

October 26, 2012

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. ER13- \_\_\_\_-000**

**Tariff Amendment to Implement Downsizing Opportunity for  
Interconnecting Generator Projects (generator project  
downsizing tariff amendment)**

Dear Secretary Bose:

The California Independent System Operator Corporation (“ISO”) submits this amendment to its tariff to provide a one-time opportunity for all customers in the ISO’s interconnection queue that entered the queue *prior to cluster five* to downsize their projects (“generator project downsizing tariff amendment”).<sup>1</sup> This generator project downsizing tariff amendment does not extend to interconnection customers in queue cluster five and later clusters, whose interconnection requests are processed under ISO tariff Appendix DD, the Generator Interconnection and Deliverability Allocation Process (known as the “GIDAP”) recently accepted by the Commission.<sup>2</sup>

This generator project downsizing tariff amendment is responsive to numerous requests from affected interconnection customers for an opportunity to downsize their projects in addition to existing downsizing options. As explained

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<sup>1</sup> The ISO submits this filing pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d, and requests waiver of Section 35.13 of the Commission’s regulations, 18 C.F.R. § 35.13, to the extent applicable to this filing, and waiver of any other applicable requirement of 18 C.F.R. Part 35 for which waiver is not specifically requested, if necessary, in order to permit Commission acceptance of this filing. Capitalized terms not otherwise defined herein have the meanings set forth in the ISO tariff, and references to specific sections, articles, and appendices are references to sections, articles, and appendices in the ISO tariff unless otherwise indicated.

<sup>2</sup> See California Independent System Operator Corp., 140 FERC ¶ 61,070 (2012).

below, the existing downsizing options in the ISO tariff are limited in one or more of the following respects:

- (i) the timing during the study process when the options are available;
- (ii) the megawatt (“MW”) amount of capacity by which a customer can downsize; and
- (iii) the impact that downsizing would have on other customers in the queue.

By contrast, the proposed tariff amendment will provide – *to those customers whose interconnection requests predate queue cluster five* and are in compliance with the ISO’s interconnection rules – with a *one-time opportunity* to downsize their projects with no limitation on the MW generating capacity of the downsizing requests. This one-time option will also allow customers to downsize, even if doing so affects other customers in the queue, but downsizing generators will bear such costs, so that neither other customers nor ratepayers will be adversely affected.

The purpose of allowing this additional one-time downsizing opportunity is to facilitate the completion and commercial operation of projects that would be viable *but for* an inability to construct the full MW generating capacity stated in the customers’ interconnection requests. The opportunity to downsize such projects will help to ensure that more projects can achieve commercial operation, even if with less capacity than originally planned, thereby helping to meet California’s renewable energy goals and advancing the ISO’s efforts to reduce non-viable MWs from its interconnection queue, which contains in excess of three hundred interconnection requests.

The ISO requests that the Commission make the attached tariff revisions effective 64 days after the date of this filing, *i.e.*, January 1, 2013.<sup>3</sup> This effective date will permit the ISO to implement a proposed due date of January 4, 2013 for the ISO to receive all generator downsizing requests. A January 1, 2013 date will also allow the ISO to incorporate the downsizing study results into the GIDAP reassessment that it will conduct in 2013 with regard to the processing of the fifth queue cluster.

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<sup>3</sup> Due to technical difficulties, the filing was submitted to the Commission after 5:00 p.m. on Friday, October 26. Thus, the filing will be shown in eLibrary as having been submitted on Monday, October 29.

## **I. Background and Need for Tariff Amendment**

### **A. Generator Downsizing Opportunities Currently Available Under the ISO Tariff**

While interconnection customers in the ISO's interconnection queue have the ability to downsize their generator projects under certain circumstances, interconnection customers have expressed to the ISO an interest in an additional mechanism for permitting downsizing under today's unique circumstances, where generator developers are trying both to conform their requests to the post-September 2008 economic recessionary climate and to meet the current, sometimes revised contractual needs of load serving entities.

The ISO is not proposing to modify any of the existing opportunities to downsize in this tariff amendment and, in fact, they will remain in place. However, limitations of these existing options effectively preclude downsizing for many customers who are in the late stages of their interconnection processing and who could avail themselves of the proposed one-time downsizing opportunity. The existing downsizing opportunities are as follows:<sup>4</sup>

**(1) Downsizing during interconnection studies when all parties agree.** First, both ISO tariff Appendix U and Appendix Y provide that, at any time during the course of the interconnection studies, the interconnection customer, the applicable participating transmission owner, or the ISO may identify changes to the interconnection "that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request." If such changes are acceptable (with consent to such changes not to be unreasonably withheld), then the ISO

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<sup>4</sup> Earlier processing-stage opportunities for downsizing prior to completion of the interconnection studies, which are set forth in Appendices U and Y to the ISO tariff, have already passed for potential downsizing generators under this tariff amendment. These earlier downsizing opportunities are available to all customers in the ISO's interconnection queue at discrete times during the interconnection study process:

Appendix U, which sets forth the generator interconnection procedures for large generator projects in the serial study process, provides that an interconnection customer may reduce the size of its project by up to 60 percent of its MW output prior to returning an executed interconnection system impact study agreement to the ISO and by up to an additional 15 percent of its MW output prior to returning an executed interconnection facilities study agreement to the ISO. Appendix U Sections 4.4.1, 4.4.2.

Appendix Y, which sets forth the generator interconnection procedures for projects in a cluster study process prior to cluster five, provides that between the Phase I and Phase II interconnection studies the interconnection customer has the right to downsize its project, without any limits on the decrease in MW output for the project. Appendix Y Section 6.9.2.2.

modifies the interconnection configuration, in accordance with the agreed-upon changes.<sup>5</sup>

**(2) Downsizing through a “material modification” review.** Second, an interconnection customer may also seek to downsize its project after the study process has concluded pursuant to the terms of the customer’s generator interconnection agreement. The generator interconnection agreements under the ISO tariff for both serial and cluster projects provide that an interconnection customer may undertake modifications to its facilities. Such modifications are subject to a material modification review in accordance with the relevant interconnection procedures and agreements.<sup>6</sup> The ISO, in coordination with the affected participating transmission owner(s), performs a material modification review for an interconnection customer’s request on a project-by-project basis in order to determine whether granting the requested modification would have a material impact on the cost or timing of later-queued interconnection requests. If the requested modification would not have such an impact, then the ISO will grant the request.<sup>7</sup> If there is material impact, then the modification request must be denied.

Given the number of interconnection customers and the interdependencies of the projects in the ISO queue, it is highly unlikely that many would be able to downsize under the existing rules. The interdependencies of projects mean that very few would pass the material modification review. In the event of a material modification, the interconnection customer currently must either (i) continue to construct its generating facility at the MW level set out in the interconnection request or (ii) elect to withdraw the request and submit a new interconnection request at the lower MW capacity in a later cluster.<sup>8</sup>

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<sup>5</sup> Appendix U Section 4.4; Appendix Y Section 6.9.2.1.

<sup>6</sup> Appendix T Article 6.2; Appendix U Articles 4.4.3, 4.4.5; Appendix Z Article 5.19.1; Appendix BB Article 5.19.1; Appendix CC Article 5.19.1; Appendix EE Article 5.19.1; Appendix FF Article 6.2.

<sup>7</sup> Appendix A (defining Material Modification as a “modification that has a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date”); Appendix U Section 4.4.3; Appendix Y Section 6.9.2.2.

There are a number of instances where a project’s request to downsize may not be a material modification, including but not limited to: (1) the project is the only project in the electrical area and thus downsizing of the project does not impact a later-queued customer; and (2) the project is not responsible for any reliability or deliverability upgrades and therefore does not have an impact on later-queued interconnection requests.

<sup>8</sup> Appendix U Section 4.4.3; Appendix Y Section 6.9.2.2.

**(3) Safe-harbor downsizing opportunity.** A third opportunity to downsize is available only to pre-queue cluster five interconnection customers that were tendered a large generator interconnection agreement on or after January 31, 2012.<sup>9</sup> This opportunity is limited as well. The *pro forma* large generator interconnection agreement, in effect as of January 31, contains a “safe harbor” provision under which an interconnection customer may reduce the MW capacity of its generating facility by up to five percent (5%), for any reason, up until its commercial operation date, and may request authorization from the ISO to reduce the MW capacity of its generating facility by more than five percent under limited conditions where the interconnection customer reasonably demonstrates that the more-than-five-percent reduction is warranted due to any of three specified reasons beyond the control of the interconnection customer.<sup>10</sup>

**(4) Use of non-conforming “partial termination” provision.** Fourth and finally, the ISO has filed and obtained Commission acceptance of four non-conforming generator interconnection agreements that include “partial termination” provisions allowing customers that are building generating facilities with multiple phases to invoke partial termination of their generator interconnection agreements with regard to the later phases, without breaching the generator interconnection agreements and without adverse impacts on the earlier phases.<sup>11</sup>

The partial termination provisions were developed in 2010 to address the unique circumstances of these interconnection customers. In each case, the construction of the final segments of the network upgrades for their phased generating facilities involved an extremely long lead time – 84 months – resulting in significant commercial uncertainty as to whether the developer could find a counterparty for the generating capacity that would not be deliverable until the upgrades were built.<sup>12</sup> Although the ISO does not categorically rule out future

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<sup>9</sup> January 31 is the effective date of the ISO’s Generator Interconnection Procedures (“GIP”) Phase 2 tariff amendment approved in *California Independent System Operator Corporation*, 138 FERC ¶ 61,060, *order on clarification and rehearing*, 140 FERC 61,168 (2012). The Commission approved the safe-harbor downsizing opportunity in the GIP Phase 2 proceeding. The ISO plans to file a tariff amendment in the future to extend the safe-harbor downsizing opportunity to all interconnection customers that do not currently have that opportunity. Extension of the safe-harbor provision is a component of the final generator project downsizing proposal as approved by the ISO Governing Board (“Board”). The timing for presenting the proposal to the Commission did not permit the ISO to make that tariff amendment by the filing date of the instant tariff amendment.

<sup>10</sup> Appendix CC Article 5.19.4 (entitled “Permitted Reductions in Output Capacity (MW Generating Capacity) of the Generating Facility”).

<sup>11</sup> These four generator interconnection agreements were filed and accepted in Docket Nos. ER11-2318, ER11-2451, ER11-4512, and ER12-556.

<sup>12</sup> As explained in the filings containing these non-conforming agreements, in addition to the

use of a similar contractual partial termination mechanism, the ISO believes it would be appropriate only on a project-by-project basis and in very limited circumstances comparable to those that occurred in 2010.<sup>13</sup> Thus, the ISO does not view this option as a generally applicable solution to the issues raised by interconnection customers that led to this tariff amendment.

## **B. Numerous Interconnection Customers Have Requested an Additional Opportunity to Downsize Their Projects**

Generation developers in the ISO's interconnection queue have requested that the ISO provide them an opportunity to downsize their generator projects over and above the existing opportunities described above.<sup>14</sup> Pre-cluster five interconnection customers have voiced a number of reasons why an additional downsizing opportunity would be of benefit.<sup>15</sup>

The ISO interconnection process does not allow the developer to "shed" capacity, other than through one of the existing downsizing mechanisms discussed above. Nor does the process permit an interconnection customer to

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long lead time there were other unique circumstances that justified the partial termination provisions, including the fact that the participating transmission owner had agreed to up-front fund the network upgrades, and the fact that the ISO concluded there would be no adverse impacts on later-queued projects and little likelihood of stranded investment or under-utilized transmission capacity if the partial termination option were exercised in return for the payment of a partial termination charge that was securitized by a security instrument posted before the exercise. These matters are also discussed at pages 11-12 of the Generator Project Downsizing Draft Final Proposal ("Draft Final Proposal") issued by the ISO in the stakeholder process for this generator downsizing project tariff amendment on July 19, 2012. The Draft Final Proposal is provided in Attachment E to this filing.

<sup>13</sup> Draft Final Proposal at 12.

<sup>14</sup> Interconnection customers in queue cluster five and later queue clusters already have downsizing opportunities. Therefore, those interconnection customers are not subject to the provisions of this generator project downsizing tariff amendment. As discussed below, the ISO will continue to evaluate the need for additional downsizing opportunities in future stakeholder initiatives.

<sup>15</sup> A developer may be making progress in meeting the requirements set forth in its generator interconnection agreement but then discover, as the milestone dates for project commencement approach, that the developer is not in a position to construct the full MW capacity of the project as set forth in the agreement. In some cases, this situation stems from the developer not having secured a power purchase agreement coverings the full output of its originally planned megawatt capacity. In other cases, a developer may wish to downsize its generator project in response to changes in economic and financing conditions since the time it submitted its interconnection request. And in still other cases, a developer may have a scalable project (which is often the true of renewable projects) that it may be necessary to downsize for some other reason.

split a project that has been studied as a single project in interconnection studies into multiple projects with multiple generator interconnection agreements.<sup>16</sup>

Most of the projects that entered the interconnection queue prior to queue cluster five have already completed the interconnection study process, and so their opportunity to downsize during the interconnection study process has passed. And because of the large number of interconnection requests in the queue and the concentration of many of these projects within specific electrical areas of the grid (which would be later-queued projects from the perspective of many downsizing generators), there is a high likelihood that downsizing the projects would have a material impact on other customers in the queue, therefore making them ineligible for downsizing under the material modification review process.

Consequently, but for this generator project downsizing tariff amendment, the interconnection customer might find it difficult to continue on a path forward to completing its interconnection project by building the full MW generating capacity described in the interconnection request. In the worst potential case, inability to complete the project or meet milestones could be a breach of the customer's generator interconnection agreement.<sup>17</sup> To avoid such an outcome, the ISO worked with stakeholders to develop this one-time downsizing opportunity.

### **C. The One-Time Downsizing Opportunity Proposed in This Filing Will Give All Pre-Cluster five Interconnection Customers the Ability to Downsize**

Although the ISO's tariff already offers multiple existing opportunities for downsizing, as outlined above, the ISO recognizes that customers having entered the queue prior to queue cluster five did so during a time of significant transition in the electricity industry, particularly in California. This transition has

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<sup>16</sup> Ever since the GIP Phase 1 and Phase 2 tariff amendments, stakeholders have noted to the ISO that some interconnection customers believe it is necessary to "stack" one or more generating facility projects into one interconnection request because they find the cost of separate study deposits for each project intended as a separate equity project to be cost-prohibitive. Other stakeholders have noted that a developer who fails to secure power purchase agreements for the entire MW capacity of its proposed project may need to downsize in order to "right-size" the project to the corresponding MW amount committed through power purchase agreements before it can proceed to commercial operation and thereby exit the queue.

<sup>17</sup> The ISO does not have a unilateral right to terminate the agreement. Article 2.3 of each of the *pro forma* large generator interconnection agreements set forth in Appendices V, Z, BB, CC, and EE governs termination. Pursuant to Article 2.3, any party may terminate its agreement for any reason after giving advanced written notice or due to default of counterparty, or failure of the interconnection customer to timely bring the agreement out of suspension under Article 5.16 of the agreement. Termination is effective upon the Commission's acceptance of a notice of termination.

increased the level of uncertainty and risk associated with development of many of these projects, and this has led to an increasing need for flexibility on the part of all parties to complete that process. Given this situation, the ISO understands that there are projects in the queue that may be viable but for the inability to build their entire planned capacity, that they are ineligible for the existing downsizing opportunities provided for in the ISO tariff, and that success in completing their projects, even with reduced capacity, would help to achieve California's renewable policy goals.

At the same time, it is important to address these concerns in a way that ensures that the interconnection process operates in a fair, nondiscriminatory, and efficient manner for all customers. It is also important to balance these concerns with the risk that large-scale changes could affect the ISO's transmission planning process, which is based on multiple serial and cluster studies, and which could result in ratepayers being burdened with excessive costs due to stranded or under-utilized upgrades.

Taking all of these considerations into account, the ISO decided to focus its near-term interconnection stakeholder efforts on the issue of whether to provide an additional one-time-only downsizing opportunity. Stakeholders expressed broad support for the concept of providing the additional downsizing opportunity with appropriate limitations and protections. Through the stakeholder process, the ISO fashioned the proposal with the following features:

- One-time opportunity. To prevent undermining the efficiency and fairness of the ISO's interconnection process, the ISO offers the downsizing opportunity as a one-time option. That being said, when the generator project downsizing proposal was brought before the ISO Board on September 13, 2012, the Board directed ISO management to consider whether it was appropriate to provide a future, second downsizing opportunity following the ISO's completion of the interconnection studies for queue cluster five.<sup>18</sup> Pursuant to the Board's direction, the ISO will consider re-instituting this option if necessary, after the queue cluster five studies are completed.

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<sup>18</sup> This is further discussed below in Section IV.A of this transmittal letter. See also ISO Board of Governors Decision on Generator Project Downsizing Motion, as approved, accessible on the ISO website at [http://www.caiso.com/Documents/Decision\\_on\\_Generator\\_Downsizing-Motion-Sept2012.pdf](http://www.caiso.com/Documents/Decision_on_Generator_Downsizing-Motion-Sept2012.pdf) (including the statement "Moved, that the ISO Board of Governors directs management to consider a second downsizing window following completion of the cluster 5 studies."). Board documents regarding the generator project downsizing proposal are available on the companion webpage at [http://www.caiso.com/Documents/Board%208\)%20decision%20on%20generator%20project%20downsizing](http://www.caiso.com/Documents/Board%208)%20decision%20on%20generator%20project%20downsizing).

- Limited to pre-queue cluster five customers. There is good reason to limit the one-time downsizing opportunity to pre-cluster five customers. Customers in queue cluster five have not yet received their Phase I interconnection study reports, and so they still have the opportunity to downsize pursuant to the existing process (i) before entering Phase II and (ii) possibly again after receiving transmission planning deliverability allocation results as described in Appendix DD to the ISO tariff.<sup>19</sup>
- Downsizing study utilized to assess impacts of downsizing requests. The ISO will conduct a downsizing study to determine the impacts of the downsizing requests on the current customer interconnection plans of service developed through their earlier interconnection studies. The study process will be substantially the same as the ISO's existing cluster study process. The costs of the downsizing study, and any resulting interconnection agreement amendments, will be borne by customers requesting downsizing (known as "downsizing generators" under this tariff amendment).
- Withdrawal opportunities provided. The proposal gives downsizing generators two "off-ramp" opportunities to withdraw from the downsizing effort. If they do not withdraw, they will be committed to downsizing.
  - First, each downsizing generator will have an opportunity to withdraw its generator downsizing request after being given a preliminary estimate of its obligation for downsizing study costs.
  - There will be a second opportunity to withdraw for each downsizing generator notified by the ISO that the generator's preliminary study results show that its estimated responsibility for network upgrade costs may significantly increase. The ISO expects this circumstance to be rare.
- Original cost allocations determine the cost assignment for refreshed configurations. If the downsizing requires the upgrades to be modified or substituted, the resulting costs are to be assigned in proportion to downsizing customers' responsibility for the costs of the original upgrades, thus preserving the original allocation of costs among customers in the queue.<sup>20</sup>

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<sup>19</sup> Moreover, even after those opportunities, cluster five customers will be able to avail themselves of the "safe harbor" provision referenced earlier (which is also contained in the *pro forma* GIDAP large generator interconnection agreement contained in Appendix EE to the ISO tariff).

<sup>20</sup> As the ISO explained in an October 17, 2012 stakeholder call on the draft tariff language for this filing, if the ISO did not assign costs in this way, there would be a chance that cluster

- Protection for customers who are affected but not downsizing. So that non-downsizing interconnection customers (known as “*affected generators*” under this tariff amendment) are left no worse off with regard to upgrade costs as a result of the decision of other customers to utilize this one-time opportunity to downsize, the tariff amendment includes provisions requiring that downsizing-related cost increases or cost shifts to non-downsizing customers will be the responsibility of the downsizing customers.
- Obligation to meet milestones. Each downsizing generator will be required to relinquish its suspension rights in return for its opportunity to downsize.

## II. Proposed Tariff Revisions

This generator project downsizing tariff amendment adds *new* Appendices GG and HH to the ISO tariff to implement the one-time opportunity described below.<sup>21</sup> In addition, a table showing details of the steps and expected timeframes for the generator downsizing process under Appendix GG is provided in Attachment A to this filing.

### A. The Generator Downsizing Request

#### 1. Downsizing Generator Eligibility

The one-time downsizing opportunity will be available to all interconnection customers with interconnection requests prior to queue cluster five, *i.e.*, interconnection requests for small or large generating facilities in the serial study process, the transition cluster, or queue clusters one through four.<sup>22</sup> An interconnection customer submitting a generator downsizing request by the due date of January 4, 2013 must also meet all of the following requirements of good standing:

- (1) the interconnection request has not been previously withdrawn or deemed withdrawn by the ISO;

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customers might be *re-assigned* cost responsibility components attributable to a customer who withdrew after the customer’s original governing study report and where the participating transmission owner now has the cost responsibility.

<sup>21</sup> The proposed tariff revisions are also discussed in Section IV of this transmittal letter, which addresses ISO responses to stakeholder concerns.

<sup>22</sup> Appendix GG Section 2.4(1).

- (2) the customer is in compliance with all applicable ISO tariff requirements; and
- (3) the customer is in compliance with the terms of the generator interconnection agreement, meaning that any notice of breach or default has been cured, and that the customer is not presently invoking the generator interconnection agreement suspension provision.<sup>23</sup>

Each interconnection customer that satisfies the requirements discussed above will be eligible to submit a *generator downsizing request* under Appendix GG and thereby become a *downsizing generator*.<sup>24</sup>

## **2. Due Date for ISO Receipt of Generator Downsizing Requests**

All required components of the generator downsizing requests submitted by downsizing generators must be received by the *generator downsizing request due date*, which is defined in Appendix GG as 5:00 p.m. Pacific time on January 4, 2013.<sup>25</sup> The required components include a *generator downsizing deposit* of \$200,000. As discussed below, the generator downsizing deposit will be applied toward costs that include the costs associated with performing the *generator downsizing study* and with amending generator interconnection agreements pursuant to the one-time downsizing opportunity.

The January 4<sup>th</sup> due date allows for the timing of the generator downsizing process proposed in this tariff amendment to dovetail with the timing of other critical ISO processes. These processes include the new GIDAP process, which integrates the ISO's transmission planning and generator interconnection processes and applies to queue cluster five projects. Thus, the schedule described above for the one-time downsizing opportunity will allow the results of the downsizing results to be utilized in the GIDAP process.<sup>26</sup>

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<sup>23</sup> Appendix GG Section 2.4(2).

<sup>24</sup> The new terms *generator downsizing request* and *downsizing generator* are defined in Section 1.2.2 of Appendix GG. A generator downsizing request means a request submitted under Appendix GG to modify the downsizing generator's interconnection request to reduce the megawatt generating capacity of the small or large generating facility. A downsizing generator means an interconnection customer who submits a generating downsizing request.

<sup>25</sup> Appendix GG Section 1.2.2. Appendix GG refers specifically to Pacific time as a convenience to the reader. The ISO tariff already states that all time references used therein are references to Pacific time. ISO Tariff Section 1.3.2(i).

<sup>26</sup> See Memorandum from Keith Casey, Vice President, Market and Infrastructure Development for the ISO, to ISO Board of Governors, at 5 (Sept. 7, 2012) ("Board

### **3. Initiating and Validating the Generator Downsizing Request**

#### **a. Initiation Process**

Appendix GG requires each downsizing generator to initiate its generator downsizing request by submitting all of the following to the ISO by the generator downsizing request due date:

- (1) a completed generator downsizing request in the form set forth in Appendix 1 to Appendix GG;<sup>27</sup>
- (2) a certification in the form set forth in Appendix 2 to Appendix GG that the downsizing generator meets the eligibility requirements discussed above;<sup>28</sup> and
- (3) a generator downsizing deposit in the amount of \$200,000.<sup>29</sup>

Failure to submit either item (2) or item (3) above by the January 4<sup>th</sup> deadline will result in the generator downsizing request being treated as void.<sup>30</sup>

In its request, the downsizing generator may seek to downsize for any reason and by any MW amount it desires. Further, the downsizing generator may request to change its step-up transformer and parameters of its interconnection facilities due to smaller megawatt capacity size, but proposed modifications to the generating facility technology or inverter type and proposed changes to the commercial operation date are beyond the scope of, and are not permitted in, the generator downsizing request.<sup>31</sup>

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Memorandum”). The Board Memorandum is provided in [Attachment G](#) to this filing. The ISO will also ensure that the generator downsizing process does not interfere with any ongoing ISO processes. This includes the processes for providing the results of the queue cluster 3 and 4 Phase II interconnection studies to interconnection customers and negotiating generator interconnection agreements based on those study results, which was a concern expressed in the stakeholder process for this tariff amendment.

<sup>27</sup> Appendix GG Sections 2.1, 2.5.1(i). The information requested in that form in Appendix GG is largely the same as information requested in the existing form set forth in Appendix 1 to Appendix Y (entitled Interconnection Request), with the difference that the form in Appendix GG asks for information related to the generator downsizing request.

<sup>28</sup> Appendix GG Section 2.5.1(ii).

<sup>29</sup> Appendix GG Section 2.5.1(iii).

<sup>30</sup> Appendix GG Sections 2.5.1, 2.5.2.

<sup>31</sup> Appendix GG Sections 2.5.1(i), 9. The downsizing generator may separately request a

**b. Validation Process**

Appendix GG requires the ISO to notify each downsizing generator, within ten business days after the January 4 due date, as to whether its generator downsizing request is deemed either (a) complete, valid, and ready to be studied, or (b) deficient. If the generator downsizing request is deemed deficient, Appendix GG sets forth a process for the downsizing generator to timely cure the deficiency solely as to item (1) in the list of required items discussed in the preceding section of this transmittal letter. If the deficiency is not timely cured, the generator downsizing request will not be included in the *generator downsizing study*.<sup>32</sup>

No later than five days prior to the close of the first opportunity for downsizing generators to withdraw their downsizing requests,<sup>33</sup> discussed below, the ISO will provide to each downsizing generator with a valid downsizing request a *downsizing generator payment obligation agreement* to sign and return.<sup>34</sup> If the executed agreement is not returned within five days of tender, then its generator downsizing request will be void.<sup>35</sup> This process is substantially similar to the validation process currently contained in the ISO's GIP, with somewhat shorter timelines to accommodate the more expedited nature of the downsizing study process.

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modification to the generating facility technology or inverter type in the material modification review process. Draft Final Proposal at 26.

<sup>32</sup> Appendix G Section 2.5.2. The new term generator downsizing study is defined in Section 1.2.2 of Appendix GG to mean the study or studies conducted in accordance with Appendix GG.

<sup>33</sup> The words "day" and "calendar day" are used interchangeably in Appendix GG. The ISO tariff defines any use of the word day by itself to mean a calendar day. ISO Tariff Section 1.3.2(e).

<sup>34</sup> Appendix GG Section 6.1. The new term downsizing generator payment obligation agreement is defined in Section 1.2.2 of Appendix GG to mean the repayment agreement set forth in Appendix 3 to Appendix GG that obligates the downsizing generator to pay for study work conducted for the generator downsizing study, preparation of the *generator downsizing study reports* and generator interconnection agreements, and amendments thereto necessary to implement Appendix GG. The new defined term generator downsizing study report is discussed below.

<sup>35</sup> Appendix GG Section 6.1.

**B. Initiation of Generator Downsizing Study, Amendment of Generator Interconnection Agreements, and Related Activities and Costs**

Appendix GG provides for the \$200,000 generator downsizing deposit to be applied as a pool of funds to pay for prudent costs incurred by the ISO, the participating transmission owners, or third parties at the direction of the ISO or participating transmission owner(s), as applicable, to perform and administer the generator downsizing process and to communicate with downsizing generators with respect to their generator downsizing requests. These include (1) costs associated with the generator downsizing study and associated reports and (2) costs associated with amending the generator interconnection agreements of downsizing generators and any generators affected by the downsizing requests.<sup>36</sup>

**1. Obligation of Downsizing Generator for Study Costs**

Each downsizing generator will be responsible for an equal share of all actual costs incurred by the ISO and applicable participating transmission owner(s) in connection with preparing the generator downsizing study and the generator downsizing study report, subject to a cost cap. The downsizing generator's share will be determined by dividing the total amount of actual study costs by the number of valid generator downsizing requests, with that resulting amount being capped at an amount no higher than 150 percent of the downsizing generator's equal share of the preliminary cost estimate posted by the ISO as discussed below.<sup>37</sup>

The ISO proposes the cap on study costs in order to address stakeholder concerns about the possible uncertainty of those costs and to allow each downsizing generator to better gauge the study costs associated with its generator downsizing request.<sup>38</sup>

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<sup>36</sup> Appendix GG Section 2.6.

<sup>37</sup> Appendix GG Section 2.7; See *also* Testimony of Deborah A. Le Vine, Director of Infrastructure Contracts & Management for the ISO, at 5-8 ("Le Vine Testimony"). Ms. Le Vine's testimony is provided in Attachment D to this filing.

<sup>38</sup> Le Vine Testimony at 8; Addendum to Draft Final Proposal at 2 (Aug. 16, 2012) ("Addendum"). The Addendum is provided in Attachment F to this filing.

## **2. Obligation of Downsizing Generator for Costs of Amending Generator Interconnection Agreements**

Appendix GG states that the downsizing generator's responsibility for the costs to amend generator interconnection agreements will be \$10,000 for its own such agreement and \$10,000 for each such agreement of an affected generator that is amended, in whole or in part, due to the downsizing generator's generator downsizing request, subject to the cost cap discussed below.<sup>39</sup> The \$10,000 is based on a conservative estimate of the costs the ISO and participating transmission owners would incur in connection with negotiating amendments to customers that downsize under this one-time downsizing option.

