deposits that must  
20 accompany an interconnection request. It provides that an  
21 interconnection customer must submit a deposit of \$50,000 plus \$1,000  
22 per requested MW of capacity, with a \$250,000 cap. For example, an  
23 interconnection customer proposing to build and interconnect a 100 MW

1 generator would submit a deposit of \$150,000, while an interconnection  
2 customer proposing to build and interconnect a 10 MW generator would  
3 submit a deposit of \$60,000.

4  
5 **Q. When did the CAISO implement this methodology?**

6 **A.** The CAISO implemented its current methodology in 2010 in Docket  
7 No. ER11-1830. Prior to that, the CAISO required a flat deposit of  
8 \$250,000. The intent in implementing the current methodology was to  
9 incentivize interconnection customers to accurately identify the ultimate  
10 size of the generating facility from the outset, and better align  
11 interconnection study deposits with generating facility sizes.

12  
13 **Q. Why has this methodology proven problematic?**

14 **A.** For four reasons. First, MW capacity became far less determinative of  
15 study costs when the CAISO integrated its transmission planning process  
16 and its generator interconnection study processes. The size and scope of  
17 each cluster—rather than any individual project—is far more determinative  
18 of Phase I and Phase II study costs because the CAISO and the  
19 transmission engineers study the impact on the grid of the cluster as a  
20 whole, and determine what reliability and deliverability network upgrades  
21 are required for the cluster. Because the cluster—and not the individual  
22 projects—are the subject of the Phase I and Phase II studies, study costs  
23 are allocated *pro rata* among the projects in that cluster.

1           Second, where projects may incur their own individual study costs,  
2           small generation projects counterintuitively incur higher costs because  
3           they generally interconnect at lower voltage areas and unique points of  
4           interconnection, whereas large generation projects concentrate at  
5           collector substations for higher voltage facilities. CAISO and transmission  
6           owner engineers are generally much more familiar with collector  
7           substation interconnections because they are the most common points of  
8           interconnection. Put another way, engineering efforts and studies  
9           determine the mitigation required on the existing system to interconnect a  
10          new generator, but the strength of the existing system at the points of  
11          interconnection is more determinative to the complexity of the study than  
12          the size of the generator. Because the sub-transmission system is  
13          generally designed to carry less capacity than higher voltage facilities, it  
14          generally requires more mitigation.

15           Third, small generation projects now more commonly request TP  
16          Deliverability allocations, which incur increased related study costs.  
17          Fourth, the CAISO instituted a reassessment process with the GIDAP in  
18          2012, which adds some study costs not anticipated when the current study  
19          deposit structure was developed.

20

21          **Q. What is the result of unanticipated higher study costs?**

22          **A.** Section 3.2 of Appendix DD provides that each interconnection customer  
23          must pay the actual costs of all interconnection studies, including those in

1 excess of study deposits. Nevertheless, interconnection customers have  
2 a reasonable expectation that study deposits are an accurate estimate of  
3 their eventual actual costs. As such, they are often unpleasantly surprised  
4 to receive invoices for costs beyond their deposits.

5 Perhaps more problematic: many interconnection customers  
6 withdraw from the queue with these invoices outstanding. They then  
7 dissolve the limited liability companies that were the interconnection  
8 customers, forcing the transmission owner to absorb the losses.

9

10 **Q. Please explain the extent to which the current methodology is**  
11 **problematic.**

12 **A.** Interconnection clusters five and six represent completed interconnection  
13 studies under the CAISO's current integrated study methodology. Of the  
14 136 interconnection customers in these clusters, 36 completed both  
15 Phase I and Phase II interconnection studies. Based on the current MW-  
16 based methodology, these 36 interconnection customers submitted an  
17 average deposit of \$135,181, but the average actual study cost was  
18 \$149,186. As such, of these 36 interconnection customers, 22—or 61%—  
19 had to be invoiced for costs exceeding their deposits. These invoices  
20 ranged from \$12,497 to \$176,503, with an average of \$80,904.

21

1 **Q. How do small generator projects compare to large generator projects**  
2 **in this regard?**

3 **A.** Of the sample of 36 interconnection customers, 12 were for generator  
4 projects 20 MW or below. Because of their size, these 12 interconnection  
5 customers submitted study deposits ranging from \$51,000 to \$70,000 with  
6 an average of \$66,042. However, their actual study costs ranged from  
7 \$66,646 to \$238,503, with an average of \$132,483. As such, of these 12,  
8 11 received invoices for costs exceeding their deposits.