To estimate the costs, the ISO identified the primary tasks that it expects will need to be performed with the applicable participating transmission owner(s) in order to amend the generator interconnection agreements affected by downsizing, as well as the estimated costs of doing so. In this regard, ISO personnel who prepare such amendments and budgets as part of their day-to-day responsibilities developed a reasonable estimate of the hours and corresponding costs for preparing a hypothetical straightforward amendment to a generator interconnection agreement. The ISO determined that the total of these estimated costs to amend the hypothetical generator interconnection agreement would be approximately \$11,000. The ISO selected \$10,000 as the cost responsibility for amending each generator interconnection agreement under this tariff amendment because of its confidence that the cost incurred could be at least \$10,000, thus ensuring against any possibility of over-charging.<sup>40</sup>

It is just and reasonable to use an estimate of costs to establish the charge of \$10,000 per amended GIA. The ISO does not separately track and bill the costs of negotiating and preparing individual interconnection agreements because the interconnection customers do not pay itemized costs for such work pursuant to the ISO tariff appendices under which interconnection requests are processed. In light of the fact that the ISO does not account and bill for costs associated with amendments to interconnection agreements and the fact that the downsizing option is a "one-time-only" option, it is appropriate for the ISO to rely on its estimate.<sup>41</sup>

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<sup>39</sup> Appendix GG Section 2.8. Also, the downsizing generator and each affected generator will be responsible for its own costs to amend its own generator interconnection agreement.

<sup>40</sup> Le Vine Testimony at 9-12.

<sup>41</sup> *Id.* at 12-13. Whether the ISO and the participating transmission owners should charge the interconnection customer for time expended in preparing and negotiating a generator interconnection agreement is a possible topic for the future GIP Phase 3 stakeholder process. To date, the interconnection procedures do not provide for such a charge.

Appendix GG states that, in cases where multiple generator interconnection agreements relate to multiple generator downsizing requests, the cost responsibility of each downsizing generator that submitted one of those requests will be calculated by (i) multiplying the number of amended generator interconnection agreements by \$10,000 and then (ii) dividing the resulting amount by the number of requests.<sup>42</sup> For example, if six generator interconnection agreements are amended pursuant to two generator downsizing requests, the cost responsibility of each downsizing generator that submitted one of those requests will be \$30,000 (*i.e.*, six amended agreements multiplied by \$10,000, which equals \$60,000, and then that resulting amount divided by two requests, which results in the \$30,000 cost responsibility for each downsizing generator).<sup>43</sup>

A downsizing generator's cost responsibility for amending generator interconnection agreements will be capped at \$100,000.<sup>44</sup> Thus, even if the generator downsizing request of a downsizing generator were to require amendments to eleven generator interconnection agreements (*i.e.*, the downsizing generator's own agreement and ten agreements of affected generators), the downsizing generator's cost responsibility would nevertheless be capped at the \$100,000 amount.<sup>45</sup> This cap is based on a high-level review conducted by the ISO indicating that few, if any, generator downsizing requests will require more than ten amendments to interconnection agreements. However, the ISO proposes the cap to ensure that the costs to amend interconnection agreements are limited to \$100,000 in the relatively rare cases where amendments to more than ten agreements are required.<sup>46</sup>

### **3. Use of Generator Downsizing Deposit to Pay Study Costs and Costs to Amend Generator Interconnection Agreements**

As discussed above, the \$200,000 generator downsizing deposit will serve as a pool of funds used to pay for the sum of the downsizing generator's obligations for study costs and costs to amend generator interconnection agreements, as adjusted using the caps on those costs. If the amount required to pay for those costs is determined to be more than \$200,000, the downsizing generator will be obligated to provide the additional amount, subject to the cost

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<sup>42</sup> Appendix GG Section 2.8.

<sup>43</sup> Draft Final Proposal at 18.

<sup>44</sup> Appendix GG Section 2.8.

<sup>45</sup> Draft Final Proposal at 18.

<sup>46</sup> Le Vine Testimony at 13.

caps.<sup>47</sup> Conversely, if the amount required to pay for those costs is determined to be less than \$200,000, the downsizing generator will be refunded the unused balance of its deposit, with interest.<sup>48</sup> In her testimony, Ms. Le Vine provides hypothetical examples to illustrate how these payment rules will operate.<sup>49</sup>

Ms. Le Vine also explains that this level of the generator downsizing deposit is intended to strike a reasonable balance between ensuring that downsizing generators have enough “skin in the game” to participate meaningfully in the one-time generator downsizing opportunity, while at the same time not being subject to a level of deposit so high as possibly to discourage them from participating in the opportunity. Further, the provision in Appendix GG that provides refunds with interest will ensure that downsizing generators will get back the unused portions of their deposits.<sup>50</sup>

In building its estimate as to study costs, the ISO reviewed historical cost data from past queue cluster studies to determine the likely amount of responsibility of downsizing generators for the study costs. The ISO’s review indicated that, on average, queue cluster study costs have not exceeded \$50,000 per interconnection customer. For estimating purposes, the ISO doubled that historical average, which resulted in an estimated downsizing study cost amount of up to approximately \$100,000 for each downsizing generator. The ISO believes that \$100,000 is the “high water mark” for likely study costs. In addition, the cost responsibility of each downsizing generator will be limited by the 150 percent cap on its study costs.<sup>51</sup>

Similarly, a downsizing generator’s obligation for costs to amend generator interconnection agreements is capped at \$100,000, which is a high water mark that the ISO expects will not be reached by the majority of downsizing generators as most will be unlikely to require ten or more interconnection agreements to be amended. Accordingly, the ISO believes that the \$200,000 will be more than sufficient to cover the ISO’s and participating transmission owners’ costs and will result in the return of unused portions of the generator downsizing deposits to most or all downsizing generators.<sup>52</sup>

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<sup>47</sup> Appendix GG Section 2.12.

<sup>48</sup> Appendix GG Section 2.9.

<sup>49</sup> Le Vine Testimony at 15-16.

<sup>50</sup> *Id.* at 17-18. As discussed below, however, a downsizing generator that chooses to withdraw its generator downsizing request pursuant to the proposed second withdrawal opportunity will not be refunded its deposit.

<sup>51</sup> Le Vine Testimony at 6-7, 18.

<sup>52</sup> *Id.* at 18.

In the generator project downsizing stakeholder process, broad support was expressed for the concept of the generator downsizing deposit. The ISO and many stakeholders concluded that it is reasonable for downsizing generators to be responsible for the prudently incurred costs triggered by their generator downsizing requests, which the generator downsizing deposit will fund.<sup>53</sup>

#### **4. Opportunity to Withdraw Generator Downsizing Request Prior to Start of Generator Downsizing Study**

Appendix GG provides an opportunity for each downsizing generator to withdraw its generator downsizing request after the ISO posts a preliminary estimate of aggregate generator downsizing study costs. Each downsizing generator's equal share of the preliminary estimate of aggregate study costs will be determined by dividing the preliminary estimate of study costs by the number of valid generator downsizing requests.<sup>54</sup>

The ISO anticipates that it would post the information regarding the preliminary cost estimate on its website in late January 2013. Based on the determination of its equal share of the preliminary estimate of study costs, the downsizing generator will then have five business days after the information is posted to withdraw its generator downsizing request. Following a timely withdrawal, the ISO will refund the generator downsizing deposit, less costs incurred in validating the generator downsizing request. Withdrawal will result in the removal of the generator downsizing request from the generator downsizing study, which will not have been started by the time the withdrawal occurs.<sup>55</sup>

The ISO proposed this withdrawal opportunity for downsizing generators in response to concerns raised by stakeholders that the submission of a generator downsizing request should not be an irrevocable decision given the responsibility of the downsizing generator for costs above its generator downsizing deposit. In addition, the ISO was mindful of the need to give downsizing generators a withdrawal opportunity prior to the generator downsizing study, in order to avoid needless repetitions of the withdrawal and study processes.

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<sup>53</sup> Draft Final Proposal at 16-17.

<sup>54</sup> Appendix GG Section 3. That section states that the ISO will post the preliminary estimate of downsizing costs following the generator downsizing request due date. *Id.*

<sup>55</sup> Appendix GG Sections 5.1, 5.1(i).

**5. Allocation between the ISO and Participating Transmission Owners of Study Expenses and the Costs of Amending Generator Interconnection Agreements**

Appendix GG states that the ISO and the applicable participating transmission owner(s) will be paid for expenses incurred in undertaking the generator downsizing study and related reports from the amounts paid by downsizing generators for those costs. If the total study costs incurred by the ISO and the applicable participating transmission owner(s) exceed the amounts paid by downsizing generators due to the cap on study costs discussed above, then the ISO and those participating transmission owner(s) will allocate the excess costs among themselves on a *pro rata* basis, in the proportion of their individual study costs to the total amounts paid by downsizing generators.<sup>56</sup>

With respect to the costs of amending interconnection agreements, the ISO will be allocated 50 percent of the amounts paid by downsizing generators for the costs to amend generator interconnection agreements and the applicable participating transmission owner(s) will be allocated the other 50 percent of such amounts. If there is more than one applicable participating transmission owner, then the amount paid by downsizing generators will be apportioned as agreed to between the ISO and the applicable participating transmission owners.<sup>57</sup> These costs are split evenly between the ISO and participating transmission owners because, as explained above, they will not be tracked hourly as study costs will be.

**C. Responsibility for Network Upgrade Costs Pursuant to Generator Downsizing Study**

**1. Performance of Generator Downsizing Study and Issuance of Generator Downsizing Study Report**

After completion of validation activities, the ISO, in coordination with the applicable participating transmission owner(s), will perform the generator downsizing study in order to evaluate the impact of the remaining generator downsizing requests on the current plan of service for network upgrades and participating transmission owners' interconnection facilities resulting from all completed interconnection studies.

This study, the details of which are set forth in Section 6 of Appendix GG, will be performed using information and an analysis that is comparable to the information and analysis used to study projects in queue clusters prior to queue

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<sup>56</sup> Appendix GG Section 2.10.

<sup>57</sup> Appendix GG Section 2.11.

cluster five under Appendix Y.<sup>58</sup> The primary difference is that the generator downsizing study will be performed in one phase, as opposed to the two-phase approach utilized in the ISO's cluster study process under Appendix Y. The time frame is necessary in order to complete the downsizing study in a manner that prevents it from interfering with the ISO's ongoing interconnection queue processing activities, in particular the study of projects in queue cluster five. A single study phase is appropriate because downsizing generators will not be offered a blanket opportunity to withdraw once the study process is undertaken, followed by a second restudy of the remaining generators, as is the case with study during an interconnection study cycle. As explained below, some downsizing generators (*i.e.*, those identified as having a significant increase in cost responsibility) will be given the opportunity to withdraw their generator downsizing requests prior to the completion of the downsizing study, so that the impact of any such withdrawals will be accounted for in the downsizing study.

Study results will be set out in generator downsizing study reports provided to downsizing generators that have not withdrawn their generator downsizing requests under that second, limited withdrawal opportunity, and will also be provided to affected generators. The generator downsizing study report will include updated interconnection configuration information with respect to network upgrades and participating transmission owners' interconnection facilities.<sup>59</sup> If the scope of the upgrades and facilities has changed as a result of the generator downsizing study, the generator downsizing study report will also set forth the applicable cost estimates for such upgrades and facilities, which will constitute updates to any estimates contained in prior interconnection studies and reports earlier provided to downsizing generators and affected generators.<sup>60</sup>

The ISO expects that the generator downsizing study would start in early February 2013, immediately following the completion of the Phase I interconnection studies for queue cluster five in late January 2013 (with the results of those interconnection studies becoming an input into the base case assumptions for the generator downsizing study). Pursuant to that start date, the ISO anticipates that the generator downsizing technical assessment for the generator downsizing study would be completed in April 2013, and that the generator downsizing study would be completed and the generator downsizing

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<sup>58</sup> That process is set forth in Section 6 and 7 of Appendix Y.

<sup>59</sup> Styled as Participating TO's Interconnection Facilities in the ISO tariff.

<sup>60</sup> Appendix GG Section 6.4. Each downsizing generator and affected generator may also request a downsizing study results meeting with the ISO and applicable participating transmission owner(s) to discuss the results of the generator downsizing study. Appendix GG Section 10. Further, the ISO will coordinate with affected system operators and will notify affected system operators of pertinent results of the generator downsizing study. Appendix GG Sections 2.2(a), 4.

study report issued by late June 2013.<sup>61</sup> The ISO will issue a market notice of the anticipated start and completion dates for the generator downsizing study.<sup>62</sup>

## **2. Notice and Withdrawal Period Regarding Responsibility for Network Upgrade Costs**

The ISO recognizes that the results of the generator downsizing study that the ISO anticipates would be completed in April 2013 may indicate that – in instances the ISO expects to be rare – some downsizing generators will be responsible for significantly more network upgrade costs than is currently the case. Therefore, to address such rare instances, Appendix GG includes a second withdrawal opportunity, in addition to the first withdrawal opportunity discussed above, for downsizing generators to withdraw their generator downsizing requests if they do not want to be responsible for significantly larger amounts of network upgrade costs due to downsizing.<sup>63</sup>

This second withdrawal opportunity will be made available to downsizing generators prior to the completion of the generator downsizing study, because by the time of completion it would be too late for those downsizing generators to withdraw their generator downsizing requests without triggering the need for another generating downsizing study that took into account their withdrawals. Specifically, prior to completion of the generator downsizing study, the ISO would provide a preview (via written communication) in April 2013 of the generator downsizing technical assessment for the generator downsizing study in a generator downsizing study report solely to each downsizing generator whose responsibility for network upgrade costs may potentially increase by more than five percent or \$5 million, whichever is lower, from its cost responsibility identified in its interconnection facilities study, Phase II interconnection study report, or generator interconnection agreement (if it has executed one). The downsizing generator may choose to withdraw its generator downsizing request within seven business days after it receives the preview.<sup>64</sup>

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<sup>61</sup> Draft Final Proposal at 19.

<sup>62</sup> Appendix GG Section 6.4.

<sup>63</sup> Other than these two withdrawal opportunities, a downsizing generator has no opportunity to withdraw its generator downsizing request, and it must satisfy its obligations set forth in Appendix GG. Appendix GG Section 5.2.

<sup>64</sup> Appendix GG Section 5.1(ii). In the generator downsizing project stakeholder process, the ISO originally proposed to provide the second withdrawal opportunity solely to each downsizing generator whose responsibility for network upgrade costs may potentially increase by more than ten percent from its cost responsibility identified in its interconnection facilities study, Phase II interconnection study report, or generator interconnection agreement. However, pursuant to comments from stakeholders, the ISO lowered the thresholds for the second withdrawal opportunity to the five percent or \$5 million amounts set forth in Appendix GG Section 5.1(ii). See *also* Addendum at 3-4. Hypothetical and likely rare circumstances in which

If the generator timely withdraws under this second withdrawal opportunity, the downsizing generator will not receive a refund of the generator downsizing deposit. The ISO will apply against the deposit those costs incurred in validating the generator downsizing request and conducting the downsizing study. The balance of the forfeited deposit will be treated in accordance with Section 37.9.4 of the ISO tariff.<sup>65</sup>

A downsizing generator's withdrawal under either of the two opportunities will result in removal of the withdrawn generator downsizing request from the generator downsizing study.<sup>66</sup> Withdrawal under Appendix GG refers only to withdrawal from the downsizing opportunity, not from the ISO queue. Therefore, a downsizing generator that withdraws its generator downsizing request will *remain* in the ISO interconnection queue in its current serial study group or queue cluster or serial group and will be responsible for the costs identified in its interconnection facilities study, Phase II interconnection study report, or generator interconnection agreement.<sup>67</sup>

Taken together, the ISO believes that the two withdrawal opportunities set forth in Appendix GG are responsive to stakeholders' concerns and will help to reduce any uncertainties associated with the cost of downsizing.

### **3. Allocation of Costs for Network Upgrades and Participating Transmission Owners' Interconnection Facilities**

#### **a. General Cost Allocation Principles**

One potential consequence of downsizing is that certain upgrades identified in the original interconnection studies will no longer be necessary. Indeed, this is a major premise behind the proposal – to right-size the interconnection-driven upgrades in a logical, coherent manner in a way that might not be possible if there were a series of individual downsizing events or withdrawals. If previously identified upgrades are no longer necessary, they will be removed from affected interconnection agreements, resulting in lower costs being allocated to customers who were originally responsible for the costs of the upgrades. Additionally, the downsizing study may identify modifications to

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downsizing generators might wish to exercise the second withdrawal opportunity are discussed below.

<sup>65</sup> Appendix GG Section 5.1(ii).

<sup>66</sup> Appendix GG Section 5.1.

<sup>67</sup> Draft Final Proposal at 18 n.11.

upgrades in the original interconnection studies or indicate that it is possible to substitute a lower-cost upgrade in lieu of one or more upgrades in the original interconnection studies.

To the extent that upgrades in the original interconnection studies are modified or substituted in the generator downsizing study as a result of the generator downsizing requests, the costs will be assigned to the interconnection customers that originally triggered the upgrades or facilities on a *pro rata* basis in proportion to the costs allocated among the interconnection customers in the governing interconnection studies undertaken before the generator downsizing study.<sup>68</sup> This is appropriate because it preserves the original allocation of costs as performed under the ISO's existing interconnection procedures.

**b. Protection of Non-Downsizing Generators from Cost Shifts and Cost Increases**

In designing this one-time downsizing opportunity, one of the ISO's primary goals was to ensure that non-downsizing interconnection customers would be left no worse off with regard to upgrade costs as a result of the decision of other customers to utilize this further opportunity to downsize. In the process of developing this tariff amendment, the ISO and stakeholders explored two potential types of adverse consequences that could result to non-downsizing customers.

**i. Cost Shifts**

The most likely adverse consequence to non-downsizing customers that the ISO and stakeholders identified is the possibility that existing upgrade costs could be shifted to non-downsizing customers. This would occur if the generator downsizing study indicates that a network upgrade identified in the original interconnection studies will still be needed, but because of downsizing requests, the upgrade will be triggered by an interconnection customer or customers that are later in the queue than the customer or customers that originally triggered the upgrade. The tariff amendment protects against such cost-shifting.

**ii. Treatment of Potential Cost Increases**

Generally speaking, the ISO anticipates that network upgrade costs will decrease or stay the same rather than increase as a result of customers utilizing this opportunity to downsize their projects. In the generator project downsizing

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<sup>68</sup> Appendix GG Section 7.1. The cost estimates for modified or substituted network upgrades identified in the generator downsizing study will be determined in accordance with the methodology used for the Phase II interconnection study for interconnection requests in a queue cluster. Appendix GG Section 7.

proposal stakeholder process, the ISO identified just two hypothetical circumstances – which the ISO believes could occur only rarely, if at all – in which an interconnection customer’s responsibility for the costs of network upgrades after generator downsizing may be larger than its previous responsibility for such costs.<sup>69</sup>

**(1) Transmission Owner Up-Front Funding Scenario.** The first of these hypothetical circumstances might occur if the generator interconnection agreement of an interconnection customer that becomes a downsizing generator includes provisions for a participating transmission owner to provide up-front funding of network upgrades. Currently, Southern California Edison Company (“SCE”) is the only participating transmission owner that has extended such up-front funding, and that solely to certain interconnection requests related to certain transmission projects.

The provisions governing SCE’s up-front funding include various milestone conditions that the interconnection customer is required to meet. If the interconnection customer were to submit a generator downsizing request, the milestone conditions may entitle SCE to revisit and potentially withdraw or reduce its up-front funding commitment. If the up-front funding commitment were withdrawn or reduced, the interconnection customer’s responsibility for any network upgrade costs would include responsibility for the network upgrade costs formerly paid for by the up-front funding. In addition, withdrawal or reduction of the up-front funding could increase the interconnection customer’s obligation to post interconnection financial security from the posting obligation set forth in its existing generator interconnection agreement.<sup>70</sup>

Even if this circumstance were to arise, however, the interconnection customer could avoid having to bear the cost increase by withdrawing its generator downsizing request based on the preliminary results of the generator downsizing study as discussed above. Appendix GG thus includes both the

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<sup>69</sup> The generating downsizing proposal stakeholder process included comments that the ISO should distinguish any increased network upgrade costs related to generator downsizing requests from cost increases due to other factors, such as withdrawals following performance of the original interconnection studies. The ISO clarified that all previous withdrawals from the interconnection queue will be properly accounted for while conducting the generator downsizing study, and in the rare case of increasing costs, the ISO and the applicable participating transmission owner(s) will isolate the network upgrade costs attributable to downsizing generators from the network upgrade costs attributable to such withdrawals. Draft Final Proposal at 26.

<sup>70</sup> Draft Final Proposal at 19-20 & n.12, 21-22. Appendix GG states that the amount of interconnection financial security that a downsizing generator or affected generator is required to post may change based on its revised cost responsibility pursuant to the generator downsizing study. Appendix GG Section 12.

general guideline of no worse off and a mechanism for an interconnection customer to avoid being made worse off in this circumstance where the general guideline would not apply.

**(2) WDAT-Affected Generator.** The second hypothetical and rare circumstance in which an interconnection customer's responsibility for network upgrade costs after generator downsizing might be larger than its previous cost responsibility concerns the costs of interconnecting under a utility distribution company's wholesale distribution access tariff ("WDAT").

In the generator project downsizing stakeholder process, the ISO explained the potential for increased costs due to WDAT interconnection. If a project interconnects under a WDAT, the ISO cannot apply the general guideline of no worse off to require the project to fund a network upgrade that its interconnection request no longer triggers. As a consequence, the costs would be passed on to other projects and they would be made worse off because they did not request to downsize but are nevertheless being adversely affected by a downsizing project. Absent this consequence being addressed through an amendment to the WDAT itself, the only way to avoid a project being made worse off is to require the downsizing project to pay for the costs of upgrades that the interconnection request of a project under a WDAT no longer triggers but that are still needed by other projects.<sup>71</sup>

As explained below in Section IV.F of this transmittal letter, some stakeholders asserted that the participating transmission owners' WDATs should be amended to avoid this result, and other stakeholders argued further that the participating transmission owners should be given the choice of either amending their WDATs or else being responsible for the resulting costs discussed above. The ISO responded that it did not believe these suggested approaches were workable, as the scope of this generator project downsizing tariff amendment can only extend to the ISO's interconnection process, not to proposed changes to the WDATs.<sup>72</sup>

Although these are the only two scenarios in which the ISO and stakeholders could envision cost increases as the result of this one-time downsizing opportunity, in order to protect non-downsizing customers against any other potential cost increases, Appendix GG includes a general provision stating that no interconnection customer except a downsizing generator will be assigned a cost amount greater than the cost amount assigned to such interconnection customer for such upgrades or facilities in the interconnection

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<sup>71</sup> Draft Final Proposal at 25.

<sup>72</sup> *Id.*

customer's earlier-governing interconnection study.<sup>73</sup> Increases in costs for such upgrades or facilities due to generator downsizing requests will be reallocated from affected generators to downsizing generators.<sup>74</sup>

#### **D. Relinquishment of Suspension Right**

In the generator project downsizing stakeholder process, the ISO explained that each downsizing generator and affected generator would be required to relinquish the right under its generator interconnection agreement to suspend work on the construction of the participating transmission owner's interconnection facilities, network upgrades, and distribution upgrades. The reason for this requirement is that the opportunity to downsize is intended to be given solely to projects that are ready to go into active development but for the need to downsize, and suspension of work to complete the necessary interconnection facilities and upgrades is inconsistent with that goal.<sup>75</sup>

The downsizing generator or affected generator will relinquish the suspension right under its generator interconnection agreement by executing the form of *downsizing generator interconnection agreement amendment* set forth in new Appendix HH.<sup>76</sup> Each such generator is required to execute that agreement within 30 calendar days after the ISO provides it with the generator downsizing study report.<sup>77</sup>

#### **E. COD Extensions in Connection with Downsizing Study**

The generator project downsizing proposal provides that the downsizing generator or affected generator may request that the ISO evaluate a proposed change of the commercial operation date ("COD") of a generating facility (or phase thereof) only to the extent that the change is directly and reasonably related to the in-service dates of the network upgrades reflected in the generator's interconnection configuration as such in-service dates and network upgrades have been refreshed by the generator downsizing study. Also, the

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<sup>73</sup> Appendix GG Section 7.1.

<sup>74</sup> Appendix GG Section 7.2(1).

<sup>75</sup> Draft Final Proposal at 20-21; Board Memorandum at 6.

<sup>76</sup> The new term downsizing generator interconnection agreement amendment is defined in Section 1.2.2 of Appendix GG to mean the *pro forma* amendment to a downsizing generator's or affected generator's generator interconnection agreement, which *pro forma* amendment is set forth in Appendix HH.

<sup>77</sup> Appendix GG Section 13.

COD change request must be made prior to the execution of the downsizing generator interconnection agreement amendment.<sup>78</sup>

In the generator project downsizing stakeholder process, the ISO initially proposed to require the downsizing generator or affected generator to relinquish all rights under the applicable generator interconnection procedures to extend its COD, except in response to *force majeure* events. However, after considering stakeholder comments, the ISO determined that requiring the relinquishment of COD rights to that extent could conflict with the goal of allowing viable projects to downsize, in that a downsizing project may be meeting its milestones and making good progress toward commercial operation only to later encounter issues unrelated to force majeure events that may require an extension of the COD.<sup>79</sup>

Accordingly, a downsizing generator or affected generator's ability to seek an extension of the COD pursuant to the underlying interconnection procedures under which the interconnection request is being processed is unaffected by the generator project downsizing proposal, other than as to *timing*: such a COD extension request will be deferred until after completion of the generator downsizing tariff amendment activities.<sup>80</sup>

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<sup>78</sup> Appendix GG Section 8.

<sup>79</sup> Draft Final Proposal at 20-21. The ISO also clarified that a downsizing generator in good standing would retain the ability to submit a material modification request for an extension of its COD, in circumstances where the downsizing generator must submit such a request in order to obtain an extension of the COD. *Id.* at 21.

<sup>80</sup> Appendix GG Section 9. This is also true of other interconnection request modifications that are not related to the results of the generator downsizing study. These issues are deferred. The reason is that such changes usually require the ISO, in consultation with the participating transmission owners, to undertake a material modification review as described above in the transmittal letter. The overall generator downsizing effort cannot be accomplished within the required timeframe if the potential exists that hundreds of ancillary material modification requests and reviews need to be conducted at the same time.

### III. Generator Project Downsizing Stakeholder Process

This generator project downsizing tariff amendment is the product of a stakeholder process that began in May 2012.<sup>81</sup> These stakeholder efforts included:

- five rounds of documents issued by the ISO, including two straw proposals, the Draft Final Proposal, the Addendum to the Draft Final Proposal, and draft tariff provisions;
- five stakeholder meetings and conference calls, and numerous client services outreach calls; and
- four opportunities for stakeholders to submit written comments on the proposals and draft tariff provisions developed in the stakeholder process.<sup>82</sup>

The ISO Board authorized the preparation and filing of this tariff amendment at its September 13-14, 2012 meeting.<sup>83</sup>

Overall, stakeholders were very supportive of the objectives of the generator project downsizing stakeholder process. Stakeholders widely acknowledged that the one-time-only generator downsizing opportunity offers significant benefits to facilitate the development of viable generator projects while contributing to the ISO's queue management efforts. As discussed below, the ISO carefully considered and responded to comments provided by stakeholders.

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<sup>81</sup> The ISO webpage devoted to the generator project downsizing stakeholder process can be accessed at <http://www.caiso.com/informed/Pages/StakeholderProcesses/GeneratorProjectDownsizing.aspx>.

<sup>82</sup> A list of key dates in the generator project downsizing stakeholder process is provided in Attachment H to this filing.

<sup>83</sup> Materials related to the Board's authorization to prepare and submit this filing are available on the ISO website at <http://www.caiso.com/informed/Pages/BoardCommittees/BoardGovernorsMeetings.aspx>.

#### **IV. ISO Responses to Stakeholder Concerns**

##### **A. Whether to Include Additional or Expanded Downsizing Opportunities**

Participants in the stakeholder process supported the opportunity that the ISO is offering but expressed different views concerning whether additional future opportunities should be offered. Some stakeholders agreed with the ISO, favoring a one-time downsizing opportunity because it will avoid continual cycles of generator downsizing studies, reduce uncertainty, and provide needed discipline regarding the timing and volume of downsizing. Other stakeholders argued for both a near-term downsizing opportunity and an additional downsizing opportunity a number of months afterwards. And still other stakeholders agreed that each generator should have a one-time opportunity to downsize but asserted that each downsizing generator should be able to choose when it exercises that opportunity.<sup>84</sup>

In this context of proposing an alternative downsizing opportunity over and above existing downsizing opportunities available to interconnection customers, the ISO is only prepared to offer a one-time-only downsizing opportunity and to require all downsizing generators to submit their generator downsizing requests on the schedule discussed above. Offering multiple or recurring downsizing opportunities risks impeding the efficient processing of the ISO's interconnection queue because it would interject ongoing restudies of a potentially grid-wide scope into an already complex and time-constrained process.

Moreover, providing multiple or recurring downsizing opportunities would increase uncertainty for other customers in the queue, and would diminish the incentive for developers to make important decisions regarding the scope of their projects earlier in the process. It is also important that this one-time opportunity be offered solely on the defined schedule described above. Otherwise, any downsizing requests would not coincide with the ISO's other initiatives involving interconnection studies occurring around the same time as the ISO's schedule for the downsizing opportunity. Limiting the submission of generator downsizing requests as set forth in Appendix GG also permits the ISO's transmission planning engineers to evaluate the collective impacts of all downsizing requests in the most efficient manner possible.

Although the ISO has declined to propose a recurring downsizing opportunity as part of this tariff amendment, the ISO has committed to *consider* whether queue conditions warrant providing another one-time downsizing opportunity of this nature. The ISO's consideration will commence during the first

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<sup>84</sup> Draft Final Proposal at 14-16.

quarter of 2014, coinciding with the conclusion of interconnection studies for queue cluster five. At the September Board meeting, ISO management emphasized the importance of the interplay of the downsizing effort – which relates to requests up through cluster four – and the queue cluster five interconnection requests, which are being processed under a new study process, before considering the advisability of providing a second downsizing opportunity.<sup>85</sup> Accordingly, the Board directed the ISO to consider whether to establish a second downsizing opportunity for such interconnection customers at the conclusion of cluster five interconnection studies, which the ISO expects to complete in the first quarter of 2014.<sup>86</sup>

### **B. Unlimited MW Size Reduction**

As explained above, a downsizing generator may submit a request to downsize to any MW amount it desires. There is no limit on the amount of the MW capacity reduction. In the generator project downsizing stakeholder process, stakeholders expressed concern that very large MW reductions may diminish the validity of the original studies performed and require a significant number of restudy work as part of the generator downsizing study described below. The ISO believes, however, that the generator downsizing study will properly account for the MW amount of downsizing, regardless of the magnitude, and will produce revised study results that identify the resultant upgrades needed, including any additional costs.<sup>87</sup>

### **C. Use of Forfeited Deposit Funds**

As discussed above, pursuant to Section 5.1(ii) of Appendix GG, the unused balance of the forfeited generator downsizing deposit of a downsizing generator that exercises the second withdrawal opportunity will be treated in accordance with Section 37.9.4 of the ISO tariff. Consequently, the unused balance will be distributed in the manner in which the ISO distributes forfeited study deposit and interconnection financial security funds underlying the GIP – the funds are distributed to scheduling coordinators in the same manner in which the ISO distributes penalties paid to the ISO. In the stakeholder process, one stakeholder suggested that funds for the costs triggered by generator downsizing requests could be applied to the costs for upgrades or Appendix GG activities.

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<sup>85</sup> During the same time period, the ISO will also be implementing tariff changes to allocate deliverability capacity.

<sup>86</sup> See footnote 18, *supra*, and accompanying text.

<sup>87</sup> Draft Final Proposal at 15.

The ISO explained in the stakeholder process, however, that it would not be appropriate to use those forfeited amounts to pay for the costs triggered by generator downsizing requests. The generator downsizing option proposed in this tariff amendment will be a one-time opportunity, not a constant opportunity under the ISO's generator interconnection process. But even if the stakeholder's suggestion were accepted, the remaining downsizing generators would be the sole beneficiaries of the use of the forfeited amounts to pay for the costs triggered by generator downsizing.

Further, this issue is already a topic for the deferred GIP Phase 3 stakeholder initiative, where fuller consideration and vetting of the issue will be undertaken. The issue of application of the forfeited funds was a subject of much discussion in the ISO's Generator Interconnection Process Reform ("GIPR") stakeholder initiative in 2008, and the means ultimately determined for applying such funds was chosen based on concerns about potential manipulation of "deemed withdrawals" if either a participating transmission owner or the ISO "had a stake" in precipitating a withdrawal because the funds might inure to them. Before the current means of applying such funds is altered, the matter needs more thorough vetting in the GIP Phase 3 stakeholder process.<sup>88</sup>

**D. Including Expansion of Existing Material Modification Analysis in the Generator Downsizing Project Proposal and Tariff Amendment**

Some participants in the generator downsizing proposal stakeholder process urged the ISO to expand the scope of downsizing opportunities to amend the existing material modification analysis to allow the customer *to mitigate material impacts*. As discussed above, the existing material modification analysis would permit customers to downsize, but only if the material modification analysis finds that there is no material impact.<sup>89</sup> If there is a material impact, then downsizing would not be available.

Some stakeholders want the opportunity to mitigate the impacts by, for example, continuing to pay for upgrades the modifying customer no longer triggers but which are still needed by later-queued customers. The ISO declined to expand the scope of this narrowly defined initiative, because of the very compressed timeframe in which this initiative needed to be concluded to allow for

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<sup>88</sup> *Id.* at 17. The Commission approved the GIPR tariff amendment in *California Independent System Operator Corporation*, 124 FERC ¶ 61,292 (2008).

<sup>89</sup> As explained in footnote 7 above, the ISO tariff defines a material modification as a "modification that has a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date."

the downsizing option to be filed with the Commission and in effect early in 2013, and to be completed prior to the processing of cluster five applications.

The broader implications of a proposed expansion of the existing material modification analysis would require more complete vetting, and possibly involve a larger group of potentially affected stakeholders. In particular, upgrades funded by pre-cluster five customers are reimbursed for their funding of network upgrades through the transmission access charge paid for by ratepayers, and more evaluation would be necessary to consider continued customer funding and reimbursement for upgrades they no longer triggered. Thus the ISO concluded that changes to the material modification option must be deferred to a future stakeholder initiative.<sup>90</sup>

#### **E. Application of the No-Worse-Off Guideline**

Although the general guideline of no worse off received broad stakeholder support, some stakeholders argued that the general guideline does not preclude assignment of the costs of network upgrades no longer needed for downsized generators to later-queued serial study group projects, because such projects are not subject to a network upgrade cost cap and bear the risk of having to finance upgrades if earlier-queued projects exit the interconnection queue. The ISO responded (and reiterates here) that, although it is true that later-queued serial group projects bear such a risk under Appendix U, the ISO should apply the general guideline of no worse off under Appendix GG equally to all pre-cluster five projects, rather than carve out a special exception for serial study group projects.<sup>91</sup>

Other stakeholders asserted that the general guideline of no worse off may violate cost causation principles and suggested that their support for the general guideline was contingent upon any directives regarding the general guideline that are provided in the Commission's order on this generator project downsizing tariff amendment. The ISO understands these stakeholders to speculate that cost causation principles may be violated if an interconnection customer that elects to make a change in its interconnection request does not bear all the cost consequences of its election.

The ISO believes that the use of the general guideline in Appendix GG does not violate cost causation principles, because the set of potentially affected interconnection customers and the set of interconnection customers that have an

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<sup>90</sup> The ISO will consider modifications to the existing material modification opportunity to encompass the potential to "mitigate" material impacts to non-materiality when the ISO continues the GIP Phase 3 stakeholder initiative, which the ISO anticipates resuming in 2013.

<sup>91</sup> Draft Final Proposal at 24.

opportunity to avail themselves of the generator downsizing opportunity are one and the same.<sup>92</sup>

#### **F. Treatment of Earlier-Queued Distribution Interconnection Customers**

As explained above, the ISO generally anticipates that network upgrade costs will decrease or stay the same rather than increase as a result of customers utilizing this opportunity to downsize their projects. In the generator project downsizing proposal stakeholder process, the ISO identified just two hypothetical circumstances – which the ISO believes could occur only rarely, if at all – in which an interconnection customer’s responsibility for the costs of network upgrades after generator downsizing may be larger than its previous responsibility for such costs. The second hypothetical in which an interconnection customer’s responsibility for network upgrade costs after generator downsizing might be larger than its previous cost responsibility concerns the costs of interconnecting under a utility distribution company’s WDAT.

Some stakeholders asserted that the participating transmission owners’ WDATs should be amended to allow WDAT projects to avoid this result, and other stakeholders argued further that the participating transmission owners should be given the choice of either amending their WDATs or else being responsible for the resulting costs the ISO explained in the stakeholder process. The ISO responded that it did not believe these suggested approaches were workable. The scope of this generator project downsizing tariff amendment can only extend to the ISO’s interconnection process, not proposed changes to the WDATs.<sup>93</sup>

As a result, in the rare circumstance discussed above, consistent with the principle of holding non-downsizing customers harmless from the cost impacts of downsizing requests, the downsizing project will be responsible for the WDAT interconnection costs. Specifically, Appendix GG states that if the generator downsizing study indicates that a network upgrade originally triggered by an interconnection to the distribution system of a participating transmission owner is no longer needed by such interconnection, but the upgrade is needed by affected generators, then the cost of the upgrade will be allocated among the downsizing generators instead of to the distribution system interconnection customer.<sup>94</sup>

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<sup>92</sup> *Id.*

<sup>93</sup> *Id.* at 25.

<sup>94</sup> Appendix GG Section 7.2(3). In addition, Appendix GG addresses the performance of studies, reimbursement of study costs, and network upgrade cost attribution if a participating transmission owner’s tariff provides the option for customers taking interconnection service under

The downsizing generator can avoid responsibility for the WDAT interconnection costs by withdrawing its generator downsizing request pursuant to Appendix GG. So again, Appendix GG includes both the general guideline of no worse off and a mechanism for the downsizing generator to avoid being made worse off in this circumstance where the general guideline would not apply.

### **G. Whether to Provide the Downsizing Opportunity at All**

One stakeholder commented during the stakeholder process and at the September 13, 2012 ISO Board discussions that the proposal itself was inappropriate and should not be approved. This stakeholder indicated that some interconnection customers, such as itself, had already factored into their commercial decisions and their continued interconnection processing activities the actions or inactions of other interconnection customers with respect to existing tariff opportunities to accomplish the project downsizing, and that providing these parties with an additional opportunity for relief from their past commercial decisions would be unfair to those customers who had relied on the existing processes.

The ISO has considered such comments, but continues to believe that the proposal reflected in this tariff amendment furthers the interests of all interconnection customers, including those that do not avail themselves of the downsizing opportunity, and is just and reasonable, desirable, and greatly needed. This one-time downsizing opportunity provides for an orderly processing of the interconnection queue customers for various reasons. First of all, it allows stabilization of the base case, which provides greater certainty to customers by reducing the risk of one-off withdrawal of customers and potential serial re-scoping for hundreds of later-queued customers if substantial numbers of the hundreds of earlier-queued customers were to withdraw at different times.

Secondly, the one-time downsizing opportunity may allow affected generators to earlier recognize potential network upgrade cost reductions or construction schedule reductions that may result from a comprehensive re-evaluation of the interconnection upgrades to the ISO controlled grid. In this regard, the comprehensive downsizing opportunity set forth in this tariff amendment expands the ability of interconnection customers to avail themselves of downsizing opportunities which would not be available if, independently and serially, the project downsizing would be unavailable because of material impact on other generators, while avoiding material impact on other customers.

Finally, the one-time downsizing opportunity proposed in this tariff amendment provides greater opportunity for generators to right-size their projects

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its WDAT to engage in a one-time generator downsizing opportunity coincident with the time period in which the ISO will perform the generator downsizing study. Appendix GG Section 11.

to optimize the fleet of pending generating facilities to accommodate commercial, economic, and environmental needs and constraints. This will be accomplished by concentrating re-scoping efforts into one concentrated effort rather than in a protracted process that could take years and require multiple stages to complete, since it would not necessarily be transparent as to when and which downsizing and withdrawing customers might be identified over a protracted period.

Accordingly, the ISO believes that, even when taking into consideration the viewpoint of stakeholders who would prefer to maintain the status quo, the proposal in this tariff amendment and its potential benefits inure even to those who may prefer that the downsizing effort not be undertaken, and is therefore just and reasonable as to the totality of ISO constituents.

## **V. Effective Date**

The ISO requests that the Commission make the proposed tariff revisions contained in Appendices GG and HH effective 64 days after the date of this filing,<sup>95</sup> *i.e.*, January 1, 2013. As discussed above, the January 1<sup>st</sup> effective date will allow the ISO to complete the processing of the generator downsizing requests within a timeframe that permits the ISO to incorporate the downsizing study results into the GIDAP reassessment that the ISO will conduct in 2013 with regard to the ISO's processing of the fifth queue cluster.

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<sup>95</sup> As indicated in FN 3 above, due to technical difficulties, this filing was submitted to the Commission after 5:00 p.m. on Friday, October 26.

## VI. Communications

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

Nancy Saracino  
General Counsel  
Sidney M. Davies  
Assistant General Counsel  
\* Baldassaro "Bill" Di Capo  
Senior Counsel  
California Independent System  
Operator Corporation  
250 Outcropping Way  
Folsom, CA 95630  
Tel: (916) 351-4400  
Fax: (916) 608-7222  
[sdavies@caiso.com](mailto:sdavies@caiso.com)  
[bdicapo@caiso.com](mailto:bdicapo@caiso.com)

\* Michael Kunselman  
Bradley R. Miliauskas  
Alston & Bird LLP  
The Atlantic Building  
950 F Street, NW  
Washington, DC 20004  
Tel: (202) 756-3300  
Fax: (202) 654-4875  
[michael.kunselman@alston.com](mailto:michael.kunselman@alston.com)  
[bradley.miliauskas@alston.com](mailto:bradley.miliauskas@alston.com)

\* Individuals designated for service pursuant to 18 C.F.R. § 385.203(b)(3).

## VII. Service

The ISO 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 ISO tariff. In addition, the ISO has posted a copy of the filing on the ISO website.

## VIII. Contents of this Filing

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

Attachment A	Detail of steps and timeframes for generator downsizing process under ISO Tariff Appendix GG
Attachment B	Clean ISO tariff sheets
Attachment C	Black-lined tariff revisions
Attachment D	Prepared Direct Testimony of Deborah A. Le Vine

Attachment E	Draft Final Proposal
Attachment F	Addendum to Draft Final Proposal
Attachment G	Board Memorandum
Attachment H	Listing of key dates in generator project downsizing stakeholder process

## IX. Conclusion

For the reasons explained above, the ISO respectfully requests that the Commission accept the tariff revisions proposed in this filing, effective as of January 1, 2013.

Respectfully submitted,

Nancy J. Saracino  
General Counsel  
Sidney M. Davies  
Assistant General Counsel  
Baldassaro "Bill" Di Capo  
Senior Counsel  
California Independent System  
Operator Corporation  
250 Outcropping Way  
Folsom, CA 95630  
[sdavies@caiso.com](mailto:sdavies@caiso.com)  
[bdicapo@caiso.com](mailto:bdicapo@caiso.com)

/s/ Michael Kunselman  
Michael Kunselman  
Bradley R. Miliauskas  
Alston & Bird LLP  
The Atlantic Building  
950 F Street, NW  
Washington, DC 20004  
[michael.kunselman@alston.com](mailto:michael.kunselman@alston.com)  
[bradley.miliauskas@alston.com](mailto:bradley.miliauskas@alston.com)

Counsel for the  
California Independent System  
Operator Corporation

**Attachment A – Steps and Timeframes for Generator Downsizing Process**

**Tariff Amendment to Implement Downsizing Opportunity for Interconnecting Generator Projects**

**California Independent System Operator**

**October 26, 2012**

**Detail of Steps and Expected Timeframes for Generator Downsizing Process  
Pursuant to ISO Tariff Appendix GG**

Step no.	Sequential steps in the generator downsizing process (Including citations to relevant ISO tariff sections)	Expected timeframe
1	Each downsizing generator submits its generator downsizing request to the ISO. (Appendix GG Sections 2.3, 2.5.1)  Each downsizing generator must meet all requirements of good standing of its interconnection request. (Appendix GG Section 2.4(2))	No later than the generator downsizing request due date, <i>i.e.</i> , 5:00 p.m. Pacific time on January 4, 2013
2	The ISO notifies each downsizing generator whether its generator downsizing request is deemed complete, valid, and ready to be studied. (Appendix GG Section 2.5.2.1)  If the generator downsizing request is not deemed complete, valid, and ready to be studied, the process starts for requesting and providing additional information to address the deficiencies in the generator downsizing request. (Appendix GG Section 2.5.2.2)	No later than 10 business days after the generator downsizing request due date
3	The ISO issues a market notice when it has posted on its website (1) a listing of valid generator downsizing requests and (2) a preliminary estimate of the aggregate study costs for conducting the generator downsizing study. Issuance of this market notice opens the opportunity for each downsizing generator to withdraw its generator downsizing request pursuant to the information provided in the market notice, <i>i.e.</i> , opens the first withdrawal opportunity. (Appendix GG Sections 3, 5.1(i))	Following the generator downsizing request due date, in late January 2013
4	The ISO tenders a downsizing generator payment obligation agreement to each downsizing generator that has not thus far chosen to exercise the first withdrawal opportunity. (Appendix GG Section 6.1)	No later than 5 calendar days prior to the close of the first withdrawal opportunity as described in step 5
5	Close of the first withdrawal opportunity. (Appendix GG Section 5.1(i))	8:00 a.m. Pacific time on the sixth business day following issuance of the market notice described in step 3
6	Each downsizing generator that chooses not to exercise the first withdrawal opportunity must execute and return its tendered downsizing generator payment obligation agreement to the ISO. (Appendix GG Section 6.1)	Within 5 calendar days after tender of the downsizing generator payment obligation agreement as described in step 4
7	The ISO issues a market notice of the anticipated commencement and completion dates of the generator downsizing study. (Appendix GG Section 6.4)	January/February 2013
8	The ISO and participating transmission owners perform the generator downsizing technical assessment for the generator downsizing study. (Appendix GG Section 6; Attachment A to Appendix 4 of Appendix GG)	February - April 2013
9	The ISO provides written notice to each downsizing generator whose cost responsibility for network upgrades is expected to increase by more than five percent or five million dollars, whichever is lower, from the cost responsibility identified in its interconnection facilities study, Phase II interconnection study report, or generator interconnection agreement. Provision of this	April 2013

Step no.	Sequential steps in the generator downsizing process (Including citations to relevant ISO tariff sections)	Expected timeframe
	written notice opens the opportunity for each downsizing generator that receives such notice to withdraw its generator downsizing request pursuant to the information provided in the notice, <i>i.e.</i> , opens the second withdrawal opportunity. (Appendix GG Section 5.1(ii))	
10	Close of the second withdrawal opportunity. (Appendix GG Section 5.1(ii))	8:00 a.m. Pacific Time on the eighth business day following provision of the written notice described in step 9
11	The ISO and participating transmission owners complete the generator downsizing study. The ISO provides a generator downsizing study report to each downsizing generator that has not exercised the first or second withdrawal opportunity and to each affected generator. (Appendix GG Section 6; Attachment A to Appendix 4 of Appendix GG)	Late June 2013
12	Each downsizing generator may request a generator downsizing study results meeting with the ISO and the applicable participating transmission owner(s). (Appendix GG Section 10)	Within 10 calendar days of receipt of the generator downsizing study report
13	Each affected generator may request a generator downsizing study results meeting with the ISO and the applicable participating transmission owner(s). (Appendix GG Section 10)	Within 14 calendar days of receipt of the generator downsizing study report
14	The ISO provides notice of updated posting amounts of interconnection financial security, if necessary, to each downsizing generator and affected generator whose cost responsibility for network upgrades and/or participating transmission owner's interconnection facilities changes between its earlier interconnection studies and the generator downsizing study. (Appendix GG Section 12(2))	Within 15 business days of the issuance of the generator downsizing study report
15	<p>The applicable participating transmission owner(s) and the ISO tenders to each downsizing generator or affected generator a draft amendment to its executed generator interconnection agreement, if necessary, together with draft amended appendices. (Appendix GG Section 13)</p> <p>If the downsizing generator or affected generator has not yet executed a generator interconnection agreement, then the applicable participating transmission owner(s) and the ISO will, if necessary, tender a revised draft generator interconnection agreement with draft appendices. (Appendix GG Section 13)</p> <p>Also, the process subsequent to such tender for providing comments, negotiation, and execution and filing of a revised generator interconnection agreement, or an amendment to an executed generator interconnection agreement, including all timeframes, will be identical to the process set forth in Appendix Y Section 11, or as agreed to by the downsizing generator or affected generator, ISO, and participating transmission owner(s). (Appendix GG Section 13)</p>	Within 30 calendar days after the ISO provides the generator downsizing study report
16	To the extent that a downsizing generator's cost responsibility for network upgrades or participating transmission owner's interconnection facilities increases or decreases, or an affected generator's cost responsibility for network upgrades or	Within 30 calendar days after the issuance of the notice described in step 14

Step no.	Sequential steps in the generator downsizing process (Including citations to relevant ISO tariff sections)	Expected timeframe
	participating transmission owner's interconnection facilities decreases, adjustments to the interconnection financial security to conform to the updated amounts specified in the notice described in step 14 must be made. (Appendix GG Section 12(2))	
17	The participating transmission owner and any third parties performing work related to the generator downsizing study on the downsizing generator's behalf must invoice the ISO for such work. (Appendix GG Section 2.12)	Within 75 calendar days of completion of the generator downsizing study
18	The ISO issues invoices to the downsizing generator based upon the invoices provided to the ISO as described in step 17 and the ISO's own costs for the generator downsizing study. (Appendix GG Section 2.12)	Within 30 calendar days after the invoices are provided to the ISO as described in step 17
19	Each downsizing generator that receives an invoice as described in step 18 must pay any invoiced amount not covered by the downsizing generator's generator downsizing deposit. (Appendix GG Sections 2.7, 2.12)	Within 30 calendar days of the date of the invoice

**Attachment B – Clean Tariff**

**Tariff Amendment to Implement Downsizing Opportunity for Interconnecting Generator Projects**

**California Independent System Operator**

**Fifth Replacement FERC Electric Tariff**

**October 26, 2012**

**Appendix GG**  
**One-Time Interconnecting Generator**  
**Downsizing Opportunity**

## **Section 1 Objectives and Definitions**

### **1.1 Objectives and Applicability**

This Appendix GG sets out the requirements for Interconnection Customers with Interconnection Requests to interconnect either a Small or Large Generating Facility to the CAISO Controlled Grid who (a) meet the eligibility criteria set out in this Appendix GG and (b) elect to participate in the one-time opportunity set out in this Appendix GG to modify their Interconnection Requests to reduce the megawatt generating capacity of the Small or Large Generating Facility which is the subject of the request.

### **1.2 Definitions**

#### **1.2.1 Master Definitions Supplement and Section References.**

Unless the context otherwise requires, any word or expression defined in this Appendix GG shall have the same meaning used in either (a) the Master Definitions Supplement, Appendix A to the CAISO Tariff, or (b) the CAISO Tariff appendix applicable to the Interconnection Customer's Interconnection Request. A reference to a "Section" shall mean a reference to that numerical section of this Appendix GG unless otherwise indicated. A reference to a "GIP Section" shall mean a reference to that numerical section of the CAISO Tariff Appendix Y, Generator Interconnection Procedures.

#### **1.2.2 Special Definitions for this Appendix GG.**

In this Appendix GG, the following words and expressions shall have the meanings set opposite them:

"Affected Generator" shall mean an Interconnection Customer who is not a Downsizing Generator whose Interconnection configuration, including but not limited to cost responsibility or schedule for Network Upgrades, has been modified through the Generator Downsizing Study.

"Downsizing Generator" shall mean an Interconnection Customer who submits a Generator Downsizing Request under this Appendix GG.

"Downsizing Generator Interconnection Agreement Amendment" shall mean the pro forma amendment to a Downsizing Generator's or Affected Generator's Generator Interconnection Agreement, which pro forma amendment is set forth in CAISO Tariff Appendix HH.

"Downsizing Generator Payment Obligation Agreement" shall mean the repayment agreement set forth in Appendix 3 of this Appendix GG, obligating the Downsizing Generator to pay for study work conducted for the Generator Downsizing Study, preparation of the Generator Downsizing Study Reports and Generator Interconnection Agreements, and amendments thereto necessary to implement this Appendix GG.

"Generator Downsizing Deposit" shall mean a deposit in the amount of two hundred thousand dollars (\$200,000) required by this Appendix GG that is to be paid in cash or cash equivalent funds only.

"Generator Downsizing Request" shall mean a request submitted under this Appendix GG to modify the Downsizing Generator's Interconnection Request to reduce the megawatt generating capacity of the Small or Large Generating Facility.

“Generator Downsizing Request Due Date” shall mean January 4, 2013 at five o’clock (5:00) p.m., Pacific time, which shall be the due date for CAISO receipt of any Generator Downsizing Request under this Appendix GG.

“Generator Downsizing Study” shall mean that study or studies conducted in accordance with this Appendix GG.

“Generator Downsizing Study Report” shall mean the study report issued in conjunction with the Generator Downsizing Study to Downsizing Generators and Affected Generators.

"Reasonable Efforts" shall mean, with respect to an action required to be attempted or taken by a Party under this Appendix GG, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

## **Section 2 Generator Downsizing Request**

### **2.1 General**

A Downsizing Generator shall submit its Generator Downsizing Request to the CAISO in the form of Appendix 1 to this Appendix GG. The CAISO will forward a copy of the Generator Downsizing Request to the applicable Participating TO(s).

### **2.2 Roles and Responsibilities**

- (a) Each Generator Downsizing Request will be subject to the direction and oversight of the CAISO. The CAISO will conduct or cause to be performed the Generator Downsizing Study and any additional studies the CAISO determines to be reasonably necessary, and will direct the applicable Participating TO(s) to perform portions of studies where the Participating TO has specific and non-transferable expertise or data and can conduct the studies more efficiently and cost-effectively than the CAISO. The CAISO will coordinate with Affected System Operators in accordance with this Appendix GG and GIP Section 3.7.
- (b) The CAISO will undertake Reasonable Efforts to complete or cause to be completed all studies as required within the timelines provided in this Appendix GG.
- (c) Each Downsizing Generator shall pay the costs for the Generator Downsizing Study and preparation of the Generator Downsizing Study Report prepared for the Downsizing Generator and Affected Generators, and the costs associated with amending the Generator Interconnection Agreements of the Downsizing Generator and any Affected Generators, as necessary, in accordance with Sections 2.7 and 2.8.
- (d) The CAISO has established a pro forma agreement entitled “Agreement for the Allocation of Responsibilities with Regard to Generator Downsizing Opportunity, Generator Downsizing Study, and Amendment of Generator Interconnection Agreements,” attached to this Appendix GG as Appendix 4 and incorporated herein by reference, for execution by the CAISO and the applicable Participating TO(s).

### **2.3 Generator Downsizing Request Due Date**

All Generator Downsizing Requests must be submitted by the Generator Downsizing Request Due Date.

## 2.4 Eligibility to Submit Request

In order to be eligible to submit a Generator Downsizing Request, the Interconnection Customer must

- (1) have an Interconnection Request currently being processed under one of the following provisions of the CAISO Tariff:
  - (a) CAISO Tariff Appendix Y (Generator Interconnection Procedures (GIP)) applying to Interconnection Requests processed in the Transition Cluster and Queue Clusters 1 through 4;
  - (b) CAISO Tariff Appendix U (Standard Large Generator Interconnection Procedures (LGIP)) applying to Large Generating Facility Interconnection Requests not assigned to a Queue Cluster Window;
  - (c) CAISO Tariff Appendix W (Interconnection Procedures in Effect Prior to July 1, 2005 ("Amendment 39 Procedures")) applicable to Small Generating Facilities interconnecting in accordance with Section 1.3 of Appendix S and Large Generating Facilities in accordance with Section 5.1 of Appendix U; or
  - (d) CAISO Tariff Appendix S (Small Generator Interconnection Procedures).
- (2) In addition, the Interconnection Customer must meet all of the following requirements of good standing of its Interconnection Request by the Generator Downsizing Request Due Date:
  - (a) The Interconnection Request has not been withdrawn or deemed withdrawn by the CAISO. If the CAISO has issued a notice of deemed withdrawal to the Interconnection Customer, which the Interconnection Customer has not cured, then the Interconnection Customer shall not be eligible to submit a Generator Downsizing Request.
  - (b) The Interconnection Customer has complied with all applicable requirements of the CAISO Tariff under which the Interconnection Request is being processed, including timely submittal of all Interconnection Financial Security postings which have come due.
  - (c) The Interconnection Customer is in compliance with the terms of its Generator Interconnection Agreement, including Interconnection Customer milestones; has not received a notice of breach or notice of default which the Interconnection Customer has not cured; and does not have its Interconnection Request or Generator Interconnection Agreement in suspension under Article 5.16 or other applicable suspension provision of the Generator Interconnection Agreement.

Interconnection Customers with Interconnection Requests processed under CAISO Appendix DD (Generator Interconnection and Deliverability Allocation Procedures (GIDAP)) shall not be eligible to submit a Generator Downsizing Request.

## 2.5 Processing a Generator Downsizing Request

### 2.5.1 Initiating the Generator Downsizing Request.

To initiate the Generator Downsizing Request, the Downsizing Generator must submit all of the following by the Generator Downsizing Request Due Date:

- (i) A completed application in the form of Appendix 1 to this Appendix GG, including required technical data. The technical data shall include data pertaining to the reduced megawatt generating capacity of the Generating Facility corresponding to the megawatt reduction requested. The Downsizing Generator may change the step-up transformer and parameters of the Downsizing Generator's Interconnection Facilities due to the smaller megawatt capacity size. Proposed modifications to the Generating Facility technology or inverter type are beyond the scope of the Generator Downsizing Request and shall not be permitted under this Appendix GG.
- (ii) A certification in the form of Appendix 2 to this Appendix GG that the Downsizing Generator meets the eligibility requirements of Section 2.4.
- (iii) The Generator Downsizing Deposit.

Failure to submit either the certification required by Section 2.5.1(ii) or the Generator Downsizing Deposit required by Section 2.5.1(iii) by the Generator Downsizing Request Due Date shall result in the Generator Downsizing Request being treated as void and not subject to cure of a deficiency pursuant to Section 2.5.2.

## **2.5.2 Validation of Generator Downsizing Request.**

### **2.5.2.1 Notification.**

The CAISO shall notify the Downsizing Generator no later than ten (10) Business Days after the Generator Downsizing Request Due Date, whether the Generator Downsizing Request is deemed complete, valid, and ready to be studied.

### **2.5.2.2 Deficiencies in the Request as to Application Information.**

A Generator Downsizing Request will not be considered to be a valid request until the CAISO determines that the information contained in the Generator Downsizing Request is complete and that the Downsizing Generator has complied with all of the requirements of Section 2.5.1.

Only if the Generator Downsizing Request contains a deficiency in the application required by Section 2.5.1(i) will the CAISO provide the Downsizing Generator with an opportunity to cure the deficiency. In that event, the CAISO will notify the Downsizing Generator of the reason(s) that the application is deficient and will request additional information to cure the deficiency. In order to remain eligible to participate in the generator downsizing process, the Downsizing Generator must provide the additional requested information needed to constitute a valid Generator Downsizing Request. Whenever additional requested information is provided by the Downsizing Generator, the CAISO shall notify the Downsizing Generator within five (5) Business Days of receipt of the additional requested information whether the Generator Downsizing Request is valid. If the Generator Downsizing Request continues to fail to meet the requirements set forth in Section 2.5.1(i), the CAISO shall include in its notification to the Downsizing Generator the reasons for such failure. If a Generator Downsizing Request has not been deemed valid, the Downsizing Generator must submit all information necessary to meet the requirements of Section 2.5.1(i) no later than fifteen (15) Business Days after the Generator Downsizing Request Due Date or ten (10) Business Days after the CAISO first provided notice that the Generator Downsizing Request was not valid, whichever is later. Generator Downsizing Requests that have not met the requirements of Section 2.5.1(i) within fifteen (15) Business Days after the Generator Downsizing Request Due Date or ten (10) Business Days after the CAISO first provided notice that the Generator

Downsizing Request was not valid, whichever is later, will be deemed invalid and will not be included in Generator Downsizing Studies.

## **2.6 Use of Generator Downsizing Deposit**

The CAISO shall deposit all Generator Downsizing Deposits in an interest-bearing account at a bank or financial institution designated by the CAISO. The Generator Downsizing Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the generator downsizing process and to communicate with Downsizing Generators with respect to their Generator Downsizing Requests.