9

10 **II. Proposed Interconnection Study Deposit Methodology**

11 **Q. Please describe the CAISO's proposal to revise the interconnection**  
12 **study deposit methodology.**

13 **A.** The CAISO proposes to replace the MW-based methodology with a flat  
14 interconnection study deposit of \$150,000. A flat deposit will better reflect  
15 the nature of modern, integrated, and cluster-based interconnection  
16 studies.

17

18 **Q. How did the CAISO arrive at the figure of \$150,000?**

19 **A.** The CAISO worked with stakeholders to develop a flat study deposit that  
20 would mitigate the risk of not covering actual costs while not being so  
21 onerous as to deter small projects or new developers. If clusters 5 and 6  
22 were to have had this flat deposit instead of the MW-based approach,  
23 11% fewer projects would have received invoices for costs exceeding

1 study deposits, and these invoices would have averaged \$51,439 instead  
2 of \$80,904. Put another way, where the difference between the average  
3 deposit and the average actual study cost previously was  $-\$14,005$ , the  
4 difference under the proposed flat deposit would be \$814, meaning that  
5 the “average” interconnection customer that completed all interconnection  
6 studies would receive back its surplus deposit funds instead of an invoice  
7 for costs in exceeding the deposit.

8

9 **Q. Would a flat study deposit of \$150,000 mitigate the prevalence of**  
10 **costs exceeding deposit funds for small generator projects?**

11 **A.** Yes. Of the 12 small generator projects that completed all interconnection  
12 studies, only four—instead of 11—would have received invoices for costs  
13 exceeding deposits.

14

15 **Q. Why is the CAISO choosing to institute a \$150,000 study deposit**  
16 **where a \$250,000 study deposit would results in fewer invoices for**  
17 **costs exceeding deposits?**

18 **A.** First, the CAISO developed the \$150,000 figure through its stakeholder  
19 process. Stakeholders unanimously supported both a flat structure and  
20 the \$150,000 figure. Second, a \$250,000 study deposit is significant, and  
21 could deter small projects and new developers that may not be eligible for  
22 the fast track process. Third, while a \$250,000 deposit would have  
23 avoided additional costs for all but two projects in Clusters 5 and 6, it

1 would've exceeded the average study costs by \$100,000 for  
2 interconnection customers that completed Phase I and Phase II studies.  
3 For all interconnection customers in Clusters 5 and 6 (including those who  
4 withdrew before the completion of Phase I and/or Phase II), a \$250,000  
5 study deposit would have exceeded average actual costs by \$181,450.

6 In addition, the CAISO expects actual study costs to decline as the  
7 CAISO and transmission owners become more experienced with the  
8 integrated cluster approach. Clusters 5 and 6 already support this  
9 expectation: the average study actual study costs for Cluster 5 projects  
10 was \$70,150, and \$215,688 for interconnection customers that completed  
11 Phase I and Phase II studies. The average actual study costs for Cluster  
12 6 projects was \$66,550, and \$101,684 for interconnection customers that  
13 have completed Phase I and Phase II studies. Although the study costs  
14 are expected to rise for Cluster 6 as projects that have not commenced  
15 commercial operation are studied in the annual reassessment, this early  
16 data supports the CAISO's expectation that study costs will plateau. This  
17 will result in even fewer invoices for costs exceeding study deposits.

18

19 **Q. Is the CAISO amenable to future revisions if the proposed flat  
20 deposit of \$150,000 is insufficient or proves overly deterrent?**

21 **A.** Yes. The CAISO is constantly working to enhance its generator  
22 interconnection process. This revision represents the CAISO's third

1 deposit methodology, and it resulted from a cooperative stakeholder  
2 process among generation developers and transmission owners alike.

3 The CAISO, however, believes that this deposit methodology  
4 balances the need to avoid costs in excess of deposits and the need to  
5 avoid deterring small projects. Interconnection customers with generation  
6 projects 5 MW or less that pass the required electric characteristic screens  
7 may still take advantage of the CAISO's Fast Track process, which only  
8 requires a flat processing fee of \$500.

9

10 **Q. Does this conclude your testimony?**

11 **A. Yes.**