These costs shall include but not be limited to:

1. The costs of preparing the Generator Downsizing Study and associated Generator Downsizing Study Report for the Generating Facility subject to the Generator Downsizing Request and for any Affected Generators; and
2. The costs associated with amending the Generator Interconnection Agreements of the Downsizing Generator and any Affected Generators, as necessary.

## **2.7 Obligations of Downsizing Generators for Study Costs**

A Downsizing Generator shall be responsible for all actual costs incurred in connection with preparing the Generator Downsizing Study and the Generator Downsizing Study Reports. A Downsizing Generator's share of actual study costs shall be determined by dividing the total amount of actual study costs by the number of valid Generator Downsizing Requests, but shall be no higher than an amount equal to 150 percent of the Downsizing Generator's share of the preliminary estimate posted in accordance with Section 3 of the aggregate costs incurred in connection with preparing the Generator Downsizing Study and the Generator Downsizing Study Report. If the Generator Downsizing Deposit is insufficient to cover the costs for which the Downsizing Generator is responsible, the CAISO shall invoice the Downsizing Generator and such amount shall be paid within thirty (30) calendar days of the date of the invoice.

## **2.8 Obligations of Downsizing Generators for Costs of Amending GIAs**

The Downsizing Generator's responsibility for the costs to amend Generator Interconnection Agreements pursuant to Section 13 will be \$10,000 (ten thousand dollars) for its own Generator Interconnection Agreement and \$10,000 (ten thousand dollars) for each Generator Interconnection Agreement of an Affected Generator that is amended, in whole or in part, due to the Downsizing Generator's Generator Downsizing Request.

In cases where multiple Generator Interconnection Agreements relate to multiple Generator Downsizing Requests, the cost responsibility of each Downsizing Generator that submitted one of the multiple Generator Downsizing Requests will be calculated by (i) multiplying the number of amended Generator Interconnection Agreements by \$10,000 (ten thousand dollars) and then (ii) dividing the resulting amount by the number of Generator Downsizing Requests.

A Downsizing Generator's cost responsibility under this Section shall be capped at \$100,000 (one hundred thousand dollars).

## **2.9 Refund of Generator Downsizing Deposit**

If a Downsizing Generator's total obligation for both actual study costs, per Section 2.7, and amending GIAs, per Section 2.8, is less than its Generator Downsizing Deposit, then the Downsizing Generator will be refunded the unused balance of its Generator Downsizing Deposit, together with applicable interest from the interest-bearing account at the bank or financial institution into which the funds were deposited in accordance with Section 2.6.

## **2.10 Allocation Between the CAISO and Participating TOs of Study Expenses**

The CAISO and the applicable Participating TO(s) shall be paid for expenses incurred in undertaking the Generator Downsizing Study from the amounts paid by the Downsizing Generators pursuant to Section 2.7.

If the total study expenses incurred by the CAISO and the applicable Participating TO(s) exceed the amounts paid by Downsizing Generators by reason of the cost cap set forth in Section 2.7, then the CAISO and the applicable Participating TO(s) will allocate among themselves the total amount paid pro rata, in the proportion of their individual study costs to the total amounts paid by Downsizing Generators.

## **2.11 Allocation Between the CAISO and Participating TOs of Costs of Amending GIAs Collected from Downsizing Generators**

The CAISO will be allocated fifty (50) percent of the amounts paid by the Downsizing Generator for the costs to amend Generator Interconnection Agreements pursuant to Section 2.8, and the applicable Participating TO(s) will be allocated the other fifty (50) percent of such amounts. If there is more than one applicable Participating TO, then the amount paid by Downsizing Generators shall be apportioned as agreed to between the CAISO and the applicable Participating TOs.

## **2.12 Invoicing and Related Obligations**

The Participating TO and any third parties performing work related to the Generator Downsizing Study on the Downsizing Generator's behalf shall invoice the CAISO for such work within seventy-five (75) calendar days of completion of the Generator Downsizing Study, and, within thirty (30) days thereafter, the CAISO shall issue an invoice to the Downsizing Generator based upon such submitted Participating TO and third-party invoices and the CAISO's own costs for the Generator Downsizing Study. The invoice shall include a detailed and itemized accounting of the cost of each Generator Downsizing Study. The CAISO shall draw from the Generator Downsizing Deposit in accordance with the invoice.

If the Downsizing Generator's obligations for

- (i) the actual costs of performing the Generator Downsizing Studies, subject to the cost cap contained in Section 2.7; and
- (ii) the cost responsibility of amending GIAs, subject to the cost cap contained in Section 2.8

exceed the Generator Downsizing Deposit, then the Downsizing Generator shall pay the difference, in accordance with the CAISO-issued invoice, within thirty (30) calendar days. The CAISO shall not be obligated to continue to conduct any other studies unless the Downsizing Generator has paid all outstanding invoices.

### **Section 3 Internet Posting**

Following the Generator Downsizing Request Due Date, the CAISO shall post on the CAISO Website a listing of Interconnection Requests, identified by queue number, having made valid Generator Downsizing Requests. In addition, the CAISO shall publish on the CAISO Website a preliminary estimate of the aggregate study costs for conducting the Generator Downsizing Study. A Downsizing Generator's share of the preliminary estimate of the aggregate study costs for conducting the Generator Downsizing Study shall be determined by dividing the preliminary estimate by the number of valid Generator Downsizing Requests. The CAISO shall issue a Market Notice that it has posted the information in accordance with this Section.

### **Section 4 Coordination with Affected Systems**

The CAISO will notify the Affected System Operators of pertinent results of the Generator Downsizing Study and provide copies of Generator Downsizing Study Reports to Affected System Operators upon request. The Downsizing Generators shall cooperate with the CAISO and Affected System Operators in all matters related to the conduct of the Generator Downsizing Study.

### **Section 5 Withdrawal of Generator Downsizing Request**

#### **5.1 Scope of Withdrawal Rights**

A Downsizing Generator's ability to withdraw the Generator Downsizing Request is limited to the following:

- (i) First Opportunity to Withdraw. A Downsizing Generator shall have five (5) Business Days following the CAISO issuance of the Market Notice described in Section 3 to withdraw its Generator Downsizing Request. If the CAISO does not receive written notice of withdrawal by 8:00 a.m. Pacific time on the sixth (6<sup>th</sup>) Business Day following CAISO issuance of the Market Notice, the Downsizing Generator's Generator Downsizing Request will remain in effect.

Following a timely withdrawal under this Section 5.1(i), the CAISO shall refund the Downsizing Generator's Generator Downsizing Deposit, less those costs incurred in validating the Generator Downsizing Request.

- (ii) Second Opportunity to Withdraw. Following written notice from the CAISO stating that preliminary results of the Generator Downsizing Study indicate that the Downsizing Generator's cost responsibility for Network Upgrades is expected to increase by more than five percent (5%) or five million dollars (\$5,000,000), whichever is lower, from its cost responsibility identified in its Interconnection Facilities Study or Phase II Interconnection Study report, or its Generator Interconnection Agreement, if it has executed one, the Downsizing Generator shall have seven (7) Business Days following receipt of such notice to withdraw its Generator Downsizing Request. If the CAISO does not receive written notice of withdrawal by 8:00 a.m. Pacific time on the eighth (8<sup>th</sup>) Business Day following the Downsizing Generator's receipt of the Generator Downsizing Study Report, the Generator Downsizing Request will remain in effect.

A Downsizing Generator withdrawing its Generator Downsizing Request under this Section 5.1(ii) will not receive a refund of the Generator Downsizing Deposit. The CAISO will apply the Generator Downsizing Deposit against the deposit costs incurred in validating the Generator Downsizing Request and conducting

the Generator Downsizing Study. The balance of the Generator Downsizing Deposit shall be treated in accordance with Section 37.9.4 of the CAISO Tariff.

Withdrawal shall result in the removal of the Generator Downsizing Request from the Generator Downsizing Study.

## **5.2 Commitment to Go Forward**

Other than the two withdrawal opportunities set out in Section 5.1, a Downsizing Generator has no opportunity to withdraw its Generator Downsizing Request, and must satisfy a Downsizing Generator's obligations set forth in this Appendix GG.

## **Section 6 Generator Downsizing Study Process**

### **6.1 Downsizing Generator Payment Obligation Agreement**

No later than five (5) calendar days prior to the close of the first opportunity to withdraw under Section 5.1(i), the CAISO shall provide to each Downsizing Generator with a valid Generator Downsizing Request received by the Generator Downsizing Request Due Date a pro forma Downsizing Generator Payment Obligation Agreement in the form set forth in Appendix 3 of this Appendix GG. The pro forma Generator Downsizing Payment Obligation Agreement shall specify that the Downsizing Generator is responsible for and agrees to pay costs of the Generator Downsizing Study, the preparation and issuance of Generator Downsizing Study Reports to the Downsizing Generator and Affected Generators, and the negotiation and execution of amendments to the Generator Interconnection Agreements of Downsizing Generators and Affected Generators, including reasonable administrative costs, and all requirements of this Appendix GG.

Within five (5) calendar days of tender, the Downsizing Generator shall execute and return the Downsizing Generator Payment Obligation Agreement. If the Downsizing Generator fails to execute and return the Downsizing Generator Payment Obligation Agreement, then the Generator Downsizing Request shall be void and the CAISO shall refund the Downsizing Generator's Generator Downsizing Deposit, less the costs incurred in validating the Generator Downsizing Request.

### **6.2 Interconnection Base Case Data Used in Generator Downsizing Study**

In conjunction with the Generator Downsizing Study conducted by the CAISO under this Appendix GG, the CAISO and any applicable Participating TO(s) shall utilize applicable Interconnection Base Case Data.

The CAISO, in coordination with the applicable Participating TO(s), shall publish updated Interconnection Base Case Data containing applicable Base Case data developed for the Generator Downsizing Study, to a secured section of the CAISO Website.

Interconnection Base Case Data shall include information subject to the confidentiality provisions set forth in Section 13.1 of Appendix Y.

The CAISO shall require current and former Interconnection Customers, Market Participants, and electric utility regulatory agencies within California to sign a CAISO confidentiality agreement and, where the current or former Interconnection Customer or Market Participant is not a member of WECC, or its successor, an appropriate form of agreement with WECC, or its successor, as necessary. All other entities or persons seeking Interconnection Base Case Data must satisfy the foregoing requirements as well

as all requirements under 18 C.F.R. Section 388.113 for obtaining the release of Critical Energy Infrastructure Information (as that term is defined by FERC).

### **6.3 Grouping Generator Downsizing Requests**

The CAISO, in coordination with the applicable Participating TO(s), may develop one or more Group Studies for the Downsizing Generators and Affected Generators. A Group Study will include, in the CAISO's sole judgment after coordination with the applicable Participating TO(s), the Downsizing Generators and the Affected Generators that affect one another electrically with respect to the analysis being performed, without regard to the nature of the underlying Interconnection.

### **6.4 Scope and Purpose of Generator Downsizing Study**

The CAISO shall issue a Market Notice of the anticipated commencement and completion dates for the Generator Downsizing Study. The Generator Downsizing Study shall evaluate the impact of all valid and non-withdrawn Generator Downsizing Requests received by the Generator Downsizing Request Due Date on the current plan of service for Network Upgrades and Participating TOs' Interconnection Facilities resulting from all completed Interconnection Studies, and shall identify alternatives to Network Upgrades or Participating TOs' Interconnection Facilities contained in the current plan of service and the timing impacts of such refreshed upgrades or facilities on the Commercial Operation Dates of Downsizing Generators and Affected Generators.

The Generator Downsizing Study will consist of a short-circuit analysis, a stability analysis to the extent the CAISO and applicable Participating TO(s) reasonably expect transient or voltage stability concerns, a power flow analysis, including off-peak analysis, and an On-Peak Deliverability Assessment. The Generator Downsizing Study will state, within Group Studies, (i) the assumptions upon which it is based, (ii) the results of the analyses, and (iii) the revised requirements or potential impediments to providing the requested Interconnection Service to all Interconnection Requests. The Generator Downsizing Study will provide a list of Network Upgrades to the CAISO Controlled Grid and of Participating TOs' Interconnection Facilities that have been removed, modified, or substituted as a result of the Generator Downsizing Requests, and, as applicable, an estimate of any other financial impacts (*i.e.*, on Local Furnishing Bonds).

Applicable study results shall be set out in a Generator Downsizing Study Report provided, as applicable, to Downsizing Generators and Affected Generators. In general, the Generator Downsizing Study Report shall set out updated Interconnection configuration information with respect to Network Upgrades and Participating TOs' Interconnection Facilities as a result of the Generator Downsizing Requests.

The Generator Downsizing Study Report shall also set forth the applicable cost estimates for Network Upgrades and Participating TOs' Interconnection Facilities if the scope of the Network Upgrades or Participating TOs' Interconnection Facilities has changed as a result of the Generator Downsizing Study. These cost estimates shall form the updated cost estimates for Network Upgrades and Participating TOs' Interconnection Facilities, shall adjust any earlier estimates contained in the prior Interconnection Studies and reports earlier provided to the Downsizing Generators and Affected Generators, and shall establish the basis for the Downsizing Generator's or Affected Generator's Interconnection Financial Security postings.

## **Section 7 Cost Allocation for Network Upgrades Modified or Substituted in Generator Downsizing Study**

The cost estimates for modified or substituted Network Upgrades identified in the Generator Downsizing Study shall be determined in accordance with the methodology used for the Phase II Interconnection Study for Interconnection Requests in a Queue Cluster.

### **7.1 Cost Allocation for Network Upgrades and Participating TOs' Interconnection Facilities**

To the extent that Network Upgrades or Participating TOs' Interconnection Facilities were modified or substituted in the Generator Downsizing Study as a result of the Generator Downsizing Requests, the costs shall be assigned to the Interconnection Customers who originally triggered the Network Upgrades or Participating TOs' Interconnection Facilities on a pro rata basis in proportion to the costs allocated among such Interconnection Customers in the governing Interconnection Studies undertaken before the Generator Downsizing Study. Provided, however, that no Interconnection Customer except a Downsizing Generator shall be assigned a cost amount arising out of the Generator Downsizing Study greater than the cost amount assigned to such Interconnection Customer for such Network Upgrades and Participating TOs' Interconnection Facilities in the Interconnection Customer's earlier-governing Interconnection Study or, if applicable, in the Interconnection Customer's Generator Interconnection Agreement.

### **7.2 Limitation on Cost Allocation as a Result of Downsizing**

- (1) If the estimated costs of a Network Upgrade or Participating TO's Interconnection Facilities modified or substituted as a result of Generator Downsizing Requests that are assigned to an Affected Generator in this process are higher than the costs which such Affected Generator has already been assigned for the original Network Upgrade or Participating TO's Interconnection Facilities pursuant to their relevant Interconnection Studies, such costs shall not be allocated to the Affected Generator. Instead, such costs shall be re-allocated to applicable Downsizing Generators pursuant to the methodology set forth in Section 7.1.
- (2) If the Generator Downsizing Study indicates that a Network Upgrade identified in a Downsizing Generator's pertinent Interconnection Studies will no longer be needed by the originally triggering Downsizing Generator, or by Interconnection Customers in the same Cluster Study as the Downsizing Generator, but the Network Upgrade or a substitute Network Upgrade will still be needed by later-queued Interconnection Customers (provided they are being studied in Queue Cluster 4 or earlier) in the Generator Downsizing Study, the later-queued Interconnection Customers shall not be allocated the costs of the Network Upgrade. Instead, the Interconnection Customers that were originally assigned the costs of such Network Upgrade will continue to be assigned the costs of the Network Upgrade, or the substitute Network Upgrade, and shall be required to fund those Network Upgrades on the same schedule as contained in the Downsizing Generator's Generator Interconnection Agreement prior to the Downsizing Request, if maintenance of such schedule is needed by Affected Generators.
- (3) If, as a result of the Generator Downsizing Study, a Network Upgrade that was originally triggered by an interconnection to the Distribution System of a Participating TO is no longer needed by such interconnection, but the upgrade is needed by Affected Generators, then the cost of the upgrade shall not be allocated to the Distribution System interconnection customer; rather, the cost shall be allocated among the Downsizing Generators, based upon flow impact in

the case of Delivery Network Upgrades and based upon short circuit duty or megawatt (MW) capacity in the case of Reliability Network Upgrades, in accordance with Section 6 of Appendix Y.

### **7.3 Effect of Downsizing on Maximum Cost Responsibility for Generators in a Queue Cluster or Independent Study Process**

For Downsizing Generators or Affected Generators in a Queue Cluster or in the Independent Study Process, if the Generator Downsizing Study results in a change in the cost of Network Upgrades assigned to the Downsizing Generator or Affected Generator, then the Downsizing Generator's or Affected Generator's maximum cost responsibility for Network Upgrades, and the maximum value for the Interconnection Financial Security required of the Generator, shall be the amount assigned in the Generator Downsizing Study. However, for Affected Generators, if the assigned Network Upgrade costs increase as a result of the Generator Downsizing Study, then the Affected Generator's maximum cost responsibility shall not be modified, and shall continue to be determined as set forth in Section 9.5 of Appendix Y.

### **Section 8 Commercial Operation Date**

The Downsizing Generator or Affected Generator may request that the CAISO evaluate a proposed change of the Commercial Operation Date of a Generating Facility, or any phase of a Phased Generating Facility, only to the extent that the change is directly and reasonably related to the in-service dates of the Network Upgrades reflected in the Downsizing Generator's or Affected Generator's Interconnection configuration as such Network Upgrades and in-service dates have been refreshed in the Generator Downsizing Study. The CAISO and Participating TO shall consider the request and their agreement to such change request shall not be unreasonably withheld. The Commercial Operation Date change request must be made prior to the execution of the Downsizing Generator Interconnection Agreement Amendment.

### **Section 9 Modifications**

Proposed modifications to the Interconnection Request that do not directly relate to

- (i) the requested reduction in megawatt capacity of the Generating Facility pursuant to this Appendix GG; or
- (ii) a proposed change of the Commercial Operation Date of the Generating Facility or a phase of a Phased Generating Facility in accordance with Section 8

are beyond the scope of the Generator Downsizing Request and shall not be evaluated in the Generator Downsizing Study or as part of the Generator Downsizing Request activities under this Appendix GG.

The CAISO shall defer any Downsizing Generator request to modify the Interconnection Request or to request preliminary review of a proposed modification which the Downsizing Generator may make under the applicable CAISO Tariff Appendix governing the Downsizing Generator's Interconnection Request until the completion of the Downsizing Generator's Generator Downsizing Request made under this Appendix GG. Other than the deferral of such request as provided in this Section 9, nothing in this Section 9 shall diminish the rights of the Downsizing Generator or Affected Generator to request a modification pursuant to the applicable interconnection procedures under which the Downsizing Generator's or Affected Generator's Interconnection Request is being processed.

## **Section 10 Results Meeting With the CAISO and Applicable Participating TO(s)**

Within ten (10) calendar days of its receipt of the Generator Downsizing Study Report, the Downsizing Generator may request a Generator Downsizing Study results meeting with the CAISO and the applicable Participating TO(s) to discuss the results of the Generator Downsizing Study.

Within fourteen (14) calendar days of its receipt of the Generator Downsizing Study Report, the Affected Generator may request a Generator Downsizing Study results meeting with the CAISO and the applicable Participating TO(s) to discuss the results of the Generator Downsizing Study.

## **Section 11 Participating TO Tariff Option for Generator Downsizing**

To the extent that a Participating TO's tariff provides the option for customers taking interconnection service under the Participating TO's wholesale access interconnection tariff to engage in a one-time generator downsizing opportunity coincident with the time period in which the CAISO will perform the Generator Downsizing Study, the CAISO will, in coordination with the applicable Participating TO, perform the necessary studies, including deliverability studies to determine the deliverability of Participating TO interconnection customers electing such option. The CAISO shall execute any necessary agreements with the Participating TO for reimbursement of study costs and to assure cost attribution for any Network Upgrades in conjunction with such CAISO activity under this Section 11.

## **Section 12 Effect of Generator Downsizing on Interconnection Financial Security Requirements**

If a Downsizing Generator's or Affected Generator's cost responsibility for Network Upgrades and/or Participating TOs' Interconnection Facilities changes between its earlier Interconnection Studies and the Generator Downsizing Study:

- (1) the Downsizing Generator's or Affected Generator's revised cost responsibility as established through the Generator Downsizing Study and this Appendix GG shall be used for purposes of calculating all future Interconnection Financial Security postings, pursuant to the interconnection procedures under which the Downsizing Generator or Affected Generator is being processed.
- (2) Any Interconnection Financial Security postings already made by the Downsizing Generator or Affected Generator will be revised accordingly. The CAISO will provide notice of the updated posting amounts within fifteen (15) Business Days of the issuance of the applicable Generator Downsizing Study Report. To the extent that
  - (i) a Downsizing Generator's cost responsibility for Network Upgrades or Participating TO's Interconnection Facilities either increases or decreases; or
  - (ii) an Affected Generator's cost responsibility for Network Upgrades or Participating TO's Interconnection Facilities decreases

then adjustments of the Interconnection Financial Security to conform to the updated amounts specified in the notice shall be undertaken within thirty (30) calendar days of the notice.

**Section 13      Reflecting Plan of Service Changes in Generator Interconnection Agreements**

Within thirty (30) calendar days after the CAISO provides the Generator Downsizing Study Report to the Downsizing Generator or Affected Generator, the applicable Participating TO(s) and the CAISO shall, if necessary, tender a draft amendment to the executed GIA, together with draft amended appendices. Any such amendment shall be in the form of CAISO Tariff Appendix HH. If the Downsizing Generator or Affected Generator has not yet executed a GIA, then the applicable Participating TO(s) and the CAISO shall, if necessary, tender a revised draft GIA with draft appendices within thirty (30) calendar days after the CAISO provides the Generator Downsizing Study Report. The process for providing comments, negotiation, and execution and filing of a revised GIA, or an amendment to an executed GIA, including all timeframes, shall be identical to the process set forth in Section 11 of Appendix Y, or as agreed to by the Downsizing Generator or Affected Generator, CAISO, and Participating TO(s).

**Section 14      Confidentiality**

The provision for treatment of Confidential Information contained within the CAISO Tariff Appendix under which the Interconnection Request of the Downsizing Generator or Affected Generator is being processed shall govern.

**APPENDIX 1  
GENERATOR DOWNSIZING REQUEST**

**Provide three copies of this completed form pursuant to Sections 3 and 5, below, of this Appendix GG Appendix 1.**

1. The undersigned Interconnection Customer submits this request to reduce the maximum net megawatt electrical output of its Generating Facility for the Interconnection Request in the CAISO Controlled Grid Generation Queue:

CAISO Controlled Grid Generation Queue No. \_\_\_\_\_

Project Name: \_\_\_\_\_

If the Interconnection Request is for a new Generating Facility, provide the reduced maximum net output:

Maximum net megawatt electrical output (MW): \_\_\_\_\_

If the Interconnection Request is for a decrease in the generating capacity of an existing Generating Facility, provide the reduced net output decrease:

Net Megawatt decrease (MW): \_\_\_\_\_

2. Name, address, telephone number, and e-mail address of the Interconnection Customer's contact person (primary person who will be contacted):

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State: \_\_\_\_\_

Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

3. Generator Downsizing Request data (set forth in Attachment A)

**The Downsizing Generator shall provide to the CAISO the technical data called for in Appendix GG Appendix 1, Attachment A. Three (3) copies are required.**

4. Make the cashier's or bank check for the Generator Downsizing Deposit amount of \$200,000 payable to CAISO. Send the check to the CAISO (see section 5 for details) along with:

**Appendix 1 to this Appendix GG** (Generator Downsizing Request) for processing.

**Attachment A to this Appendix 1** (Generator Downsizing Request Generating Facility Data).

5. This Generator Downsizing Request shall be submitted to the CAISO representative indicated below:

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

Overnight address: California ISO, Attn: Grid Assets, 250 Outcropping Way, Folsom, CA  
95630

6. This Generator Downsizing Request is submitted by:

Legal name of the Downsizing Generator:

By (signature): \_\_\_\_\_

Name (type or print): \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**ATTACHMENT A TO APPENDIX 1**

**GENERATING FACILITY DATA**

Provide three copies of this completed form pursuant to Section 3 of Appendix GG Appendix 1.

**1. Provide two original prints and one reproducible copy (no larger than 36" x 24") of the following:**

- A. Site drawing to scale, showing generator location and Point of Interconnection with the CAISO Controlled Grid.
- B. Single-line diagram showing applicable equipment such as generating units, step-up transformers, auxiliary transformers, switches/disconnects of the proposed interconnection, including the required protection devices and circuit breakers. For wind and photovoltaic generator plants, the one-line diagram should include the distribution lines connecting the various groups of generating units, the generator capacitor banks, the step up transformers, the distribution lines, and the substation transformers and capacitor banks at the Point of Interconnection with the CAISO Controlled Grid.
- C. List changes to the currently effective Interconnection Request Generating Facility Data form on file with the CAISO:

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**Fields marked with \* should not be changed from the original Interconnection Request. Only changes related to downsizing are permitted.**

**2. Generating Facility Information**

- A. Total Generating Facility rated output (MW): \_\_\_\_\_
- B. Generating Facility auxiliary Load (MW): \_\_\_\_\_
- C. Project net capacity (A-B)(MW): \_\_\_\_\_
- D. Standby Load when Generating Facility is off-line (MW): \_\_\_\_\_
- E. Number of Generating Units: \_\_\_\_\_  
(Please repeat the following items for each generator)
- F. Individual generator rated output (MW for each unit): \_\_\_\_\_
- G. Manufacturer: \_\_\_\_\_
- H. Year Manufactured: \_\_\_\_\_
- I. Nominal Terminal Voltage (kV): \_\_\_\_\_
- J. Rated Power Factor (%): \_\_\_\_\_
- K. Type (Induction, Synchronous, DC with Inverter)\*: \_\_\_\_\_
- L. Phase (three phase or single phase)\*: \_\_\_\_\_
- M. Connection (Delta, Grounded WYE, Ungrounded WYE, impedance grounded): \_\_\_\_\_
- N. Generator Voltage Regulation Range (+/- %): \_\_\_\_\_
- O. Generator Power Factor Regulation Range: \_\_\_\_\_
- P. For combined cycle plants, specify the plant net output capacity (MW) for an outage of the steam turbine or an outage of a single combustion turbine \_\_\_\_\_

**3. Synchronous Generator – General Information:**

(Please repeat the following for each generator model)

- A. Rated Generator speed (rpm): \_\_\_\_\_
- B. Rated MVA: \_\_\_\_\_
- C. Rated Generator Power Factor: \_\_\_\_\_

- D. Generator Efficiency at Rated Load (%): \_\_\_\_\_
- E. Moment of Inertia (including prime mover): \_\_\_\_\_
- F. Inertia Time Constant (on machine base) H: \_\_\_\_\_ sec or MJ/MVA
- G. SCR (Short-Circuit Ratio - the ratio of the field current required for rated open-circuit voltage to the field current required for rated short-circuit current): \_\_\_\_\_
- H. Please attach generator reactive capability curves.
- I. Rated Hydrogen Cooling Pressure in psig (Steam Units only): \_\_\_\_\_
- J. Please attach a plot of generator terminal voltage versus field current that shows the air gap line, the open-circuit saturation curve, and the saturation curve at full load and rated power factor.

**4. Excitation System Information**

(Please repeat the following for each generator model)

- A. Indicate the Manufacturer \_\_\_\_\_ and Type \_\_\_\_\_ of excitation system used for the generator. For exciter type, please choose from 1 to 9 below or describe the specific excitation system.
  - (1) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is independent of the generator terminal voltage and current.
  - (2) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is bus fed from the generator terminal voltage.
  - (3) Rotating DC commutator exciter with non-continuously acting regulator (i.e., regulator adjustments are made in discrete increments).
  - (4) Rotating AC Alternator Exciter with non-controlled (diode) rectifiers. The regulator power source is independent of the generator terminal voltage and current (not bus-fed).
  - (5) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers. The regulator power source is fed from the exciter output voltage.
  - (6) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers.
  - (7) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from the generator terminal voltage.
  - (8) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from a combination of generator terminal voltage and current (compound-source controlled rectifiers system).
  - (9) Other (specify): \_\_\_\_\_
- B. Attach a copy of the block diagram of the excitation system from its instruction manual. The diagram should show the input, output, and all feedback loops of the excitation system.
- C. Excitation system response ratio (ASA): \_\_\_\_\_
- D. Full load rated exciter output voltage: \_\_\_\_\_
- E. Maximum exciter output voltage (ceiling voltage): \_\_\_\_\_
- F. Other comments regarding the excitation system?

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**5. Power System Stabilizer Information**

(Please repeat the following for each generator model. All new generators are required to install PSS unless an exemption has been obtained from WECC. Such an exemption can be obtained for units that do not have suitable excitation systems.)

- A. Manufacturer: \_\_\_\_\_
- B. Is the PSS digital or analog? \_\_\_\_\_
- C. Note the input signal source for the PSS  
 \_\_\_\_\_ Bus frequency    \_\_\_\_\_ Shaft speed    \_\_\_\_\_ Bus Voltage

- \_\_\_\_\_ Other (specify source)
- D. Please attach a copy of a block diagram of the PSS from the PSS Instruction Manual and the correspondence between dial settings and the time constants or PSS gain.
- E: Other comments regarding the PSS?

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**6. Turbine-Governor Information**

(Please repeat the following for each generator model)

Please complete Part A for steam, gas or combined-cycle turbines, Part B for hydro turbines, and Part C for both.

A. Steam, gas or combined-cycle turbines:

- (1) List type of unit (Steam, Gas, or Combined-cycle): \_\_\_\_\_
- (2) If steam or combined-cycle, does the turbine system have a reheat process (i.e., both high and low pressure turbines)? \_\_\_\_\_
- (3) If steam with reheat process, or if combined-cycle, indicate in the space provided, the percent of full load power produced by each turbine:  
 Low pressure turbine or gas turbine: \_\_\_\_\_%  
 High pressure turbine or steam turbine: \_\_\_\_\_%

B. Hydro turbines:

- (1) Turbine efficiency at rated load: \_\_\_\_\_%
- (2) Length of penstock: \_\_\_\_\_ ft
- (3) Average cross-sectional area of the penstock: \_\_\_\_\_ ft<sup>2</sup>
- (4) Typical maximum head (vertical distance from the bottom of the penstock, at the gate, to the water level): \_\_\_\_\_ ft
- (5) Is the water supply run-of-the-river or reservoir: \_\_\_\_\_
- (6) Water flow rate at the typical maximum head: \_\_\_\_\_ ft<sup>3</sup>/sec
- (7) Average energy rate: \_\_\_\_\_ kW-hrs/acre-ft
- (8) Estimated yearly energy production: \_\_\_\_\_ kW-hrs

C. Complete this section for each machine, independent of the turbine type.

- (1) Turbine manufacturer: \_\_\_\_\_
- (2) Maximum turbine power output: \_\_\_\_\_ MW
- (3) Minimum turbine power output (while on line): \_\_\_\_\_ MW
- (4) Governor information:
  - (a) Droop setting (speed regulation): \_\_\_\_\_
  - (b) Is the governor mechanical-hydraulic or electro-hydraulic (Electro-hydraulic governors have an electronic speed sensor and transducer.)?  
 \_\_\_\_\_
  - (c) Other comments regarding the turbine governor system?  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**7. Induction Generator Data:**

- A. Rated Generator Power Factor at rated load: \_\_\_\_\_
- B. Moment of Inertia (including prime mover): \_\_\_\_\_
- C. Do you wish reclose blocking? Yes \_\_\_\_, No \_\_\_\_

Note: Sufficient capacitance may be on the line now, or in the future, and the generator may self-excite unexpectedly.

### 8. Generator Short Circuit Data

For each generator model, provide the following reactances expressed in p.u. on the generator base:

- $X''1$  – positive sequence subtransient reactance: \_\_\_\_\_ p.u.\*\*
- $X''2$  – negative sequence reactance: \_\_\_\_\_ p.u.\*\*
- $X''0$  – zero sequence reactance: \_\_\_\_\_

Generator Grounding (select 1 for each model):

- A. \_\_\_\_\_ Solidly grounded
- B. \_\_\_\_\_ Grounded through an impedance  
(Impedance value in p.u on generator base. R: \_\_\_\_\_ p.u.  
X: \_\_\_\_\_ p.u.)
- C. \_\_\_\_\_ Ungrounded

### 9. Step-Up Transformer Data

For each step-up transformer, fill out the data form provided in Table 1.

### 10. Interconnection Facilities Line Data

There is no need to provide data for new lines that are to be constructed by the Participating TO. However, for transmission lines that are to be constructed by the generation developer, please provide the following information:

Nominal Voltage\*: \_\_\_\_\_ kV  
Line Length\*: \_\_\_\_\_ miles  
Line termination Points\*: \_\_\_\_\_  
Conductor Type: \_\_\_\_\_ Size: \_\_\_\_\_  
If bundled. Number per phase: \_\_\_\_\_, Bundle spacing: \_\_\_\_\_ in.  
Phase Configuration. Vertical: \_\_\_\_\_, Horizontal: \_\_\_\_\_  
Phase Spacing: A-B: \_\_\_\_\_ ft., B-C: \_\_\_\_\_ ft., C-A: \_\_\_\_\_ ft.  
Distance of lowest conductor to Ground at full load and 40°C: \_\_\_\_\_ ft  
Ground Wire Type: \_\_\_\_\_ Size: \_\_\_\_\_ Distance to Ground: \_\_\_\_\_ ft  
Attach Tower Configuration Diagram  
Summer line ratings in amperes (normal and emergency) \_\_\_\_\_  
Positive Sequence Resistance ( R ): \_\_\_\_\_ p.u.\*\* (for entire line length)  
Positive Sequence Reactance: ( X ): \_\_\_\_\_ p.u.\*\* (for entire line length)  
Zero Sequence Resistance ( R0 ): \_\_\_\_\_ p.u.\*\* (for entire line length)  
Zero Sequence Reactance: ( X0 ): \_\_\_\_\_ p.u.\*\* (for entire line length)  
Line Charging (B/2): \_\_\_\_\_ p.u.\*\*

\*\* On 100-MVA and nominal line voltage (kV) Base

### 10a. For Wind/photovoltaic plants, provide collector System Equivalence Impedance Data Provide values for each equivalence collector circuit at all voltage levels.

Nominal Voltage\*: \_\_\_\_\_  
Summer line ratings in amperes (normal and emergency) \_\_\_\_\_  
Positive Sequence Resistance (R1): \_\_\_\_\_ p.u. \*\* (for entire line length of each collector circuit)  
Positive Sequence Reactance: (X1): \_\_\_\_\_ p.u.\*\* (for entire line length of each collector circuit)  
Zero Sequence Resistance (R0): \_\_\_\_\_ p.u. \*\* (for entire line length of each collector circuit)  
Zero Sequence Reactance: (X0): \_\_\_\_\_ p.u.\*\* (for entire line length of each collector circuit)

Line Charging (B/2): \_\_\_\_\_ p.u.\*\* (for entire line length of each collector circuit)  
\*\* On 100-MVA and nominal line voltage (kV) Base

**11. Inverter-Based Machines**

Number of inverters to be interconnected pursuant to this Interconnection Request: \_\_\_\_\_

Inverter manufacturer, model name, number, and version\*:  
\_\_\_\_\_

List of adjustable set points for the protective equipment or software\*:  
\_\_\_\_\_

Maximum design fault contribution current\*:  
\_\_\_\_\_

Harmonics Characteristics\*:  
\_\_\_\_\_

Start-up requirements\*:  
\_\_\_\_\_

Note: A completed General Electric Company Power Systems Load Flow (PSLF) data sheet must be supplied with the Interconnection Request.

**12. Load Flow and Dynamic Models:**

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

TABLE 1

TRANSFORMER DATA  
 (Provide for each level of transformation)

UNIT \_\_\_\_\_

NUMBER OF TRANSFORMERS \_\_\_\_\_ PHASE \_\_\_\_\_

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

CURRENT TRANSFORMER RATIOS

H \_\_\_\_\_ X \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_

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

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

## APPENDIX 2

### CERTIFICATION OF ELIGIBILITY FOR ONE-TIME GENERATOR DOWNSIZING OPPORTUNITY

The undersigned authorized representative of **[Downsizing Generator Name]** executes this Certification pursuant to CAISO Tariff Appendix GG for the purpose of demonstrating eligibility of **[Downsizing Generator Name]** to participate in the One-Time Interconnecting Generator Downsizing Opportunity.

I do certify and represent to the CAISO, after having conducted sufficient inquiry of facts and circumstances of the **[Downsizing Generator Name]** to do so, that the following statements are true and accurate. I understand that the CAISO will rely upon this certification in determining whether **[Downsizing Generator Name]** is eligible for participation in the process outlined in Appendix GG:

- (1) **[Downsizing Generator Name]** has an Interconnection Request which is CAISO Queue Position No. [        ], which is being processed under one of the following provisions of the CAISO Tariff:

*[Check the CAISO Tariff Appendix that Applies]*

- CAISO Tariff Appendix Y (Generator Interconnection Procedures (GIP)) applying to Interconnection Requests processed in the Transition Cluster and Queue Clusters 1 through 4.
- CAISO Tariff Appendix U (Standard Large Generator Interconnection Procedures (LGIP)) applying to Large Generating Facility Interconnection Requests not assigned to a Queue Cluster Window.
- CAISO Tariff Appendix W (Interconnection Procedures in Effect Prior to July 1, 2005 ("Amendment 39 Procedures")) applicable to Small Generating Facilities interconnecting in accordance with Section 1.3 of Appendix S and Large Generating Facilities in accordance with Section 2.1 of Appendix U; and
- CAISO Tariff Appendix S (Small Generator Interconnection Procedures).

- (2) The Interconnection Request of **[Downsizing Generator Name]** meets all of the following requirements of good standing by the Generator Downsizing Request Due Date.:

- a) The Interconnection Request has not been withdrawn or deemed withdrawn by the CAISO. If the CAISO has issued a notice of deemed withdrawal to the Interconnection Customer, which the Interconnection Customer has not cured, then the Interconnection Customer shall not be eligible to submit a Generator Downsizing Request.
- b) The Interconnection Customer has complied with all applicable requirements of the CAISO Tariff under which the Interconnection Request is being processed, including timely submittal of all Interconnection Financial Security postings which have come due.
- c) The Interconnection Customer is in compliance with the terms of its Generator Interconnection Agreement, including Interconnection Customer milestones; has not received a notice of breach or notice of default which the Interconnection Customer has not cured; and does not have its Interconnection Request or Generator Interconnection Agreement in suspension under Article 5.16 or other applicable suspension provision of the Generator Interconnection Agreement.

I make this Certification on this [\_\_\_\_\_] day of [\_\_\_\_\_] , 20[\_\_\_], at [City:  
\_\_\_\_\_] , [State: \_\_\_\_\_]

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

**For Downsizing Generator/Interconnection Customer**

**[Insert name of the Downsizing Generator]**

Title: \_\_\_\_\_

### APPENDIX 3

#### DOWN-sizing GENERATOR PAYMENT OBLIGATION AGREEMENT

THIS AGREEMENT is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Downsizing Generator") and the California Independent System Operator Corporation, a California nonprofit public benefit corporation existing under the laws of the State of California, ("CAISO"). The Interconnection Customer and the CAISO each may be referred to as a "Party," or collectively as the "Parties."

#### RECITALS

WHEREAS, the Downsizing Generator has elected to submit a Generator Downsizing Request pursuant to CAISO Tariff Appendix GG requesting to reduce the generation megawatt capacity of the proposed Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request for the Interconnection Customer represented by Queue Position: \_\_\_\_\_;

WHEREAS, the Interconnection Customer desires to reduce the megawatt generating capacity of the Generating Facility;

WHEREAS, the Downsizing Generator has requested the CAISO to conduct or cause to be performed a Generator Downsizing Study to assess the system impact of interconnecting the Generating Facility to the CAISO Controlled Grid at the reduced megawatt capacity and to specify and estimate the cost of the equipment, engineering, procurement, and construction work needed on the Participating TO's electric system in accordance with Good Utility Practice to physically and electrically connect the Generating Facility to the CAISO Controlled Grid at the reduced megawatt capacity; and

WHEREAS, following the Generator Downsizing Study, it will be necessary to

- (i) issue Generator Downsizing Study Reports that amend the prior study reports; and
- (ii) amend the Generator Interconnection Agreement(s)

of the Downsizing Generator and certain Affected Generators and the Downsizing Generator has requested the CAISO to amend these reports and agreements or cause them to be amended;

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

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the CAISO's FERC-approved One-Time Interconnecting Generator Downsizing Opportunity set forth in CAISO Tariff Appendix GG, the applicable CAISO Tariff Appendix under which the Interconnection Request is being processed or the Master Definitions Supplement, Appendix A to the CAISO Tariff, as applicable.
- 2.0 The Interconnection Customer elects and the CAISO shall conduct or cause to be performed a Generator Downsizing Study, consistent with Appendix GG in accordance with the CAISO Tariff.
- 3.0 The scope of the Interconnection Studies shall be subject to the assumptions set forth in Appendices A and B to this Agreement.

- 4.0 The Generator Downsizing Study will be based upon the technical information provided by the Interconnection Customer in the Generator Downsizing Request subject to modifications to the proposed Commercial Operation Date of the Generating Facility accepted under Section 8 of Appendix GG. The CAISO reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Generator Downsizing Study.
- 5.0 The Generator Downsizing Study Report for the Generator Downsizing Request Interconnection Study shall provide the information specified in Appendix GG.
- 6.0 Following the issuance of the Generator Downsizing Study Report to the Downsizing Generator and Affected Generators and negotiation and execution of an amendment to the Generator Interconnection Agreements of the Downsizing Generator and Affected Generators, the CAISO shall charge and the Downsizing Generator shall pay its share of the costs of the Generator Downsizing Study, Generator Downsizing Study Report and amendments to the Generator Interconnection Agreements pursuant to Sections 2.7 and 2.8 of Appendix GG.

Any difference between the Generator Downsizing Deposit made toward the items referenced above and associated administrative costs, and the cost responsibility of the Downsizing Generator, shall be paid by or refunded to the Downsizing Generator, in the appropriate allocation, in accordance with Sections 2.9 and 2.12 of Appendix GG.

- 7.0 Pursuant to Section 4 of Appendix GG, the CAISO will coordinate any effort required to determine the impact of the Generator Downsizing Request on Affected Systems. The CAISO may provide a copy of the Generator Downsizing Request and the Generator Downsizing Study results, including the Generator Downsizing Study Report, to an Affected System Operator and the Western Electricity Coordinating Council. Requests for review and input from Affected System Operators or the Western Electricity Coordinating Council may arrive at any time prior to interconnection.
- 8.0 Substantial portions of technical data and assumptions used to perform the Generator Downsizing Study, such as system conditions, existing and planned generation, and unit modeling, may change after the CAISO provides the Generator Downsizing Study Report to the Downsizing Generator. Generator Downsizing Study results will reflect available data at the time the CAISO provides the Generator Downsizing Study Report to the Downsizing Generator. The CAISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Downsizing Generator pursuant to Appendix GG as a result of changes in such data and assumptions.
- 9.0 The CAISO shall maintain records and accounts of all costs incurred in performing the Generator Downsizing Study in sufficient detail to allow verification of all costs incurred, including associated overheads. The Downsizing Generator shall have the right, upon reasonable notice, within a reasonable time at the CAISO's offices and at its own expense, to audit the CAISO's records as necessary and as appropriate in order to verify costs incurred by the CAISO. Any audit requested by the Downsizing Generator shall be completed, and written notice of any audit dispute provided to the CAISO representative, within one hundred eighty (180) calendar days following receipt by the Downsizing Generator of the CAISO's notification of the final costs of the Generator Downsizing Study.
- 10.0 The Downsizing Generator may withdraw its Generator Downsizing Request in accordance with Section 5(i) or Section 5(ii) of Appendix GG. Upon timely receipt of the Downsizing Generator's notice to withdraw, this Agreement shall terminate, subject to the requirements of Section 5 of Appendix GG.

- 11.0 This Agreement shall become effective upon the date the fully executed Agreement is received by the CAISO. If the CAISO does not receive the fully executed Agreement, then the Generator Downsizing Request will be deemed void pursuant to Section 2.5.2.2 of Appendix GG, and the CAISO shall refund the Downsizing Generator's Generator Downsizing Deposit, less costs incurred in validating the Generator Downsizing Request.
- 12.0 Miscellaneous.
- 12.1 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Agreement, shall be resolved in accordance with the Dispute provision of the CAISO Tariff Appendix under which the Downsizing Generator's Interconnection Request is being processed.
- 12.2 Confidentiality. Confidential Information shall be treated in accordance with the confidentiality provision of the CAISO Tariff Appendix under which the Downsizing Generator's Interconnection Request is being processed.
- 12.3 Binding Effect. This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 12.4 Conflicts. In the event of a conflict between the body of this Agreement and any attachments, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.
- 12.5 Rules of Interpretation. This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Agreement or such Appendix to this Agreement, or such Section of Appendix GG or such Appendix to Appendix GG, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".
- 12.6 Entire Agreement. This Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.

- 12.7 No Third Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 12.8 Waiver. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, or duty of this Agreement. Termination or default of this Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this Agreement shall, if requested, be provided in writing.
- Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- 12.9 Headings. The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- 12.10 Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 12.11 Amendment. The Parties may by mutual agreement amend this Agreement by a written instrument duly executed by both of the Parties.
- 12.12 Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations.
- 12.13 Reservation of Rights. The CAISO shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 12.14 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall

have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

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

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

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of the Downsizing Generator]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## APPENDIX 4

### AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO GENERATOR DOWNSIZING OPPORTUNITY, GENERATOR DOWNSIZING STUDY AND AMENDMENT OF GENERATOR INTERCONNECTION AGREEMENTS

This Agreement for the Allocation of Responsibilities with Regard to Generator Downsizing Opportunity, Generator Downsizing Study, and Amendment of Generator Interconnection Agreements ("Agreement"), dated \_\_\_\_\_, is entered into between the California Independent System Operator Corporation ("CAISO") and [NAME OF PTO] \_\_\_\_\_ ("PTO"). The CAISO and PTO are jointly referred to as the "Parties" and individually, as a "Party."

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

NOW THEREFORE, in view of the respective responsibilities assigned to the Parties and the foregoing FERC orders, and the provisions of the CAISO's Generator Downsizing Opportunity set forth in CAISO Tariff Appendix GG ("Appendix GG"), the CAISO and PTO agree to the following allocation of responsibilities for a centralized Generator Downsizing Study and amendment of Generator Interconnection Agreements under the direction and oversight of the CAISO:

#### 1. DEFINITIONS

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

#### 2. TERM OF AGREEMENT

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

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

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

**3.2 [INTENTIONALLY LEFT BLANK]**

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

**3.3.1** In the event that an Interconnection Customer proposes to interconnect a Generating Facility with the PTO's facilities, or the PTO is an owner of an Affected System, the PTO shall have the right to participate in any Interconnection Study or any other study conducted in connection with such request for Interconnection Service. "Participate" in this Section 3.3.1 means physically perform any study or portion thereof in connection with an Interconnection Request, under the direction and oversight of, and approval by, the CAISO pursuant to Section 3.4 of this Agreement; provide or receive input, data or other information regarding any study or portion thereof consistent with Section 3.4 of this Agreement; and, when any study or portion thereof in connection with an Interconnection Request is physically performed by an entity other than the PTO, perform activities necessary to adequately review or validate, as appropriate, any results of the study or portions thereof and provide recommendations.

**3.3.2** In the event that an Interconnection Customer proposes to interconnect a Generating Facility with the PTO's facilities, or the PTO is an owner of an Affected System, the PTO shall have the right to participate in all meetings expressly established pursuant to the CAISO Tariff Appendix GG. As appropriate, the PTO may participate in all other material or substantive communications in connection with an Interconnection Request.

**3.4** Generator Downsizing Study Responsibility Allocation: In complying with its responsibility for conducting or causing to be performed Generator Downsizing Studies, the CAISO will assign responsibility for performance of portions of the Generator Downsizing Studies to the PTO, under the direction and oversight of, and approval by, the CAISO, as set forth in Attachment A, except as specifically qualified as follows:

**3.4.1** For any tasks specifically assigned to the PTO pursuant to Attachment A or otherwise mutually agreed upon by the CAISO and the PTO, the CAISO reserves the right, on a case-by-case basis, to perform or reassign to a mutually agreed upon and pre-qualified contractor such task only where: (a) the quality and accuracy of prior PTO Interconnection Study work product resulting from assigned tasks has been deemed deficient by the CAISO, the CAISO has notified the PTO pursuant to the notice provision of Section 4.15 of this Agreement in writing of the deficiency, and the deficiency has not been cured pursuant to Section 3.4.2 of this Agreement; (b) the timeliness of PTO Interconnection Study work product has been deemed deficient, and either (i) the CAISO has not been notified of the reasons and actions taken to address the timeliness of the work, or (ii) if notified, the stated reasons and actions taken are insufficient or unjustifiable and the PTO has not cured the deficiency pursuant to Section 3.4.2 of this Agreement; (c) the PTO has failed, in a mutually agreed upon timeframe, to provide the CAISO with information or data related to an Interconnection Request despite a written request by the CAISO, pursuant to Section 3.5 hereof, to do so, and such data is the responsibility of the PTO to provide to the CAISO, subject to Section 4.3 of this Agreement; (d) the PTO advises the CAISO in writing that it does not have the resources to adequately or timely perform the task according to the applicable timelines set forth in Attachment A; or (e) the estimated cost of the PTO performing the task has been determined in writing by the CAISO to significantly exceed the cost of the CAISO or mutually agreed upon contractor performing the task, inclusive of the costs that will be incurred by the PTO in exercising its review rights of the results of any

such tasks performed by such third party(ies). If the CAISO deviates from the assignments set forth in Attachment A based on the foregoing factors, the CAISO will provide the PTO with a written explanation for the deviation and any associated reassignments of work. The PTO may contest the deviation pursuant to the Dispute Resolution procedures set forth in Section 4.1 of this Agreement.

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

**3.4.2 Cure for reassigned Generator Downsizing Study work**

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

(a) The CAISO and PTO shall negotiate in good faith and agree to a corrective action plan proposed by the PTO, including a reasonably adequate cure period, and the corrective action plan is satisfactorily implemented.

(b) The CAISO determines the deficiency is cured without an action plan.

**3.4.3 Assessment of prior PTO Generator Downsizing Study work shall only be based on work conducted under the process that becomes effective concurrent with the effective date of this Agreement. Further, assessment of prior PTO Interconnection Study work shall be based on work conducted no earlier than the eighteen (18) month period prior to the date of the CAISO notice of deviation from assignments set forth in Attachment A.**

**3.5** Information Exchange: The PTO shall provide the CAISO, subject to confidentiality requirements in Section 4.3 of this Agreement, with any documentation or data requested by the CAISO reasonably necessary to permit the CAISO to perform, review, validate and approve any Interconnection Study, or portion thereof, performed by the PTO. The CAISO shall provide the PTO with any documentation or data requested by the PTO, subject to confidentiality requirements in Section 4.3 of this Agreement, reasonably necessary to perform, review, and validate any Interconnection Study, or portion thereof.

**3.6** Consistency with Provisions for Centralized Interconnection Study Process: The CAISO and PTO have determined that the processes and allocation of responsibilities in Section 3.4 of this Agreement ensure that impacts to the CAISO Controlled Grid are independently assessed and that the assignment of responsibilities minimizes handoffs, takes advantage of non-transferable skills, and promotes the efficiency and cost-effectiveness of the centralized Interconnection Study processes, consistent with Appendix GG Section 2.2.

**3.7** Re-Studies: If any re-studies are required, the CAISO will confer with the PTO as to the need for a re-study. The CAISO will make the final determination regarding the need for a re-study, subject to dispute resolution procedures.

**3.8** Use of Contractors: Nothing in this Agreement shall prevent either the CAISO or the PTO from using qualified, mutually agreed upon third party contractors to meet that Party's rights or obligations under this Agreement or Appendix GG. To promote the efficiency of the process, the CAISO and PTO will collaborate to identify a list of the mutually agreed upon qualified contractors available to the Parties.

**3.9** Performance Standards: Each Party shall perform all of its obligations under the Appendix GG, this Agreement, and any FERC approved Interconnection Study procedures that may be adopted by the CAISO to implement Appendix GG, or this

Agreement, in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice.

- 3.10** Recovery of Costs: The PTO shall recover study expenses pursuant to Sections 2.10 and 2.12 of Appendix GG, including costs incurred in exercising its right to review, and make recommendations on the Generator Downsizing Study or portions thereof performed by the CAISO and/or contractors under Section 3.8 of this Agreement. The PTO shall receive funds to apply to its expenses incurred in amending Generator Interconnection Agreements pursuant to Section 2.11 of Appendix GG.

#### **4 GENERAL TERMS AND CONDITIONS**

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

any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

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

have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

**4.14** Assignment: This Agreement may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

**4.15** Notices: Any notice, demand, or request provided in this Agreement, or served, given, or made in connection with it, will be in writing and deemed properly served, given, or made if delivered in person, transmitted by facsimile, or sent by United States mail, postage prepaid, to the persons specified in Attachment B hereto unless otherwise provided in this Agreement. Any Party may at any time, by notice to all other Parties, change the designation or address of the person specified in Attachment B as the person who receives notices pursuant to this Agreement.

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

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[NAME OF PTO]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## ATTACHMENT A TO APPENDIX 4

### GENERATOR DOWNSIZING INTERCONNECTION STUDY RESPONSIBILITY ALLOCATION

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

Purpose: This Attachment A to the “Agreement for the Allocation of Responsibilities with Regard to Generator Downsizing Opportunity, Generator Downsizing Study, and Amendment of Generator Interconnection Agreements” serves as further clarification of the roles and responsibilities of the parties to this Agreement. The CAISO will assign responsibility for performance of portions of the Generator Downsizing Study to the relevant PTOs, under the direction and oversight of, and approval by, the CAISO, as set forth in this Attachment A. This document serves as a general overview of only the roles and responsibilities as between the CAISO and PTOs. This Agreement does not include the process steps, involvement or obligations of the Interconnection Customer (IC). This Agreement is not inclusive of all procedures necessary to comply with all provisions of Appendix GG and the Downsizing Generator Payment Obligation Agreement.

#### Generator Downsizing Request (GDR) Process

1. CAISO forwards the GDR to the PTO within three (3) Business Days (BD) of CAISO receipt of the GDR
2. PTO(s) provides any feedback regarding GDR to CAISO within three (3) BD

#### Generator Downsizing Study Timeline

Line	Generator Downsizing Study	Typical Calendar Days	Timeline (Days)
1	CAISO and PTOs confirm initial Generating Facility groups for initial Dispatch assumptions and cost allocation purposes (except for thermal overload and short circuit mitigation).	1	1
2	PTOs update Base Cases, each representing all Generating Facilities of the Downsizing Generators and potential Affected Generators.	7	2-8
3	PTOs update contingency lists.	4	9-12
4	CAISO reviews and approves Base Cases and contingency lists.	7	9-15
5	CAISO performs on-peak Deliverability Assessment.	21	16-36
6	At the CAISO’s direction, the PTOs perform the off-peak Load Flow, and summer peak and off-peak Post Transient and Stability analyses, and submit results for CAISO review.	21	16-36
7	CAISO proposes network upgrades. The PTO develops mitigation plans to supplement CAISO proposed mitigation plans for consideration, as appropriate, and submits to CAISO for review and direction.	14	37-50

8	CAISO retests Deliverability Assessment results with proposed Delivery Network Upgrades and Reliability Network Upgrades. PTOs review and comment on retest results.	7	51-57
9	CAISO assigns cost responsibility of Delivery Network Upgrades to generators.	14	58-71
10	PTOs assign cost responsibility of Reliability Network Upgrades to generators.	14	58-71
<b>Short Circuit Duty</b>			
11	CAISO directs PTOs to update Base Cases	49	1-50
12	PTOs perform SCD analyses	14	51-64
13	PTOs update short circuit duty mitigation and submit to CAISO for review	14	65-78
<b>Facility cost estimates and schedules</b>			
14	At the CAISO's direction, PTO(s) prepares cost estimates and schedules for modified or substituted direct assignment facilities and Network Upgrades.	120	1-120
<b>Generator Downsizing Study Report</b>			
15	At the CAISO's direction, PTOs prepare draft report for modified or substituted Network Upgrades and the PTO's Interconnection Facilities.	50	79-128
16	CAISO reviews draft report and submits comments, recommendations and direction to the PTOs.	10	129-138
17	PTOs incorporate CAISO's directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and the PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report.	7	139-145
18	PTOs submit final draft report to the CAISO. The CAISO will finalize the report and tender the CAISO approved report to the ICs.	5	146-150

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

**Generator Downsizing Interconnection Agreement Amendment Process**

Line	GIA Amendment Activity	Typical Calendar Days	Timeline (Days)
19	At CAISO's direction, PTO prepares and tenders amendment to Interconnection Agreement, in the form of Appendix HH, or revised Interconnection Agreement, as applicable	30	151-180
20	PTO, with CAISO input, negotiates amended or revised Interconnection Agreement as necessary with Downsizing Generator or Affected Generator (all parties can agree to extend timeline)	60 days (App. U) 30 days (App. S) 90 days (App. Y)	151-240 (App. U) 151-211 (App. S) 151-271 (App. Y)
21	CAISO and PTO finalize and file Interconnection Agreement or amendment to Interconnection Agreement under respective tariffs. (all parties can agree to extend timeline)	60 days (App. U) 30 days (App. S) 90 days (App. Y)	151-240 (App. U) 151-211 (App. S) 151-271 (App. Y)

**ATTACHMENT B TO APPENDIX 4**

**CONTACTS FOR NOTICES**

**[Section 4.15]**

**CAISO**

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

**[NAME OF PTO]**

[Address of PTO]

**APPENDIX HH**

**Generation Interconnection Agreement Amendment**

**Re: Generator Downsizing**

*This Appendix HH is to be used to implement amendments to Generation Interconnection Agreements pursuant to CAISO Tariff Appendix GG for Interconnection Customers who are either Downsizing Generators or Affected Generators*



(b) WHEREAS, the Interconnection Customer's Interconnection Request has been included in the Generator Downsizing Study conducted pursuant to CAISO Tariff Appendix GG, wherein the Interconnection Customer was [check applicable alternative]

[ ] a Downsizing Generator with a Generator Downsizing Request to reduce the megawatt capacity of the Generating Facility; or

[ ] an Affected Generator whose Interconnection configuration was modified or otherwise affected by the Generator Downsizing Study;

(c) WHEREAS, the Parties desire to update the GIA following the Generator Downsizing Study;

**NOW, THEREFORE**, the Parties agree as follows:

### AMENDMENT

1. Unless otherwise defined herein, all defined terms used herein shall have the meaning set out in CAISO Tariff Appendix A, CAISO Tariff Appendix GG, or the GIA.
2. *[This Amendment Section 2 shall apply only to a Large Generator Interconnection Customer who was a Downsizing Generator whose Generator Downsizing Request was included in the Generator Downsizing Study]*

Article 5.16 shall be amended as follows:

Notwithstanding any other provision of the GIA or this Article 5.16, the Interconnection Customer shall have no further right of suspension.

*Check this provision if the Interconnection Customer is an Affected Generator*

[ ] This Amendment Article 2 is intentionally omitted.

3. The "Generating Facility" as defined in the GIA is hereby amended and superseded by the following definition

*[Generating Facility definition – include reduced MW value capacity]*

4. This Amendment Section 4 adds the following Article XX to the GIA:

**XX Permitted Reductions in output capacity (MW generating capacity) of the Generating Facility.** An Interconnection Customer may reduce the MW capacity of the Generating Facility by up to five percent (5%) for any reason, during the time period between the Effective Date of this GIA and the Commercial Operation Date. The five percent (5%) value shall be established by reference to the MW generating capacity as set forth in this GIA as amended pursuant to Appendix GG.

The CAISO (in consultation with the applicable Participating TO(s)) will consider an Interconnection Customer's request for a reduction in the MW generating capacity greater than five percent (5%) under limited conditions where the Interconnection Customer reasonably demonstrates to the Participating TO and CAISO that the MW generation capacity reduction is warranted due to reasons beyond the control of the

Interconnection Customer. Reasons beyond the control of the Interconnection Customer shall consist of any one or more of the following:

- (i) the Interconnection Customer's failure to secure required permits and other governmental approvals to construct the Generating Facility at its total MW generating capacity as specified in its Interconnection Request after the Interconnection Customer has made diligent effort to secure such permits or approvals;
- (ii) the Interconnection Customer's receipt of a written statement from the permitting or approval authority (such as a draft environmental impact report) indicating that construction of a Generating Facility of the total MW generating capacity size specified in the Interconnection Request will likely result in disapproval due to a significant environmental or other impact that cannot be mitigated;
- (iii) failure to obtain the legal right of use of the full site acreage necessary to construct and/or operate the total MW generating capacity size for the entire Generating Facility, after the Interconnection Customer has made a diligent attempt to secure such legal right of use. This subsection (iii) applies only where an Interconnection Customer has previously demonstrated and maintained its demonstration of Site Exclusivity prior to invoking this subsection as a reason for downsizing.

If relying on subsections (i) or (ii) above, in order to be eligible for a capacity reduction greater than five percent (5%), the Interconnection Customer must also demonstrate to the CAISO that a reduction of MW generating capacity of the Generating Facility to the reduced size that the Interconnection Customer proposes will likely overcome the objections of the permitting/approving authority or otherwise cause the permitting/approving authority to grant the permit or approval. The Interconnection Customer may satisfy this demonstration requirement by submitting to the CAISO either a writing from the permitting/approving authority to this effect or other evidence of a commitment by the permitting/approving authority that the MW capacity reduction will remove the objections of the authority to the permit/approval application.

If relying on subsection (iii) above, the Interconnection Customer must also reasonably demonstrate to the CAISO that the proposed reduced-capacity Generating Facility can be constructed on the site over which the Interconnection Customer has been able to obtain legal rights of use.

Upon such demonstration to the reasonable satisfaction of the CAISO (after consultation with the applicable Participating TO) the CAISO will permit such reduction. No permitted reduction of MW generation capacity under this Article shall operate to diminish the Interconnection Customer's cost responsibility for Network Upgrades or to diminish the Interconnection Customer's right to repayment for financing of Network Upgrades under this generator interconnection agreement.

5. The GIA shall be amended to delete the following Appendices/Attachments to the GIA in their entirety  
 [Check applicable references to deleted and replaced appendices]

[ ]	<i>If GIA is an LGIA</i>	[ ]	<i>If GIA is an SGIA</i>
[ ]	Appendix A,	[ ]	Attachment 1
[ ]	Appendix B,	[ ]	Attachment 2
[ ]	Appendix C,	[ ]	Attachment 3
[ ]	Appendix D,	[ ]	Attachment 4
[ ]	Appendix E,	[ ]	Attachment 5
[ ]	Appendix F	[ ]	Attachment 6
[ ]	Appendix G	[ ]	Attachment 7
		[ ]	Attachment 8

The deleted appendices/attachments are replaced with those attached to this Amendment.

6. This Amendment constitutes the complete and final agreement of the Parties with respect to the matters set forth in this Amendment, and supersedes all prior understandings, whether written or oral, with respect to such subject matter set forth therein.
7. Except as expressly modified herein, all other terms of the GIA (and subsequent amendments thereto) shall remain unchanged. In the event of conflict between the terms of this Amendment and the GIA, the terms of this Amendment shall govern.
8. This Amendment may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same agreement.

**IN WITNESS WHEREOF**, the Parties have caused this Amendment to be duly executed by and through their respective authorized representatives as of the date referenced above as the effective date.

**Interconnection Customer**

By \_\_\_\_\_  
 Printed Name \_\_\_\_\_  
 Title: \_\_\_\_\_

**California Independent System Operator Corporation**

By \_\_\_\_\_  
 Printed Name \_\_\_\_\_  
 Title: \_\_\_\_\_

---

**Participating TO**

By \_\_\_\_\_  
 Printed Name \_\_\_\_\_  
 Title: \_\_\_\_\_

**Attachment C – Marked Tariff**

**Tariff Amendment to Implement Downsizing Opportunity for Interconnecting Generator Projects**

**California Independent System Operator**

**Fifth Replacement FERC Electric Tariff**

**October 26, 2012**

Appendix GG  
One-Time Interconnecting Generator  
Downsizing Opportunity

## **Section 1 Objectives and Definitions**

### **1.1 Objectives and Applicability**

This Appendix GG sets out the requirements for Interconnection Customers with Interconnection Requests to interconnect either a Small or Large Generating Facility to the CAISO Controlled Grid who (a) meet the eligibility criteria set out in this Appendix GG and (b) elect to participate in the one-time opportunity set out in this Appendix GG to modify their Interconnection Requests to reduce the megawatt generating capacity of the Small or Large Generating Facility which is the subject of the request.

### **1.2 Definitions**

#### **1.2.1 Master Definitions Supplement and Section References.**

Unless the context otherwise requires, any word or expression defined in this Appendix GG shall have the same meaning used in either (a) the Master Definitions Supplement, Appendix A to the CAISO Tariff, or (b) the CAISO Tariff appendix applicable to the Interconnection Customer's Interconnection Request. A reference to a "Section" shall mean a reference to that numerical section of this Appendix GG unless otherwise indicated. A reference to a "GIP Section" shall mean a reference to that numerical section of the CAISO Tariff Appendix Y, Generator Interconnection Procedures.

#### **1.2.2 Special Definitions for this Appendix GG.**

In this Appendix GG, the following words and expressions shall have the meanings set opposite them:

"Affected Generator" shall mean an Interconnection Customer who is not a Downsizing Generator whose Interconnection configuration, including but not limited to cost responsibility or schedule for Network Upgrades, has been modified through the Generator Downsizing Study.

"Downsizing Generator" shall mean an Interconnection Customer who submits a Generator Downsizing Request under this Appendix GG.

"Downsizing Generator Interconnection Agreement Amendment" shall mean the pro forma amendment to a Downsizing Generator's or Affected Generator's Generator Interconnection Agreement, which pro forma amendment is set forth in CAISO Tariff Appendix HH.

"Downsizing Generator Payment Obligation Agreement" shall mean the repayment agreement set forth in Appendix 3 of this Appendix GG, obligating the Downsizing Generator to pay for study work conducted for the Generator Downsizing Study, preparation of the Generator Downsizing Study Reports and Generator Interconnection Agreements, and amendments thereto necessary to implement this Appendix GG.

"Generator Downsizing Deposit" shall mean a deposit in the amount of two hundred thousand dollars (\$200,000) required by this Appendix GG that is to be paid in cash or cash equivalent funds only.

"Generator Downsizing Request" shall mean a request submitted under this Appendix GG to modify the Downsizing Generator's Interconnection Request to reduce the megawatt generating capacity of the Small or Large Generating Facility.

“Generator Downsizing Request Due Date” shall mean January 4, 2013 at five o’clock (5:00) p.m., Pacific time, which shall be the due date for CAISO receipt of any Generator Downsizing Request under this Appendix GG.

“Generator Downsizing Study” shall mean that study or studies conducted in accordance with this Appendix GG.

“Generator Downsizing Study Report” shall mean the study report issued in conjunction with the Generator Downsizing Study to Downsizing Generators and Affected Generators.

“Reasonable Efforts” shall mean, with respect to an action required to be attempted or taken by a Party under this Appendix GG, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

## **Section 2 Generator Downsizing Request**

### **2.1 General**

A Downsizing Generator shall submit its Generator Downsizing Request to the CAISO in the form of Appendix 1 to this Appendix GG. The CAISO will forward a copy of the Generator Downsizing Request to the applicable Participating TO(s).

### **2.2 Roles and Responsibilities**

- (a) Each Generator Downsizing Request will be subject to the direction and oversight of the CAISO. The CAISO will conduct or cause to be performed the Generator Downsizing Study and any additional studies the CAISO determines to be reasonably necessary, and will direct the applicable Participating TO(s) to perform portions of studies where the Participating TO has specific and non-transferable expertise or data and can conduct the studies more efficiently and cost-effectively than the CAISO. The CAISO will coordinate with Affected System Operators in accordance with this Appendix GG and GIP Section 3.7.
- (b) The CAISO will undertake Reasonable Efforts to complete or cause to be completed all studies as required within the timelines provided in this Appendix GG.
- (c) Each Downsizing Generator shall pay the costs for the Generator Downsizing Study and preparation of the Generator Downsizing Study Report prepared for the Downsizing Generator and Affected Generators, and the costs associated with amending the Generator Interconnection Agreements of the Downsizing Generator and any Affected Generators, as necessary, in accordance with Sections 2.7 and 2.8.
- (d) The CAISO has established a pro forma agreement entitled “Agreement for the Allocation of Responsibilities with Regard to Generator Downsizing Opportunity, Generator Downsizing Study, and Amendment of Generator Interconnection Agreements,” attached to this Appendix GG as Appendix 4 and incorporated herein by reference, for execution by the CAISO and the applicable Participating TO(s).

### **2.3 Generator Downsizing Request Due Date**

All Generator Downsizing Requests must be submitted by the Generator Downsizing Request Due Date.

## **2.4 Eligibility to Submit Request**

In order to be eligible to submit a Generator Downsizing Request, the Interconnection Customer must

- (1) have an Interconnection Request currently being processed under one of the following provisions of the CAISO Tariff:
  - (a) CAISO Tariff Appendix Y (Generator Interconnection Procedures (GIP)) applying to Interconnection Requests processed in the Transition Cluster and Queue Clusters 1 through 4;
  - (b) CAISO Tariff Appendix U (Standard Large Generator Interconnection Procedures (LGIP)) applying to Large Generating Facility Interconnection Requests not assigned to a Queue Cluster Window;
  - (c) CAISO Tariff Appendix W (Interconnection Procedures in Effect Prior to July 1, 2005 ("Amendment 39 Procedures")) applicable to Small Generating Facilities interconnecting in accordance with Section 1.3 of Appendix S and Large Generating Facilities in accordance with Section 5.1 of Appendix U; or
  - (d) CAISO Tariff Appendix S (Small Generator Interconnection Procedures).
- (2) In addition, the Interconnection Customer must meet all of the following requirements of good standing of its Interconnection Request by the Generator Downsizing Request Due Date:
  - (a) The Interconnection Request has not been withdrawn or deemed withdrawn by the CAISO. If the CAISO has issued a notice of deemed withdrawal to the Interconnection Customer, which the Interconnection Customer has not cured, then the Interconnection Customer shall not be eligible to submit a Generator Downsizing Request.
  - (b) The Interconnection Customer has complied with all applicable requirements of the CAISO Tariff under which the Interconnection Request is being processed, including timely submittal of all Interconnection Financial Security postings which have come due.
  - (c) The Interconnection Customer is in compliance with the terms of its Generator Interconnection Agreement, including Interconnection Customer milestones; has not received a notice of breach or notice of default which the Interconnection Customer has not cured; and does not have its Interconnection Request or Generator Interconnection Agreement in suspension under Article 5.16 or other applicable suspension provision of the Generator Interconnection Agreement.

Interconnection Customers with Interconnection Requests processed under CAISO Appendix DD (Generator Interconnection and Deliverability Allocation Procedures (GIDAP)) shall not be eligible to submit a Generator Downsizing Request.

## **2.5 Processing a Generator Downsizing Request**

### **2.5.1 Initiating the Generator Downsizing Request.**

To initiate the Generator Downsizing Request, the Downsizing Generator must submit all of the following by the Generator Downsizing Request Due Date:

- (i) A completed application in the form of Appendix 1 to this Appendix GG, including required technical data. The technical data shall include data pertaining to the reduced megawatt generating capacity of the Generating Facility corresponding to the megawatt reduction requested. The Downsizing Generator may change the step-up transformer and parameters of the Downsizing Generator's Interconnection Facilities due to the smaller megawatt capacity size. Proposed modifications to the Generating Facility technology or inverter type are beyond the scope of the Generator Downsizing Request and shall not be permitted under this Appendix GG.
- (ii) A certification in the form of Appendix 2 to this Appendix GG that the Downsizing Generator meets the eligibility requirements of Section 2.4.
- (iii) The Generator Downsizing Deposit.

Failure to submit either the certification required by Section 2.5.1(ii) or the Generator Downsizing Deposit required by Section 2.5.1(iii) by the Generator Downsizing Request Due Date shall result in the Generator Downsizing Request being treated as void and not subject to cure of a deficiency pursuant to Section 2.5.2.

## **2.5.2 Validation of Generator Downsizing Request.**

### **2.5.2.1 Notification.**

The CAISO shall notify the Downsizing Generator no later than ten (10) Business Days after the Generator Downsizing Request Due Date, whether the Generator Downsizing Request is deemed complete, valid, and ready to be studied.

### **2.5.2.2 Deficiencies in the Request as to Application Information.**

A Generator Downsizing Request will not be considered to be a valid request until the CAISO determines that the information contained in the Generator Downsizing Request is complete and that the Downsizing Generator has complied with all of the requirements of Section 2.5.1.

Only if the Generator Downsizing Request contains a deficiency in the application required by Section 2.5.1(i) will the CAISO provide the Downsizing Generator with an opportunity to cure the deficiency. In that event, the CAISO will notify the Downsizing Generator of the reason(s) that the application is deficient and will request additional information to cure the deficiency. In order to remain eligible to participate in the generator downsizing process, the Downsizing Generator must provide the additional requested information needed to constitute a valid Generator Downsizing Request. Whenever additional requested information is provided by the Downsizing Generator, the CAISO shall notify the Downsizing Generator within five (5) Business Days of receipt of the additional requested information whether the Generator Downsizing Request is valid. If the Generator Downsizing Request continues to fail to meet the requirements set forth in Section 2.5.1(i), the CAISO shall include in its notification to the Downsizing Generator the reasons for such failure. If a Generator Downsizing Request has not been deemed valid, the Downsizing Generator must submit all information necessary to meet the requirements of Section 2.5.1(i) no later than fifteen (15) Business Days after the Generator Downsizing Request Due Date or ten (10) Business Days after the CAISO first provided notice that the Generator Downsizing Request was not valid, whichever is later. Generator Downsizing Requests that have not met the requirements of Section 2.5.1(i) within fifteen (15) Business Days after the Generator Downsizing Request Due Date or ten (10) Business Days after the CAISO first provided notice that the Generator

Downsizing Request was not valid, whichever is later, will be deemed invalid and will not be included in Generator Downsizing Studies.

## **2.6 Use of Generator Downsizing Deposit**

The CAISO shall deposit all Generator Downsizing Deposits in an interest-bearing account at a bank or financial institution designated by the CAISO. The Generator Downsizing Deposit shall be applied to pay for prudent costs incurred by the CAISO, the Participating TOs, or third parties at the direction of the CAISO or Participating TOs, as applicable, to perform and administer the generator downsizing process and to communicate with Downsizing Generators with respect to their Generator Downsizing Requests.

These costs shall include but not be limited to:

1. The costs of preparing the Generator Downsizing Study and associated Generator Downsizing Study Report for the Generating Facility subject to the Generator Downsizing Request and for any Affected Generators; and
2. The costs associated with amending the Generator Interconnection Agreements of the Downsizing Generator and any Affected Generators, as necessary.

## **2.7 Obligations of Downsizing Generators for Study Costs**

A Downsizing Generator shall be responsible for all actual costs incurred in connection with preparing the Generator Downsizing Study and the Generator Downsizing Study Reports. A Downsizing Generator's share of actual study costs shall be determined by dividing the total amount of actual study costs by the number of valid Generator Downsizing Requests, but shall be no higher than an amount equal to 150 percent of the Downsizing Generator's share of the preliminary estimate posted in accordance with Section 3 of the aggregate costs incurred in connection with preparing the Generator Downsizing Study and the Generator Downsizing Study Report. If the Generator Downsizing Deposit is insufficient to cover the costs for which the Downsizing Generator is responsible, the CAISO shall invoice the Downsizing Generator and such amount shall be paid within thirty (30) calendar days of the date of the invoice.

## **2.8 Obligations of Downsizing Generators for Costs of Amending GIAs**

The Downsizing Generator's responsibility for the costs to amend Generator Interconnection Agreements pursuant to Section 13 will be \$10,000 (ten thousand dollars) for its own Generator Interconnection Agreement and \$10,000 (ten thousand dollars) for each Generator Interconnection Agreement of an Affected Generator that is amended, in whole or in part, due to the Downsizing Generator's Generator Downsizing Request.

In cases where multiple Generator Interconnection Agreements relate to multiple Generator Downsizing Requests, the cost responsibility of each Downsizing Generator that submitted one of the multiple Generator Downsizing Requests will be calculated by (i) multiplying the number of amended Generator Interconnection Agreements by \$10,000 (ten thousand dollars) and then (ii) dividing the resulting amount by the number of Generator Downsizing Requests.

A Downsizing Generator's cost responsibility under this Section shall be capped at \$100,000 (one hundred thousand dollars).

## **2.9 Refund of Generator Downsizing Deposit**

If a Downsizing Generator's total obligation for both actual study costs, per Section 2.7, and amending GIAs, per Section 2.8, is less than its Generator Downsizing Deposit, then the Downsizing Generator will be refunded the unused balance of its Generator Downsizing Deposit, together with applicable interest from the interest-bearing account at the bank or financial institution into which the funds were deposited in accordance with Section 2.6.

## **2.10 Allocation Between the CAISO and Participating TOs of Study Expenses**

The CAISO and the applicable Participating TO(s) shall be paid for expenses incurred in undertaking the Generator Downsizing Study from the amounts paid by the Downsizing Generators pursuant to Section 2.7.

If the total study expenses incurred by the CAISO and the applicable Participating TO(s) exceed the amounts paid by Downsizing Generators by reason of the cost cap set forth in Section 2.7, then the CAISO and the applicable Participating TO(s) will allocate among themselves the total amount paid pro rata, in the proportion of their individual study costs to the total amounts paid by Downsizing Generators.

## **2.11 Allocation Between the CAISO and Participating TOs of Costs of Amending GIAs Collected from Downsizing Generators**

The CAISO will be allocated fifty (50) percent of the amounts paid by the Downsizing Generator for the costs to amend Generator Interconnection Agreements pursuant to Section 2.8, and the applicable Participating TO(s) will be allocated the other fifty (50) percent of such amounts. If there is more than one applicable Participating TO, then the amount paid by Downsizing Generators shall be apportioned as agreed to between the CAISO and the applicable Participating TOs.

## **2.12 Invoicing and Related Obligations**

The Participating TO and any third parties performing work related to the Generator Downsizing Study on the Downsizing Generator's behalf shall invoice the CAISO for such work within seventy-five (75) calendar days of completion of the Generator Downsizing Study, and, within thirty (30) days thereafter, the CAISO shall issue an invoice to the Downsizing Generator based upon such submitted Participating TO and third-party invoices and the CAISO's own costs for the Generator Downsizing Study. The invoice shall include a detailed and itemized accounting of the cost of each Generator Downsizing Study. The CAISO shall draw from the Generator Downsizing Deposit in accordance with the invoice.

If the Downsizing Generator's obligations for

- (i) the actual costs of performing the Generator Downsizing Studies, subject to the cost cap contained in Section 2.7; and
- (ii) the cost responsibility of amending GIAs, subject to the cost cap contained in Section 2.8

exceed the Generator Downsizing Deposit, then the Downsizing Generator shall pay the difference, in accordance with the CAISO-issued invoice, within thirty (30) calendar days. The CAISO shall not be obligated to continue to conduct any other studies unless the Downsizing Generator has paid all outstanding invoices.

### **Section 3 Internet Posting**

Following the Generator Downsizing Request Due Date, the CAISO shall post on the CAISO Website a listing of Interconnection Requests, identified by queue number, having made valid Generator Downsizing Requests. In addition, the CAISO shall publish on the CAISO Website a preliminary estimate of the aggregate study costs for conducting the Generator Downsizing Study. A Downsizing Generator's share of the preliminary estimate of the aggregate study costs for conducting the Generator Downsizing Study shall be determined by dividing the preliminary estimate by the number of valid Generator Downsizing Requests. The CAISO shall issue a Market Notice that it has posted the information in accordance with this Section.

### **Section 4 Coordination with Affected Systems**

The CAISO will notify the Affected System Operators of pertinent results of the Generator Downsizing Study and provide copies of Generator Downsizing Study Reports to Affected System Operators upon request. The Downsizing Generators shall cooperate with the CAISO and Affected System Operators in all matters related to the conduct of the Generator Downsizing Study.

### **Section 5 Withdrawal of Generator Downsizing Request**

#### **5.1 Scope of Withdrawal Rights**

A Downsizing Generator's ability to withdraw the Generator Downsizing Request is limited to the following:

- (i) First Opportunity to Withdraw. A Downsizing Generator shall have five (5) Business Days following the CAISO issuance of the Market Notice described in Section 3 to withdraw its Generator Downsizing Request. If the CAISO does not receive written notice of withdrawal by 8:00 a.m. Pacific time on the sixth (6<sup>th</sup>) Business Day following CAISO issuance of the Market Notice, the Downsizing Generator's Generator Downsizing Request will remain in effect.

Following a timely withdrawal under this Section 5.1(i), the CAISO shall refund the Downsizing Generator's Generator Downsizing Deposit, less those costs incurred in validating the Generator Downsizing Request.

- (ii) Second Opportunity to Withdraw. Following written notice from the CAISO stating that preliminary results of the Generator Downsizing Study indicate that the Downsizing Generator's cost responsibility for Network Upgrades is expected to increase by more than five percent (5%) or five million dollars (\$5,000,000), whichever is lower, from its cost responsibility identified in its Interconnection Facilities Study or Phase II Interconnection Study report, or its Generator Interconnection Agreement, if it has executed one, the Downsizing Generator shall have seven (7) Business Days following receipt of such notice to withdraw its Generator Downsizing Request. If the CAISO does not receive written notice of withdrawal by 8:00 a.m. Pacific time on the eighth (8<sup>th</sup>) Business Day following the Downsizing Generator's receipt of the Generator Downsizing Study Report, the Generator Downsizing Request will remain in effect.

A Downsizing Generator withdrawing its Generator Downsizing Request under this Section 5.1(ii) will not receive a refund of the Generator Downsizing Deposit. The CAISO will apply the Generator Downsizing Deposit against the deposit costs incurred in validating the Generator Downsizing Request and conducting

the Generator Downsizing Study. The balance of the Generator Downsizing Deposit shall be treated in accordance with Section 37.9.4 of the CAISO Tariff.

Withdrawal shall result in the removal of the Generator Downsizing Request from the Generator Downsizing Study.

## **5.2 Commitment to Go Forward**

Other than the two withdrawal opportunities set out in Section 5.1, a Downsizing Generator has no opportunity to withdraw its Generator Downsizing Request, and must satisfy a Downsizing Generator's obligations set forth in this Appendix GG.

## **Section 6 Generator Downsizing Study Process**

### **6.1 Downsizing Generator Payment Obligation Agreement**

No later than five (5) calendar days prior to the close of the first opportunity to withdraw under Section 5.1(i), the CAISO shall provide to each Downsizing Generator with a valid Generator Downsizing Request received by the Generator Downsizing Request Due Date a pro forma Downsizing Generator Payment Obligation Agreement in the form set forth in Appendix 3 of this Appendix GG. The pro forma Generator Downsizing Payment Obligation Agreement shall specify that the Downsizing Generator is responsible for and agrees to pay costs of the Generator Downsizing Study, the preparation and issuance of Generator Downsizing Study Reports to the Downsizing Generator and Affected Generators, and the negotiation and execution of amendments to the Generator Interconnection Agreements of Downsizing Generators and Affected Generators, including reasonable administrative costs, and all requirements of this Appendix GG.

Within five (5) calendar days of tender, the Downsizing Generator shall execute and return the Downsizing Generator Payment Obligation Agreement. If the Downsizing Generator fails to execute and return the Downsizing Generator Payment Obligation Agreement, then the Generator Downsizing Request shall be void and the CAISO shall refund the Downsizing Generator's Generator Downsizing Deposit, less the costs incurred in validating the Generator Downsizing Request.

### **6.2 Interconnection Base Case Data Used in Generator Downsizing Study**

In conjunction with the Generator Downsizing Study conducted by the CAISO under this Appendix GG, the CAISO and any applicable Participating TO(s) shall utilize applicable Interconnection Base Case Data.

The CAISO, in coordination with the applicable Participating TO(s), shall publish updated Interconnection Base Case Data containing applicable Base Case data developed for the Generator Downsizing Study, to a secured section of the CAISO Website.

Interconnection Base Case Data shall include information subject to the confidentiality provisions set forth in Section 13.1 of Appendix Y.

The CAISO shall require current and former Interconnection Customers, Market Participants, and electric utility regulatory agencies within California to sign a CAISO confidentiality agreement and, where the current or former Interconnection Customer or Market Participant is not a member of WECC, or its successor, an appropriate form of agreement with WECC, or its successor, as necessary. All other entities or persons seeking Interconnection Base Case Data must satisfy the foregoing requirements as well

as all requirements under 18 C.F.R. Section 388.113 for obtaining the release of Critical Energy Infrastructure Information (as that term is defined by FERC).

### **6.3 Grouping Generator Downsizing Requests**

The CAISO, in coordination with the applicable Participating TO(s), may develop one or more Group Studies for the Downsizing Generators and Affected Generators. A Group Study will include, in the CAISO's sole judgment after coordination with the applicable Participating TO(s), the Downsizing Generators and the Affected Generators that affect one another electrically with respect to the analysis being performed, without regard to the nature of the underlying Interconnection.

### **6.4 Scope and Purpose of Generator Downsizing Study**

The CAISO shall issue a Market Notice of the anticipated commencement and completion dates for the Generator Downsizing Study. The Generator Downsizing Study shall evaluate the impact of all valid and non-withdrawn Generator Downsizing Requests received by the Generator Downsizing Request Due Date on the current plan of service for Network Upgrades and Participating TOs' Interconnection Facilities resulting from all completed Interconnection Studies, and shall identify alternatives to Network Upgrades or Participating TOs' Interconnection Facilities contained in the current plan of service and the timing impacts of such refreshed upgrades or facilities on the Commercial Operation Dates of Downsizing Generators and Affected Generators.

The Generator Downsizing Study will consist of a short-circuit analysis, a stability analysis to the extent the CAISO and applicable Participating TO(s) reasonably expect transient or voltage stability concerns, a power flow analysis, including off-peak analysis, and an On-Peak Deliverability Assessment. The Generator Downsizing Study will state, within Group Studies, (i) the assumptions upon which it is based, (ii) the results of the analyses, and (iii) the revised requirements or potential impediments to providing the requested Interconnection Service to all Interconnection Requests. The Generator Downsizing Study will provide a list of Network Upgrades to the CAISO Controlled Grid and of Participating TOs' Interconnection Facilities that have been removed, modified, or substituted as a result of the Generator Downsizing Requests, and, as applicable, an estimate of any other financial impacts (i.e., on Local Furnishing Bonds).

Applicable study results shall be set out in a Generator Downsizing Study Report provided, as applicable, to Downsizing Generators and Affected Generators. In general, the Generator Downsizing Study Report shall set out updated Interconnection configuration information with respect to Network Upgrades and Participating TOs' Interconnection Facilities as a result of the Generator Downsizing Requests.

The Generator Downsizing Study Report shall also set forth the applicable cost estimates for Network Upgrades and Participating TOs' Interconnection Facilities if the scope of the Network Upgrades or Participating TOs' Interconnection Facilities has changed as a result of the Generator Downsizing Study. These cost estimates shall form the updated cost estimates for Network Upgrades and Participating TOs' Interconnection Facilities, shall adjust any earlier estimates contained in the prior Interconnection Studies and reports earlier provided to the Downsizing Generators and Affected Generators, and shall establish the basis for the Downsizing Generator's or Affected Generator's Interconnection Financial Security postings.

## Section 7 Cost Allocation for Network Upgrades Modified or Substituted in Generator Downsizing Study

The cost estimates for modified or substituted Network Upgrades identified in the Generator Downsizing Study shall be determined in accordance with the methodology used for the Phase II Interconnection Study for Interconnection Requests in a Queue Cluster.

### 7.1 Cost Allocation for Network Upgrades and Participating TOs' Interconnection Facilities

To the extent that Network Upgrades or Participating TOs' Interconnection Facilities were modified or substituted in the Generator Downsizing Study as a result of the Generator Downsizing Requests, the costs shall be assigned to the Interconnection Customers who originally triggered the Network Upgrades or Participating TOs' Interconnection Facilities on a pro rata basis in proportion to the costs allocated among such Interconnection Customers in the governing Interconnection Studies undertaken before the Generator Downsizing Study. Provided, however, that no Interconnection Customer except a Downsizing Generator shall be assigned a cost amount arising out of the Generator Downsizing Study greater than the cost amount assigned to such Interconnection Customer for such Network Upgrades and Participating TOs' Interconnection Facilities in the Interconnection Customer's earlier-governing Interconnection Study or, if applicable, in the Interconnection Customer's Generator Interconnection Agreement.

### 7.2 Limitation on Cost Allocation as a Result of Downsizing

- (1) If the estimated costs of a Network Upgrade or Participating TO's Interconnection Facilities modified or substituted as a result of Generator Downsizing Requests that are assigned to an Affected Generator in this process are higher than the costs which such Affected Generator has already been assigned for the original Network Upgrade or Participating TO's Interconnection Facilities pursuant to their relevant Interconnection Studies, such costs shall not be allocated to the Affected Generator. Instead, such costs shall be re-allocated to applicable Downsizing Generators pursuant to the methodology set forth in Section 7.1.
- (2) If the Generator Downsizing Study indicates that a Network Upgrade identified in a Downsizing Generator's pertinent Interconnection Studies will no longer be needed by the originally triggering Downsizing Generator, or by Interconnection Customers in the same Cluster Study as the Downsizing Generator, but the Network Upgrade or a substitute Network Upgrade will still be needed by later-queued Interconnection Customers (provided they are being studied in Queue Cluster 4 or earlier) in the Generator Downsizing Study, the later-queued Interconnection Customers shall not be allocated the costs of the Network Upgrade. Instead, the Interconnection Customers that were originally assigned the costs of such Network Upgrade will continue to be assigned the costs of the Network Upgrade, or the substitute Network Upgrade, and shall be required to fund those Network Upgrades on the same schedule as contained in the Downsizing Generator's Generator Interconnection Agreement prior to the Downsizing Request, if maintenance of such schedule is needed by Affected Generators.
- (3) If, as a result of the Generator Downsizing Study, a Network Upgrade that was originally triggered by an interconnection to the Distribution System of a Participating TO is no longer needed by such interconnection, but the upgrade is needed by Affected Generators, then the cost of the upgrade shall not be allocated to the Distribution System interconnection customer; rather, the cost shall be allocated among the Downsizing Generators, based upon flow impact in

the case of Delivery Network Upgrades and based upon short circuit duty or megawatt (MW) capacity in the case of Reliability Network Upgrades, in accordance with Section 6 of Appendix Y.

### **7.3 Effect of Downsizing on Maximum Cost Responsibility for Generators in a Queue Cluster or Independent Study Process**

For Downsizing Generators or Affected Generators in a Queue Cluster or in the Independent Study Process, if the Generator Downsizing Study results in a change in the cost of Network Upgrades assigned to the Downsizing Generator or Affected Generator, then the Downsizing Generator's or Affected Generator's maximum cost responsibility for Network Upgrades, and the maximum value for the Interconnection Financial Security required of the Generator, shall be the amount assigned in the Generator Downsizing Study. However, for Affected Generators, if the assigned Network Upgrade costs increase as a result of the Generator Downsizing Study, then the Affected Generator's maximum cost responsibility shall not be modified, and shall continue to be determined as set forth in Section 9.5 of Appendix Y.

### **Section 8 Commercial Operation Date**

The Downsizing Generator or Affected Generator may request that the CAISO evaluate a proposed change of the Commercial Operation Date of a Generating Facility, or any phase of a Phased Generating Facility, only to the extent that the change is directly and reasonably related to the in-service dates of the Network Upgrades reflected in the Downsizing Generator's or Affected Generator's Interconnection configuration as such Network Upgrades and in-service dates have been refreshed in the Generator Downsizing Study. The CAISO and Participating TO shall consider the request and their agreement to such change request shall not be unreasonably withheld. The Commercial Operation Date change request must be made prior to the execution of the Downsizing Generator Interconnection Agreement Amendment.

### **Section 9 Modifications**

Proposed modifications to the Interconnection Request that do not directly relate to

- (i) the requested reduction in megawatt capacity of the Generating Facility pursuant to this Appendix GG; or
- (ii) a proposed change of the Commercial Operation Date of the Generating Facility or a phase of a Phased Generating Facility in accordance with Section 8

are beyond the scope of the Generator Downsizing Request and shall not be evaluated in the Generator Downsizing Study or as part of the Generator Downsizing Request activities under this Appendix GG.

The CAISO shall defer any Downsizing Generator request to modify the Interconnection Request or to request preliminary review of a proposed modification which the Downsizing Generator may make under the applicable CAISO Tariff Appendix governing the Downsizing Generator's Interconnection Request until the completion of the Downsizing Generator's Generator Downsizing Request made under this Appendix GG. Other than the deferral of such request as provided in this Section 9, nothing in this Section 9 shall diminish the rights of the Downsizing Generator or Affected Generator to request a modification pursuant to the applicable interconnection procedures under which the Downsizing Generator's or Affected Generator's Interconnection Request is being processed.

## **Section 10 Results Meeting With the CAISO and Applicable Participating TO(s)**

Within ten (10) calendar days of its receipt of the Generator Downsizing Study Report, the Downsizing Generator may request a Generator Downsizing Study results meeting with the CAISO and the applicable Participating TO(s) to discuss the results of the Generator Downsizing Study.

Within fourteen (14) calendar days of its receipt of the Generator Downsizing Study Report, the Affected Generator may request a Generator Downsizing Study results meeting with the CAISO and the applicable Participating TO(s) to discuss the results of the Generator Downsizing Study.

## **Section 11 Participating TO Tariff Option for Generator Downsizing**

To the extent that a Participating TO's tariff provides the option for customers taking interconnection service under the Participating TO's wholesale access interconnection tariff to engage in a one-time generator downsizing opportunity coincident with the time period in which the CAISO will perform the Generator Downsizing Study, the CAISO will, in coordination with the applicable Participating TO, perform the necessary studies, including deliverability studies to determine the deliverability of Participating TO interconnection customers electing such option. The CAISO shall execute any necessary agreements with the Participating TO for reimbursement of study costs and to assure cost attribution for any Network Upgrades in conjunction with such CAISO activity under this Section 11.

## **Section 12 Effect of Generator Downsizing on Interconnection Financial Security Requirements**

If a Downsizing Generator's or Affected Generator's cost responsibility for Network Upgrades and/or Participating TOs' Interconnection Facilities changes between its earlier Interconnection Studies and the Generator Downsizing Study:

- (1) the Downsizing Generator's or Affected Generator's revised cost responsibility as established through the Generator Downsizing Study and this Appendix GG shall be used for purposes of calculating all future Interconnection Financial Security postings, pursuant to the interconnection procedures under which the Downsizing Generator or Affected Generator is being processed.
- (2) Any Interconnection Financial Security postings already made by the Downsizing Generator or Affected Generator will be revised accordingly. The CAISO will provide notice of the updated posting amounts within fifteen (15) Business Days of the issuance of the applicable Generator Downsizing Study Report. To the extent that
  - (i) a Downsizing Generator's cost responsibility for Network Upgrades or Participating TO's Interconnection Facilities either increases or decreases; or
  - (ii) an Affected Generator's cost responsibility for Network Upgrades or Participating TO's Interconnection Facilities decreases

then adjustments of the Interconnection Financial Security to conform to the updated amounts specified in the notice shall be undertaken within thirty (30) calendar days of the notice.

### **Section 13 Reflecting Plan of Service Changes in Generator Interconnection Agreements**

Within thirty (30) calendar days after the CAISO provides the Generator Downsizing Study Report to the Downsizing Generator or Affected Generator, the applicable Participating TO(s) and the CAISO shall, if necessary, tender a draft amendment to the executed GIA, together with draft amended appendices. Any such amendment shall be in the form of CAISO Tariff Appendix HH. If the Downsizing Generator or Affected Generator has not yet executed a GIA, then the applicable Participating TO(s) and the CAISO shall, if necessary, tender a revised draft GIA with draft appendices within thirty (30) calendar days after the CAISO provides the Generator Downsizing Study Report. The process for providing comments, negotiation, and execution and filing of a revised GIA, or an amendment to an executed GIA, including all timeframes, shall be identical to the process set forth in Section 11 of Appendix Y, or as agreed to by the Downsizing Generator or Affected Generator, CAISO, and Participating TO(s).

### **Section 14 Confidentiality**

The provision for treatment of Confidential Information contained within the CAISO Tariff Appendix under which the Interconnection Request of the Downsizing Generator or Affected Generator is being processed shall govern.

**APPENDIX 1**  
**GENERATOR DOWNSIZING REQUEST**

**Provide three copies of this completed form pursuant to Sections 3 and 5, below, of this Appendix GG Appendix 1.**

1. The undersigned Interconnection Customer submits this request to reduce the maximum net megawatt electrical output of its Generating Facility for the Interconnection Request in the CAISO Controlled Grid Generation Queue:

CAISO Controlled Grid Generation Queue No. \_\_\_\_\_

Project Name: \_\_\_\_\_

If the Interconnection Request is for a new Generating Facility, provide the reduced maximum net output:

Maximum net megawatt electrical output (MW): \_\_\_\_\_

If the Interconnection Request is for a decrease in the generating capacity of an existing Generating Facility, provide the reduced net output decrease:

Net Megawatt decrease (MW): \_\_\_\_\_

2. Name, address, telephone number, and e-mail address of the Interconnection Customer's contact person (primary person who will be contacted):

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State: \_\_\_\_\_

Zip Code: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

3. Generator Downsizing Request data (set forth in Attachment A)

**The Downsizing Generator shall provide to the CAISO the technical data called for in Appendix GG Appendix 1, Attachment A. Three (3) copies are required.**

4. Make the cashier's or bank check for the Generator Downsizing Deposit amount of \$200,000 payable to CAISO. Send the check to the CAISO (see section 5 for details) along with:

Appendix 1 to this Appendix GG (Generator Downsizing Request) for processing.

Attachment A to this Appendix 1 (Generator Downsizing Request Generating Facility Data).

5. This Generator Downsizing Request shall be submitted to the CAISO representative indicated below:

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

Overnight address: California ISO, Attn: Grid Assets, 250 Outcropping Way, Folsom, CA  
95630

6. This Generator Downsizing Request is submitted by:

Legal name of the Downsizing Generator:

By (signature): \_\_\_\_\_

Name (type or print): \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**ATTACHMENT A TO APPENDIX 1**

**GENERATING FACILITY DATA**

Provide three copies of this completed form pursuant to Section 3 of Appendix GG Appendix 1.

**1. Provide two original prints and one reproducible copy (no larger than 36" x 24") of the following:**

- A. Site drawing to scale, showing generator location and Point of Interconnection with the CAISO Controlled Grid.
- B. Single-line diagram showing applicable equipment such as generating units, step-up transformers, auxiliary transformers, switches/disconnects of the proposed interconnection, including the required protection devices and circuit breakers. For wind and photovoltaic generator plants, the one-line diagram should include the distribution lines connecting the various groups of generating units, the generator capacitor banks, the step up transformers, the distribution lines, and the substation transformers and capacitor banks at the Point of Interconnection with the CAISO Controlled Grid.
- C. List changes to the currently effective Interconnection Request Generating Facility Data form on file with the CAISO:

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**Fields marked with \* should not be changed from the original Interconnection Request. Only changes related to downsizing are permitted.**

**2. Generating Facility Information**

- A. Total Generating Facility rated output (MW): \_\_\_\_\_
- B. Generating Facility auxiliary Load (MW): \_\_\_\_\_
- C. Project net capacity (A-B)(MW): \_\_\_\_\_
- D. Standby Load when Generating Facility is off-line (MW): \_\_\_\_\_
- E. Number of Generating Units: \_\_\_\_\_  
(Please repeat the following items for each generator)
- F. Individual generator rated output (MW for each unit): \_\_\_\_\_
- G. Manufacturer: \_\_\_\_\_
- H. Year Manufactured: \_\_\_\_\_
- I. Nominal Terminal Voltage (kV): \_\_\_\_\_
- J. Rated Power Factor (%): \_\_\_\_\_
- K. Type (Induction, Synchronous, DC with Inverter)\*: \_\_\_\_\_
- L. Phase (three phase or single phase)\*: \_\_\_\_\_
- M. Connection (Delta, Grounded WYE, Ungrounded WYE, impedance grounded): \_\_\_\_\_
  
- N. Generator Voltage Regulation Range (+/- %): \_\_\_\_\_
- O. Generator Power Factor Regulation Range: \_\_\_\_\_
- P. For combined cycle plants, specify the plant net output capacity (MW) for an outage of the steam turbine or an outage of a single combustion turbine \_\_\_\_\_

**3. Synchronous Generator – General Information:**

(Please repeat the following for each generator model)

- A. Rated Generator speed (rpm): \_\_\_\_\_
- B. Rated MVA: \_\_\_\_\_
- C. Rated Generator Power Factor: \_\_\_\_\_

- D. Generator Efficiency at Rated Load (%): \_\_\_\_\_
- E. Moment of Inertia (including prime mover): \_\_\_\_\_
- F. Inertia Time Constant (on machine base) H: \_\_\_\_\_ sec or MJ/MVA
- G. SCR (Short-Circuit Ratio - the ratio of the field current required for rated open-circuit voltage to the field current required for rated short-circuit current): \_\_\_\_\_
- H. Please attach generator reactive capability curves.
- I. Rated Hydrogen Cooling Pressure in psig (Steam Units only): \_\_\_\_\_
- J. Please attach a plot of generator terminal voltage versus field current that shows the air gap line, the open-circuit saturation curve, and the saturation curve at full load and rated power factor.

**4. Excitation System Information**

(Please repeat the following for each generator model)

- A. Indicate the Manufacturer \_\_\_\_\_ and Type \_\_\_\_\_ of excitation system used for the generator. For exciter type, please choose from 1 to 9 below or describe the specific excitation system.
  - (1) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is independent of the generator terminal voltage and current.
  - (2) Rotating DC commutator exciter with continuously acting regulator. The regulator power source is bus fed from the generator terminal voltage.
  - (3) Rotating DC commutator exciter with non-continuously acting regulator (i.e., regulator adjustments are made in discrete increments).
  - (4) Rotating AC Alternator Exciter with non-controlled (diode) rectifiers. The regulator power source is independent of the generator terminal voltage and current (not bus-fed).
  - (5) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers. The regulator power source is fed from the exciter output voltage.
  - (6) Rotating AC Alternator Exciter with controlled (thyristor) rectifiers.
  - (7) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from the generator terminal voltage.
  - (8) Static Exciter with controlled (thyristor) rectifiers. The regulator power source is bus-fed from a combination of generator terminal voltage and current (compound-source controlled rectifiers system).
  - (9) Other (specify): \_\_\_\_\_
- B. Attach a copy of the block diagram of the excitation system from its instruction manual. The diagram should show the input, output, and all feedback loops of the excitation system.
- C. Excitation system response ratio (ASA): \_\_\_\_\_
- D. Full load rated exciter output voltage: \_\_\_\_\_
- E. Maximum exciter output voltage (ceiling voltage): \_\_\_\_\_
- F. Other comments regarding the excitation system?

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**5. Power System Stabilizer Information**

(Please repeat the following for each generator model. All new generators are required to install PSS unless an exemption has been obtained from WECC. Such an exemption can be obtained for units that do not have suitable excitation systems.)

- A. Manufacturer: \_\_\_\_\_
- B. Is the PSS digital or analog? \_\_\_\_\_
- C. Note the input signal source for the PSS  
\_\_\_\_\_ Bus frequency \_\_\_\_\_ Shaft speed \_\_\_\_\_ Bus Voltage

Other (specify source)

D. Please attach a copy of a block diagram of the PSS from the PSS Instruction Manual and the correspondence between dial settings and the time constants or PSS gain.

E: Other comments regarding the PSS?

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**6. Turbine-Governor Information**

(Please repeat the following for each generator model)

Please complete Part A for steam, gas or combined-cycle turbines, Part B for hydro turbines, and Part C for both.

A. Steam, gas or combined-cycle turbines:

- (1) List type of unit (Steam, Gas, or Combined-cycle): \_\_\_\_\_
- (2) If steam or combined-cycle, does the turbine system have a reheat process (i.e., both high and low pressure turbines)? \_\_\_\_\_
- (3) If steam with reheat process, or if combined-cycle, indicate in the space provided, the percent of full load power produced by each turbine:  
Low pressure turbine or gas turbine: \_\_\_\_\_ %  
High pressure turbine or steam turbine: \_\_\_\_\_ %

B. Hydro turbines:

- (1) Turbine efficiency at rated load: \_\_\_\_\_ %
- (2) Length of penstock: \_\_\_\_\_ ft
- (3) Average cross-sectional area of the penstock: \_\_\_\_\_ ft<sup>2</sup>
- (4) Typical maximum head (vertical distance from the bottom of the penstock, at the gate, to the water level): \_\_\_\_\_ ft
- (5) Is the water supply run-of-the-river or reservoir: \_\_\_\_\_
- (6) Water flow rate at the typical maximum head: \_\_\_\_\_ ft<sup>3</sup>/sec
- (7) Average energy rate: \_\_\_\_\_ kW-hrs/acre-ft
- (8) Estimated yearly energy production: \_\_\_\_\_ kW-hrs

C. Complete this section for each machine, independent of the turbine type.

- (1) Turbine manufacturer: \_\_\_\_\_
- (2) Maximum turbine power output: \_\_\_\_\_ MW
- (3) Minimum turbine power output (while on line): \_\_\_\_\_ MW
- (4) Governor information:
  - (a) Droop setting (speed regulation): \_\_\_\_\_
  - (b) Is the governor mechanical-hydraulic or electro-hydraulic (Electro-hydraulic governors have an electronic speed sensor and transducer.)?  
\_\_\_\_\_
  - (c) Other comments regarding the turbine governor system?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**7. Induction Generator Data:**

- A. Rated Generator Power Factor at rated load: \_\_\_\_\_
- B. Moment of Inertia (including prime mover): \_\_\_\_\_
- C. Do you wish reclose blocking? Yes \_\_\_\_\_, No \_\_\_\_\_

Note: Sufficient capacitance may be on the line now, or in the future, and the generator may self-excite unexpectedly.

### **8. Generator Short Circuit Data**

For each generator model, provide the following reactances expressed in p.u. on the generator base:

- $X''1$  – positive sequence subtransient reactance: \_\_\_\_\_ p.u.\*\*
- $X''2$  – negative sequence reactance: \_\_\_\_\_ p.u.\*\*
- $X''0$  – zero sequence reactance: \_\_\_\_\_

Generator Grounding (select 1 for each model):

A. \_\_\_\_\_ Solidly grounded

B. \_\_\_\_\_ Grounded through an impedance

\_\_\_\_\_ (Impedance value in p.u on generator base. R: \_\_\_\_\_ p.u.)

X: \_\_\_\_\_ p.u.)

C. \_\_\_\_\_ Ungrounded

### **9. Step-Up Transformer Data**

For each step-up transformer, fill out the data form provided in Table 1.

### **10. Interconnection Facilities Line Data**

There is no need to provide data for new lines that are to be constructed by the Participating TO. However, for transmission lines that are to be constructed by the generation developer, please provide the following information:

Nominal Voltage\*: \_\_\_\_\_ kV

Line Length\*: \_\_\_\_\_ miles

Line termination Points\*: \_\_\_\_\_

Conductor Type: \_\_\_\_\_ Size: \_\_\_\_\_

If bundled. Number per phase: \_\_\_\_\_, Bundle spacing: \_\_\_\_\_ in.

Phase Configuration. Vertical: \_\_\_\_\_, Horizontal: \_\_\_\_\_

Phase Spacing: A-B: \_\_\_\_\_ ft., B-C: \_\_\_\_\_ ft., C-A: \_\_\_\_\_ ft.

Distance of lowest conductor to Ground at full load and 40°C: \_\_\_\_\_ ft

Ground Wire Type: \_\_\_\_\_ Size: \_\_\_\_\_ Distance to Ground: \_\_\_\_\_ ft

Attach Tower Configuration Diagram

Summer line ratings in amperes (normal and emergency) \_\_\_\_\_

Positive Sequence Resistance ( R ): \_\_\_\_\_ p.u. \*\* (for entire line length)

Positive Sequence Reactance: ( X ): \_\_\_\_\_ p.u. \*\* (for entire line length)

Zero Sequence Resistance ( R0 ): \_\_\_\_\_ p.u. \*\* (for entire line length)

Zero Sequence Reactance: ( X0 ): \_\_\_\_\_ p.u. \*\* (for entire line length)

Line Charging (B/2): \_\_\_\_\_ p.u.\*\*

\*\* On 100-MVA and nominal line voltage (kV) Base

### **10a. For Wind/photovoltaic plants, provide collector System Equivalence Impedance Data**

Provide values for each equivalence collector circuit at all voltage levels.

Nominal Voltage\*: \_\_\_\_\_

Summer line ratings in amperes (normal and emergency) \_\_\_\_\_

Positive Sequence Resistance (R1): \_\_\_\_\_ p.u. \*\* (for entire line length of each collector circuit)

Positive Sequence Reactance: (X1): \_\_\_\_\_ p.u. \*\* (for entire line length of each collector circuit)

Zero Sequence Resistance (R0): \_\_\_\_\_ p.u. \*\* (for entire line length of each collector circuit)

Zero Sequence Reactance: (X0): \_\_\_\_\_ p.u. \*\* (for entire line length of each collector circuit)

Line Charging (B/2): \_\_\_\_\_ p.u\*\* (for entire line length of each collector circuit)  
\*\* On 100-MVA and nominal line voltage (kV) Base

**11. Inverter-Based Machines**

Number of inverters to be interconnected pursuant to this Interconnection Request: \_\_\_\_\_

Inverter manufacturer, model name, number, and version\*:  
\_\_\_\_\_

List of adjustable set points for the protective equipment or software\*:  
\_\_\_\_\_

Maximum design fault contribution current\*:  
\_\_\_\_\_

Harmonics Characteristics\*:  
\_\_\_\_\_

Start-up requirements\*:  
\_\_\_\_\_

Note: A completed General Electric Company Power Systems Load Flow (PSLF) data sheet must be supplied with the Interconnection Request.

**12. Load Flow and Dynamic Models:**

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

TABLE 1

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

UNIT \_\_\_\_\_

NUMBER OF TRANSFORMERS \_\_\_\_\_ PHASE \_\_\_\_\_

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

CURRENT TRANSFORMER RATIOS

H \_\_\_\_\_ X \_\_\_\_\_ Y \_\_\_\_\_ N \_\_\_\_\_

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

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

## APPENDIX 2

### CERTIFICATION OF ELIGIBILITY FOR ONE-TIME GENERATOR DOWNSIZING OPPORTUNITY

The undersigned authorized representative of [Downsizing Generator Name] executes this Certification pursuant to CAISO Tariff Appendix GG for the purpose of demonstrating eligibility of [Downsizing Generator Name] to participate in the One-Time Interconnecting Generator Downsizing Opportunity.

I do certify and represent to the CAISO, after having conducted sufficient inquiry of facts and circumstances of the [Downsizing Generator Name] to do so, that the following statements are true and accurate. I understand that the CAISO will rely upon this certification in determining whether [Downsizing Generator Name] is eligible for participation in the process outlined in Appendix GG:

(1) [Downsizing Generator Name] has an Interconnection Request which is CAISO Queue Position No. [     ], which is being processed under one of the following provisions of the CAISO Tariff:

[Check the CAISO Tariff Appendix that Applies]

[     ] CAISO Tariff Appendix Y (Generator Interconnection Procedures (GIP)) applying to Interconnection Requests processed in the Transition Cluster and Queue Clusters 1 through 4.

[     ] CAISO Tariff Appendix U (Standard Large Generator Interconnection Procedures (LGIP)) applying to Large Generating Facility Interconnection Requests not assigned to a Queue Cluster Window.

[     ] CAISO Tariff Appendix W (Interconnection Procedures in Effect Prior to July 1, 2005 ("Amendment 39 Procedures")) applicable to Small Generating Facilities interconnecting in accordance with Section 1.3 of Appendix S and Large Generating Facilities in accordance with Section 2.1 of Appendix U; and

[     ] CAISO Tariff Appendix S (Small Generator Interconnection Procedures).

(2) The Interconnection Request of [Downsizing Generator Name] meets all of the following requirements of good standing by the Generator Downsizing Request Due Date.:

a) The Interconnection Request has not been withdrawn or deemed withdrawn by the CAISO. If the CAISO has issued a notice of deemed withdrawal to the Interconnection Customer, which the Interconnection Customer has not cured, then the Interconnection Customer shall not be eligible to submit a Generator Downsizing Request.

b) The Interconnection Customer has complied with all applicable requirements of the CAISO Tariff under which the Interconnection Request is being processed, including timely submittal of all Interconnection Financial Security postings which have come due.

c) The Interconnection Customer is in compliance with the terms of its Generator Interconnection Agreement, including Interconnection Customer milestones; has not received a notice of breach or notice of default which the Interconnection Customer has not cured; and does not have its Interconnection Request or Generator Interconnection Agreement in suspension under Article 5.16 or other applicable suspension provision of the Generator Interconnection Agreement.

I make this Certification on this [ \_\_\_\_\_ ] day of [ \_\_\_\_\_ ], 20[ \_\_\_\_\_ ], at [City: \_\_\_\_\_ ], [State: \_\_\_\_\_ ]

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

**For Downsizing Generator/Interconnection Customer**

**[Insert name of the Downsizing Generator]**

Title: \_\_\_\_\_

### APPENDIX 3

#### DOWNSIZING GENERATOR PAYMENT OBLIGATION AGREEMENT

THIS AGREEMENT is made and entered into this      day of      , 20      by and between      , a      organized and existing under the laws of the State of      ("Downsizing Generator") and the California Independent System Operator Corporation, a California nonprofit public benefit corporation existing under the laws of the State of California, ("CAISO"). The Interconnection Customer and the CAISO each may be referred to as a "Party," or collectively as the "Parties."

#### RECITALS

WHEREAS, the Downsizing Generator has elected to submit a Generator Downsizing Request pursuant to CAISO Tariff Appendix GG requesting to reduce the generation megawatt capacity of the proposed Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request for the Interconnection Customer represented by Queue Position:      ;

WHEREAS, the Interconnection Customer desires to reduce the megawatt generating capacity of the Generating Facility;

WHEREAS, the Downsizing Generator has requested the CAISO to conduct or cause to be performed a Generator Downsizing Study to assess the system impact of interconnecting the Generating Facility to the CAISO Controlled Grid at the reduced megawatt capacity and to specify and estimate the cost of the equipment, engineering, procurement, and construction work needed on the Participating TO's electric system in accordance with Good Utility Practice to physically and electrically connect the Generating Facility to the CAISO Controlled Grid at the reduced megawatt capacity; and

WHEREAS, following the Generator Downsizing Study, it will be necessary to

- (i)      issue Generator Downsizing Study Reports that amend the prior study reports; and
- (ii)      amend the Generator Interconnection Agreement(s)

of the Downsizing Generator and certain Affected Generators and the Downsizing Generator has requested the CAISO to amend these reports and agreements or cause them to be amended;

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

- 1.0      When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the CAISO's FERC-approved One-Time Interconnecting Generator Downsizing Opportunity set forth in CAISO Tariff Appendix GG, the applicable CAISO Tariff Appendix under which the Interconnection Request is being processed or the Master Definitions Supplement, Appendix A to the CAISO Tariff, as applicable.
- 2.0      The Interconnection Customer elects and the CAISO shall conduct or cause to be performed a Generator Downsizing Study, consistent with Appendix GG in accordance with the CAISO Tariff.
- 3.0      The scope of the Interconnection Studies shall be subject to the assumptions set forth in Appendices A and B to this Agreement.

- 4.0 The Generator Downsizing Study will be based upon the technical information provided by the Interconnection Customer in the Generator Downsizing Request subject to modifications to the proposed Commercial Operation Date of the Generating Facility accepted under Section 8 of Appendix GG. The CAISO reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Generator Downsizing Study.
- 5.0 The Generator Downsizing Study Report for the Generator Downsizing Request Interconnection Study shall provide the information specified in Appendix GG.
- 6.0 Following the issuance of the Generator Downsizing Study Report to the Downsizing Generator and Affected Generators and negotiation and execution of an amendment to the Generator Interconnection Agreements of the Downsizing Generator and Affected Generators, the CAISO shall charge and the Downsizing Generator shall pay its share of the costs of the Generator Downsizing Study, Generator Downsizing Study Report and amendments to the Generator Interconnection Agreements pursuant to Sections 2.7 and 2.8 of Appendix GG.
- Any difference between the Generator Downsizing Deposit made toward the items referenced above and associated administrative costs, and the cost responsibility of the Downsizing Generator, shall be paid by or refunded to the Downsizing Generator, in the appropriate allocation, in accordance with Sections 2.9 and 2.12 of Appendix GG.
- 7.0 Pursuant to Section 4 of Appendix GG, the CAISO will coordinate any effort required to determine the impact of the Generator Downsizing Request on Affected Systems. The CAISO may provide a copy of the Generator Downsizing Request and the Generator Downsizing Study results, including the Generator Downsizing Study Report, to an Affected System Operator and the Western Electricity Coordinating Council. Requests for review and input from Affected System Operators or the Western Electricity Coordinating Council may arrive at any time prior to interconnection.
- 8.0 Substantial portions of technical data and assumptions used to perform the Generator Downsizing Study, such as system conditions, existing and planned generation, and unit modeling, may change after the CAISO provides the Generator Downsizing Study Report to the Downsizing Generator. Generator Downsizing Study results will reflect available data at the time the CAISO provides the Generator Downsizing Study Report to the Downsizing Generator. The CAISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Downsizing Generator pursuant to Appendix GG as a result of changes in such data and assumptions.
- 9.0 The CAISO shall maintain records and accounts of all costs incurred in performing the Generator Downsizing Study in sufficient detail to allow verification of all costs incurred, including associated overheads. The Downsizing Generator shall have the right, upon reasonable notice, within a reasonable time at the CAISO's offices and at its own expense, to audit the CAISO's records as necessary and as appropriate in order to verify costs incurred by the CAISO. Any audit requested by the Downsizing Generator shall be completed, and written notice of any audit dispute provided to the CAISO representative, within one hundred eighty (180) calendar days following receipt by the Downsizing Generator of the CAISO's notification of the final costs of the Generator Downsizing Study.
- 10.0 The Downsizing Generator may withdraw its Generator Downsizing Request in accordance with Section 5(i) or Section 5(ii) of Appendix GG. Upon timely receipt of the Downsizing Generator's notice to withdraw, this Agreement shall terminate, subject to the requirements of Section 5 of Appendix GG.

11.0 This Agreement shall become effective upon the date the fully executed Agreement is received by the CAISO. If the CAISO does not receive the fully executed Agreement, then the Generator Downsizing Request will be deemed void pursuant to Section 2.5.2.2 of Appendix GG, and the CAISO shall refund the Downsizing Generator's Generator Downsizing Deposit, less costs incurred in validating the Generator Downsizing Request.

12.0 Miscellaneous.

12.1 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Agreement, shall be resolved in accordance with the Dispute provision of the CAISO Tariff Appendix under which the Downsizing Generator's Interconnection Request is being processed.

12.2 Confidentiality. Confidential Information shall be treated in accordance with the confidentiality provision of the CAISO Tariff Appendix under which the Downsizing Generator's Interconnection Request is being processed.

12.3 Binding Effect. This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

12.4 Conflicts. In the event of a conflict between the body of this Agreement and any attachments, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.

12.5 Rules of Interpretation. This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Agreement or such Appendix to this Agreement, or such Section of Appendix GG or such Appendix to Appendix GG, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

12.6 Entire Agreement. This Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Agreement.

- 12.7 No Third Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.
- 12.8 Waiver. The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.
- Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, or duty of this Agreement. Termination or default of this Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or CAISO. Any waiver of this Agreement shall, if requested, be provided in writing.
- Any waivers at any time by any Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- 12.9 Headings. The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.
- 12.10 Multiple Counterparts. This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 12.11 Amendment. The Parties may by mutual agreement amend this Agreement by a written instrument duly executed by both of the Parties.
- 12.12 Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Agreement upon satisfaction of all applicable laws and regulations.
- 12.13 Reservation of Rights. The CAISO shall have the right to make a unilateral filing with FERC to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 12.14 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall

have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

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

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

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[Insert name of the Downsizing Generator]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## APPENDIX 4

### AGREEMENT FOR THE ALLOCATION OF RESPONSIBILITIES WITH REGARD TO GENERATOR DOWNSIZING OPPORTUNITY, GENERATOR DOWNSIZING STUDY AND AMENDMENT OF GENERATOR INTERCONNECTION AGREEMENTS

This Agreement for the Allocation of Responsibilities with Regard to Generator Downsizing Opportunity, Generator Downsizing Study, and Amendment of Generator Interconnection Agreements ("Agreement"), dated \_\_\_\_\_, is entered into between the California Independent System Operator Corporation ("CAISO") and [NAME OF PTO] \_\_\_\_\_ ("PTO"). The CAISO and PTO are jointly referred to as the "Parties" and individually, as a "Party."

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

NOW THEREFORE, in view of the respective responsibilities assigned to the Parties and the foregoing FERC orders, and the provisions of the CAISO's Generator Downsizing Opportunity set forth in CAISO Tariff Appendix GG ("Appendix GG"), the CAISO and PTO agree to the following allocation of responsibilities for a centralized Generator Downsizing Study and amendment of Generator Interconnection Agreements under the direction and oversight of the CAISO:

#### 1. DEFINITIONS

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

#### 2. TERM OF AGREEMENT

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

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

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

### **3.2 [INTENTIONALLY LEFT BLANK]**

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

**3.3.1** In the event that an Interconnection Customer proposes to interconnect a Generating Facility with the PTO's facilities, or the PTO is an owner of an Affected System, the PTO shall have the right to participate in any Interconnection Study or any other study conducted in connection with such request for Interconnection Service. "Participate" in this Section 3.3.1 means physically perform any study or portion thereof in connection with an Interconnection Request, under the direction and oversight of, and approval by, the CAISO pursuant to Section 3.4 of this Agreement; provide or receive input, data or other information regarding any study or portion thereof consistent with Section 3.4 of this Agreement; and, when any study or portion thereof in connection with an Interconnection Request is physically performed by an entity other than the PTO, perform activities necessary to adequately review or validate, as appropriate, any results of the study or portions thereof and provide recommendations.

**3.3.2** In the event that an Interconnection Customer proposes to interconnect a Generating Facility with the PTO's facilities, or the PTO is an owner of an Affected System, the PTO shall have the right to participate in all meetings expressly established pursuant to the CAISO Tariff Appendix GG. As appropriate, the PTO may participate in all other material or substantive communications in connection with an Interconnection Request.

**3.4** **Generator Downsizing Study Responsibility Allocation:** In complying with its responsibility for conducting or causing to be performed Generator Downsizing Studies, the CAISO will assign responsibility for performance of portions of the Generator Downsizing Studies to the PTO, under the direction and oversight of, and approval by, the CAISO, as set forth in Attachment A, except as specifically qualified as follows:

**3.4.1** For any tasks specifically assigned to the PTO pursuant to Attachment A or otherwise mutually agreed upon by the CAISO and the PTO, the CAISO reserves the right, on a case-by-case basis, to perform or reassign to a mutually agreed upon and pre-qualified contractor such task only where: (a) the quality and accuracy of prior PTO Interconnection Study work product resulting from assigned tasks has been deemed deficient by the CAISO, the CAISO has notified the PTO pursuant to the notice provision of Section 4.15 of this Agreement in writing of the deficiency, and the deficiency has not been cured pursuant to Section 3.4.2 of this Agreement; (b) the timeliness of PTO Interconnection Study work product has been deemed deficient, and either (i) the CAISO has not been notified of the reasons and actions taken to address the timeliness of the work, or (ii) if notified, the stated reasons and actions taken are insufficient or unjustifiable and the PTO has not cured the deficiency pursuant to Section 3.4.2 of this Agreement; (c) the PTO has failed, in a mutually agreed upon timeframe, to provide the CAISO with information or data related to an Interconnection Request despite a written request by the CAISO, pursuant to Section 3.5 hereof, to do so, and such data is the responsibility of the PTO to provide to the CAISO, subject to Section 4.3 of this Agreement; (d) the PTO advises the CAISO in writing that it does not have the resources to adequately or timely perform the task according to the applicable timelines set forth in Attachment A; or (e) the estimated cost of the PTO performing the task has been determined in writing by the CAISO to significantly exceed the cost of the CAISO or mutually agreed upon contractor performing the task, inclusive of the costs that will be incurred by the PTO in exercising its review rights of the results of any

such tasks performed by such third party(ies). If the CAISO deviates from the assignments set forth in Attachment A based on the foregoing factors, the CAISO will provide the PTO with a written explanation for the deviation and any associated reassignments of work. The PTO may contest the deviation pursuant to the Dispute Resolution procedures set forth in Section 4.1 of this Agreement.

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

### **3.4.2 Cure for reassigned Generator Downsizing Study work**

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

(a) The CAISO and PTO shall negotiate in good faith and agree to a corrective action plan proposed by the PTO, including a reasonably adequate cure period, and the corrective action plan is satisfactorily implemented.

(b) The CAISO determines the deficiency is cured without an action plan.

### **3.4.3 Assessment of prior PTO Generator Downsizing Study work shall only be based on work conducted under the process that becomes effective concurrent with the effective date of this Agreement. Further, assessment of prior PTO Interconnection Study work shall be based on work conducted no earlier than the eighteen (18) month period prior to the date of the CAISO notice of deviation from assignments set forth in Attachment A.**

**3.5 Information Exchange:** The PTO shall provide the CAISO, subject to confidentiality requirements in Section 4.3 of this Agreement, with any documentation or data requested by the CAISO reasonably necessary to permit the CAISO to perform, review, validate and approve any Interconnection Study, or portion thereof, performed by the PTO. The CAISO shall provide the PTO with any documentation or data requested by the PTO, subject to confidentiality requirements in Section 4.3 of this Agreement, reasonably necessary to perform, review, and validate any Interconnection Study, or portion thereof.

**3.6 Consistency with Provisions for Centralized Interconnection Study Process:** The CAISO and PTO have determined that the processes and allocation of responsibilities in Section 3.4 of this Agreement ensure that impacts to the CAISO Controlled Grid are independently assessed and that the assignment of responsibilities minimizes handoffs, takes advantage of non-transferable skills, and promotes the efficiency and cost-effectiveness of the centralized Interconnection Study processes, consistent with Appendix GG Section 2.2.

**3.7 Re-Studies:** If any re-studies are required, the CAISO will confer with the PTO as to the need for a re-study. The CAISO will make the final determination regarding the need for a re-study, subject to dispute resolution procedures.

**3.8 Use of Contractors:** Nothing in this Agreement shall prevent either the CAISO or the PTO from using qualified, mutually agreed upon third party contractors to meet that Party's rights or obligations under this Agreement or Appendix GG. To promote the efficiency of the process, the CAISO and PTO will collaborate to identify a list of the mutually agreed upon qualified contractors available to the Parties.

**3.9 Performance Standards:** Each Party shall perform all of its obligations under the Appendix GG, this Agreement, and any FERC approved Interconnection Study procedures that may be adopted by the CAISO to implement Appendix GG, or this

Agreement, in accordance with Applicable Laws and Regulations, Applicable Reliability Standards, and Good Utility Practice.

3.10 Recovery of Costs: The PTO shall recover study expenses pursuant to Sections 2.10 and 2.12 of Appendix GG, including costs incurred in exercising its right to review, and make recommendations on the Generator Downsizing Study or portions thereof performed by the CAISO and/or contractors under Section 3.8 of this Agreement. The PTO shall receive funds to apply to its expenses incurred in amending Generator Interconnection Agreements pursuant to Section 2.11 of Appendix GG.

#### **4 GENERAL TERMS AND CONDITIONS**

4.1 Dispute Resolution: In the event any dispute regarding the terms, conditions, and performance of this Agreement is not settled informally, the Parties shall follow the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff.

4.2 Liability: No Party to this Agreement shall be liable to any other Party for any direct, indirect, special, incidental or consequential losses, damages, claims, liabilities, costs or expenses (including attorneys' fees and court costs) arising from the performance or non-performance of its obligations under this Agreement regardless of the cause (including intentional action, willful action, gross or ordinary negligence, or force majeure); provided, however, that a Party may seek equitable or other non-monetary relief as may be necessary to enforce this Agreement and that damages for which a Party may be liable to another Party under another agreement will not be considered damages under this Agreement.

4.3 Confidentiality: Confidential Information shall be treated in accordance with the confidentiality provision of the CAISO Tariff Appendix under which the Downsizing Generator's Interconnection Request is being processed.

4.4 Binding Effect: This Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

4.5 Conflicts: In the event of a conflict between the body of this Agreement and any attachments, appendices or exhibits hereto, the terms and provisions of the body of this Agreement shall prevail and be deemed the final intent of the Parties.

4.6 Rules of Interpretation: This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section, Attachment, or Appendix means such Article or Section of this Agreement or such Attachment or Appendix to this Agreement, or such Section of Appendix GG or such Appendix to Appendix GG, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article or Section; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of

any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

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

have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.

4.14 Assignment: This Agreement may be assigned by a Party only with the written consent of the other Parties; provided that a Party may assign this Agreement without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

4.15 Notices: Any notice, demand, or request provided in this Agreement, or served, given, or made in connection with it, will be in writing and deemed properly served, given, or made if delivered in person, transmitted by facsimile, or sent by United States mail, postage prepaid, to the persons specified in Attachment B hereto unless otherwise provided in this Agreement. Any Party may at any time, by notice to all other Parties, change the designation or address of the person specified in Attachment B as the person who receives notices pursuant to this Agreement.

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

**California Independent System Operator Corporation**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**[NAME OF PTO]**

By: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## ATTACHMENT A TO APPENDIX 4

### GENERATOR DOWNSIZING INTERCONNECTION STUDY RESPONSIBILITY ALLOCATION

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

Purpose: This Attachment A to the “Agreement for the Allocation of Responsibilities with Regard to Generator Downsizing Opportunity, Generator Downsizing Study, and Amendment of Generator Interconnection Agreements” serves as further clarification of the roles and responsibilities of the parties to this Agreement. The CAISO will assign responsibility for performance of portions of the Generator Downsizing Study to the relevant PTOs, under the direction and oversight of, and approval by, the CAISO, as set forth in this Attachment A. This document serves as a general overview of only the roles and responsibilities as between the CAISO and PTOs. This Agreement does not include the process steps, involvement or obligations of the Interconnection Customer (IC). This Agreement is not inclusive of all procedures necessary to comply with all provisions of Appendix GG and the Downsizing Generator Payment Obligation Agreement.

#### Generator Downsizing Request (GDR) Process

1. CAISO forwards the GDR to the PTO within three (3) Business Days (BD) of CAISO receipt of the GDR
2. PTO(s) provides any feedback regarding GDR to CAISO within three (3) BD

#### Generator Downsizing Study Timeline

<u>Line</u>	<u>Generator Downsizing Study</u>	<u>Typical Calendar Days</u>	<u>Timeline (Days)</u>
<u>1</u>	<u>CAISO and PTOs confirm initial Generating Facility groups for initial Dispatch assumptions and cost allocation purposes (except for thermal overload and short circuit mitigation).</u>	<u>1</u>	<u>1</u>
<u>2</u>	<u>PTOs update Base Cases, each representing all Generating Facilities of the Downsizing Generators and potential Affected Generators.</u>	<u>7</u>	<u>2-8</u>
<u>3</u>	<u>PTOs update contingency lists.</u>	<u>4</u>	<u>9-12</u>
<u>4</u>	<u>CAISO reviews and approves Base Cases and contingency lists.</u>	<u>7</u>	<u>9-15</u>
<u>5</u>	<u>CAISO performs on-peak Deliverability Assessment.</u>	<u>21</u>	<u>16-36</u>
<u>6</u>	<u>At the CAISO’s direction, the PTOs perform the off-peak Load Flow, and summer peak and off-peak Post Transient and Stability analyses, and submit results for CAISO review.</u>	<u>21</u>	<u>16-36</u>
<u>7</u>	<u>CAISO proposes network upgrades. The PTO develops mitigation plans to supplement CAISO proposed mitigation plans for consideration, as appropriate, and submits to CAISO for review and direction.</u>	<u>14</u>	<u>37-50</u>

<u>8</u>	<u>CAISO retests Deliverability Assessment results with proposed Delivery Network Upgrades and Reliability Network Upgrades. PTOs review and comment on retest results.</u>	<u>7</u>	<u>51-57</u>
<u>9</u>	<u>CAISO assigns cost responsibility of Delivery Network Upgrades to generators.</u>	<u>14</u>	<u>58-71</u>
<u>10</u>	<u>PTOs assign cost responsibility of Reliability Network Upgrades to generators.</u>	<u>14</u>	<u>58-71</u>
<b><u>Short Circuit Duty</u></b>			
<u>11</u>	<u>CAISO directs PTOs to update Base Cases</u>	<u>49</u>	<u>1-50</u>
<u>12</u>	<u>PTOs perform SCD analyses</u>	<u>14</u>	<u>51-64</u>
<u>13</u>	<u>PTOs update short circuit duty mitigation and submit to CAISO for review</u>	<u>14</u>	<u>65-78</u>
<b><u>Facility cost estimates and schedules</u></b>			
<u>14</u>	<u>At the CAISO's direction, PTO(s) prepares cost estimates and schedules for modified or substituted direct assignment facilities and Network Upgrades.</u>	<u>120</u>	<u>1-120</u>
<b><u>Generator Downsizing Study Report</u></b>			
<u>15</u>	<u>At the CAISO's direction, PTOs prepare draft report for modified or substituted Network Upgrades and the PTO's Interconnection Facilities.</u>	<u>50</u>	<u>79-128</u>
<u>16</u>	<u>CAISO reviews draft report and submits comments, recommendations and direction to the PTOs.</u>	<u>10</u>	<u>129-138</u>
<u>17</u>	<u>PTOs incorporate CAISO's directions, conclusions and recommendations. If CAISO conclusions and recommendations conflict with PTO conclusions, then CAISO and the PTO must coordinate to resolve conflicts. Any remaining conflicts must be noted in the final report.</u>	<u>7</u>	<u>139-145</u>
<u>18</u>	<u>PTOs submit final draft report to the CAISO. The CAISO will finalize the report and tender the CAISO approved report to the ICs.</u>	<u>5</u>	<u>146-150</u>

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

**Generator Downsizing Interconnection Agreement Amendment Process**

<b><u>Line</u></b>	<b><u>GIA Amendment Activity</u></b>	<b><u>Typical Calendar Days</u></b>	<b><u>Timeline (Days)</u></b>
<u>19</u>	<u>At CAISO's direction, PTO prepares and tenders amendment to Interconnection Agreement, in the form of Appendix HH, or revised Interconnection Agreement, as applicable</u>	<u>30</u>	<u>151-180</u>
<u>20</u>	<u>PTO, with CAISO input, negotiates amended or revised Interconnection Agreement as necessary with Downsizing Generator or Affected Generator (all parties can agree to extend timeline)</u>	<u>60 days (App. U)</u> <u>30 days (App. S)</u> <u>90 days (App. Y)</u>	<u>151-240 (App. U)</u> <u>151-211 (App. S)</u> <u>151-271 (App. Y)</u>
<u>21</u>	<u>CAISO and PTO finalize and file Interconnection Agreement or amendment to Interconnection Agreement under respective tariffs. (all parties can agree to extend timeline)</u>	<u>60 days (App. U)</u> <u>30 days (App. S)</u> <u>90 days (App. Y)</u>	<u>151-240 (App. U)</u> <u>151-211 (App. S)</u> <u>151-271 (App. Y)</u>

ATTACHMENT B TO APPENDIX 4

CONTACTS FOR NOTICES

[Section 4.15]

CAISO

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

[NAME OF PTO]

[Address of PTO]

**APPENDIX HH**

**Generation Interconnection Agreement Amendment**

**Re: Generator Downsizing**

*This Appendix HH is to be used to implement amendments to Generation Interconnection Agreements pursuant to CAISO Tariff Appendix GG for Interconnection Customers who are either Downsizing Generators or Affected Generators*

**AMENDMENT TO THE GENERATOR INTERCONNECTION AGREEMENT**

**BETWEEN**

**[INTERCONNECTION CUSTOMER]**

**[PARTICIPATING TO]**

**CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION**

**(Queue Position \_\_\_\_\_)**

**(Post Downsizing Study Amendment)**

**THIS AMENDMENT**, effective as of \_\_\_\_\_, 20\_\_\_\_, is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and among \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ (“Interconnection Customer”), \_\_\_\_\_, a corporation organized and existing under the laws of the State of California (“Participating TO”), and the California Independent System Operator Corporation, a California nonprofit public benefit corporation organized and existing under the laws of the State of California (“CAISO”). The Interconnection Customer, the Participating TO, and the CAISO each may be referred to as a “Party” or collectively as the “Parties.”

This Amendment amends the following Generation Interconnection Agreement:  
[Check the applicable agreement]

[ \_\_\_\_\_ ] \_\_\_\_\_ A Large Generation Interconnection Agreement (“LGIA”);

[ \_\_\_\_\_ ] \_\_\_\_\_ A Small Generation Interconnection Agreement (“SGIA”);

which is herein referenced as the Generator Interconnection Agreement (“GIA”).

\_\_\_\_\_ This Amendment is the [list sequential amendment number \_\_\_\_\_] amendment to the GIA.

**RECITALS**

(a) WHEREAS, the Interconnection Customer, the Participating TO, and the CAISO entered into a GIA dated \_\_\_\_\_ for the purpose of interconnecting the Generating Facility known as \_\_\_\_\_, which GIA is referenced as CAISO Service Agreement No. \_\_\_\_\_; Participating TO Service Agreement No. \_\_\_\_\_)

[Check here [ \_\_\_\_\_ ], if the GIA has been previously amended]

Which the Parties thereafter amended by the following:

[List amendments and execution or effective date]

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(b) WHEREAS, the Interconnection Customer's Interconnection Request has been included in the Generator Downsizing Study conducted pursuant to CAISO Tariff Appendix GG, wherein the Interconnection Customer was [check applicable alternative]

[ ] a Downsizing Generator with a Generator Downsizing Request to reduce the megawatt capacity of the Generating Facility; or

[ ] an Affected Generator whose Interconnection configuration was modified or otherwise affected by the Generator Downsizing Study;

(c) WHEREAS, the Parties desire to update the GIA following the Generator Downsizing Study;

**NOW, THEREFORE, the Parties agree as follows:**

### **AMENDMENT**

1. Unless otherwise defined herein, all defined terms used herein shall have the meaning set out in CAISO Tariff Appendix A, CAISO Tariff Appendix GG, or the GIA.

2. [This Amendment Section 2 shall apply only to a Large Generator Interconnection Customer who was a Downsizing Generator whose Generator Downsizing Request was included in the Generator Downsizing Study]

Article 5.16 shall be amended as follows:

Notwithstanding any other provision of the GIA or this Article 5.16, the Interconnection Customer shall have no further right of suspension.

Check this provision if the Interconnection Customer is an Affected Generator

[ ] This Amendment Article 2 is intentionally omitted.

3. The "Generating Facility" as defined in the GIA is hereby amended and superseded by the following definition

[Generating Facility definition – include reduced MW value capacity]

4. This Amendment Section 4 adds the following Article XX to the GIA:

**XX Permitted Reductions in output capacity (MW generating capacity) of the Generating Facility.** An Interconnection Customer may reduce the MW capacity of the Generating Facility by up to five percent (5%) for any reason, during the time period between the Effective Date of this GIA and the Commercial Operation Date. The five percent (5%) value shall be established by reference to the MW generating capacity as set forth in this GIA as amended pursuant to Appendix GG.

The CAISO (in consultation with the applicable Participating TO(s)) will consider an Interconnection Customer's request for a reduction in the MW generating capacity greater than five percent (5%) under limited conditions where the Interconnection Customer reasonably demonstrates to the Participating TO and CAISO that the MW generation capacity reduction is warranted due to reasons beyond the control of the

Interconnection Customer. Reasons beyond the control of the Interconnection Customer shall consist of any one or more of the following:

- (i) the Interconnection Customer's failure to secure required permits and other governmental approvals to construct the Generating Facility at its total MW generating capacity as specified in its Interconnection Request after the Interconnection Customer has made diligent effort to secure such permits or approvals;
- (ii) the Interconnection Customer's receipt of a written statement from the permitting or approval authority (such as a draft environmental impact report) indicating that construction of a Generating Facility of the total MW generating capacity size specified in the Interconnection Request will likely result in disapproval due to a significant environmental or other impact that cannot be mitigated;
- (iii) failure to obtain the legal right of use of the full site acreage necessary to construct and/or operate the total MW generating capacity size for the entire Generating Facility, after the Interconnection Customer has made a diligent attempt to secure such legal right of use. This subsection (iii) applies only where an Interconnection Customer has previously demonstrated and maintained its demonstration of Site Exclusivity prior to invoking this subsection as a reason for downsizing.

If relying on subsections (i) or (ii) above, in order to be eligible for a capacity reduction greater than five percent (5%), the Interconnection Customer must also demonstrate to the CAISO that a reduction of MW generating capacity of the Generating Facility to the reduced size that the Interconnection Customer proposes will likely overcome the objections of the permitting/approving authority or otherwise cause the permitting/approving authority to grant the permit or approval. The Interconnection Customer may satisfy this demonstration requirement by submitting to the CAISO either a writing from the permitting/approving authority to this effect or other evidence of a commitment by the permitting/approving authority that the MW capacity reduction will remove the objections of the authority to the permit/approval application.

If relying on subsection (iii) above, the Interconnection Customer must also reasonably demonstrate to the CAISO that the proposed reduced-capacity Generating Facility can be constructed on the site over which the Interconnection Customer has been able to obtain legal rights of use.

Upon such demonstration to the reasonable satisfaction of the CAISO (after consultation with the applicable Participating TO) the CAISO will permit such reduction. No permitted reduction of MW generation capacity under this Article shall operate to diminish the Interconnection Customer's cost responsibility for Network Upgrades or to diminish the Interconnection Customer's right to repayment for financing of Network Upgrades under this generator interconnection agreement.

5. The GIA shall be amended to delete the following Appendices/Attachments to the GIA in their entirety [Check applicable references to deleted and replaced appendices]

<input type="checkbox"/>	<i>If GIA is an LGIA</i>	<input type="checkbox"/>	<i>If GIA is an SGIA</i>
<input type="checkbox"/>	Appendix A,	<input type="checkbox"/>	Attachment 1
<input type="checkbox"/>	Appendix B,	<input type="checkbox"/>	Attachment 2
<input type="checkbox"/>	Appendix C,	<input type="checkbox"/>	Attachment 3
<input type="checkbox"/>	Appendix D,	<input type="checkbox"/>	Attachment 4
<input type="checkbox"/>	Appendix E,	<input type="checkbox"/>	Attachment 5
<input type="checkbox"/>	Appendix F,	<input type="checkbox"/>	Attachment 6
<input type="checkbox"/>	Appendix G,	<input type="checkbox"/>	Attachment 7
<input type="checkbox"/>		<input type="checkbox"/>	Attachment 8

The deleted appendices/attachments are replaced with those attached to this Amendment.

6. This Amendment constitutes the complete and final agreement of the Parties with respect to the matters set forth in this Amendment, and supersedes all prior understandings, whether written or oral, with respect to such subject matter set forth therein.

7. Except as expressly modified herein, all other terms of the GIA (and subsequent amendments thereto) shall remain unchanged. In the event of conflict between the terms of this Amendment and the GIA, the terms of this Amendment shall govern.

8. This Amendment may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same agreement.

**IN WITNESS WHEREOF**, the Parties have caused this Amendment to be duly executed by and through their respective authorized representatives as of the date referenced above as the effective date.

**Interconnection Customer**

By \_\_\_\_\_

Printed Name \_\_\_\_\_

Title: \_\_\_\_\_

**California Independent System Operator Corporation**

By \_\_\_\_\_

Printed Name \_\_\_\_\_

Title: \_\_\_\_\_

**Participating TO**

By \_\_\_\_\_

Printed Name \_\_\_\_\_

Title: \_\_\_\_\_

**Attachment D – Prepared Direct Testimony of Deborah A. Le Vine**  
**Tariff Amendment to Implement Downsizing Opportunity for Interconnecting Generator Projects**  
**California Independent System Operator**  
**October 26, 2012**

1 UNITED STATES OF AMERICA  
2 BEFORE THE  
3 FEDERAL ENERGY REGULATORY COMMISSION  
4

California Independent System  
Operator Corporation

Docket No. ER13-\_\_\_\_-000

5  
6  
7 PREPARED DIRECT TESTIMONY  
8 OF  
9 DEBORAH A. LE VINE  
10

11 **Q. Please state your name and business address.**

12 **A.** My name is Deborah A. Le Vine. I am employed by the California Independent  
13 System Operator Corporation (“ISO”), 250 Outcropping Way, Folsom, CA 95630.  
14

15 **Q. Please describe your professional and educational background.**

16 **A.** I earned a Bachelor of Science degree in Electrical Engineering from San Diego  
17 State University in San Diego, California in May 1981. In May 1987, I received a  
18 Master in Business Administration from Pepperdine University in Malibu,  
19 California. In December 2002, I completed an Executive Program in Driving  
20 Government Performance: Leadership Strategies that Produce Results, from the  
21 John F. Kennedy School of Government, Harvard University in Cambridge,  
22 Massachusetts. In August 2007, I completed an Advanced Masters Certificate  
23 program in Project Management from Villanova University in Villanova,  
24 Pennsylvania. Additionally, I am a registered Professional Electrical Engineer in  
25 the State of California.  
26

1 **Q. By whom and in what capacity are you employed?**

2 **A.** I have been employed by the ISO for over 14 years and I am currently the  
3 Director of Infrastructure Contracts & Management. Prior to assuming this  
4 position, I was the Director of System Operations, in which I ensured that the  
5 day-to-day grid and market operations are maintained, thereby ensuring  
6 compliance with system reliability for the ISO balancing authority area and  
7 transmission provider as designated by the North American Electric Reliability  
8 Corporation and the Western Electricity Coordinating Council, and the market  
9 responsibilities in the ISO tariff. At the ISO I have also held Director positions in  
10 Contracts & Compliance, Contracts & Special Projects, Market Services, and  
11 Project Management for the Market Redesign and Technology Update. Under  
12 my directorship as Director of Contracts & Compliance, the ISO developed its  
13 initial *pro forma* generator interconnection agreements and handled negotiation  
14 and execution of these agreements.

15

16 **Q. What are your job responsibilities as Director of Infrastructure Contracts &**  
17 **Management?**

18 **A.** The ISO created the position of Director of Infrastructure Contracts &  
19 Management earlier this year as a result of the increased number of generator  
20 interconnections required to meet the 33 percent renewable portfolio standard in  
21 California, the need to manage the ISO's generation interconnection queue and  
22 generation interconnection agreement ("GIA") portfolio, and the need to oversee  
23 the preparation and updating of other regulatory contracts required by the ISO

1 tariff. The responsibilities include proactively monitoring that the parties to GIAs  
2 are meeting the terms and conditions of the GIAs; managing the interconnection  
3 queue to enable viable projects to reach commercial operation and non-viable  
4 projects to either become viable or surrender their queue positions; and aligning  
5 internal ISO processes to manage the over 300 projects currently in the ISO's  
6 queue and resolve interconnection customer issues. In addition, I am  
7 responsible for all regulatory contracts negotiated and executed between the ISO  
8 and market participants, including but not limited to Participating Generator  
9 Agreements, Meter Service Agreements, and Adjacent Balancing Authority  
10 Operating Agreements.

11  
12 **Q. Were you involved in the development of the one-time generator**  
13 **downsizing opportunity that the ISO proposes to implement in December**  
14 **2012?**

15 **A.** Yes, I was part of the team that created the proposal to implement the one-time  
16 generator downsizing opportunity. In my role as Director of Infrastructure  
17 Contracts & Management, as part of the ISO team, I participated in the proposal  
18 creation from inception to final proposal, including interaction with stakeholders in  
19 stakeholder conference calls and ISO team review and incorporation or other  
20 treatment of stakeholder comments. In this connection, I participated in the  
21 overall design development, including the downsizing study scope, and had the  
22 primary role in developing the proposal component pertaining to ISO negotiation

1 and amendment of GIAs to implement incorporating the generator downsizing  
2 study results into GIA amendments.

3  
4 **Q. What is the purpose of your testimony?**

5 **A.** First, I will explain the responsibility of each downsizing generator for study costs,  
6 which the ISO proposes to limit using a cost cap on that obligation. I will then  
7 discuss the responsibility of downsizing generators for GIA amendment costs,  
8 which the ISO also proposes to limit using a cost cap. While the GIA amendment  
9 costs are set at \$10,000 per agreement, there is a limitation on the number of  
10 agreements the downsizing generator is responsible for, as I will explain further.  
11 Lastly, I will discuss the \$200,000 generator downsizing deposit that each  
12 downsizing generator will be required to provide toward the payment of its  
13 capped study and GIA amendment costs.

14  
15 **I. Responsibility for Study Costs**

16  
17  
18 **Q. What responsibility will downsizing generators have for the costs of the  
19 one-time generator downsizing opportunity proposed in the ISO's filing?**

20 **A.** Downsizing generators will be obligated to pay for two types of costs associated  
21 with the one-time generator downsizing effort: (1) the costs associated with  
22 performing the downsizing studies that analyze the impact of the generator  
23 downsizing requests on the system upgrades that have been identified in  
24 previous interconnection studies; and (2) the costs to amend those GIAs that  
25 require modification as a result of the generator downsizing requests and the

1 study results. In this regard, study results identify an interconnection  
2 configuration (sometimes called a “method of service”) which is then carried over  
3 into GIAs. So if the generator downsizing study changes the interconnection  
4 configuration, the method of service will be updated in the GIAs through the GIA  
5 amendment process.

6  
7 **Q. What obligation will each downsizing generator have for study costs?**

8 **A.** Each downsizing generator will be responsible for an equal share of the actual  
9 costs incurred by the ISO and applicable participating transmission owner(s) in  
10 connection with conducting the generator downsizing study and the generator  
11 downsizing study reports to be developed in the course of the one-time  
12 downsizing opportunity (including the costs associated with validating the  
13 generator downsizing requests), subject to a cost cap that I discuss below.

14  
15 **Q. How will the obligation of each downsizing generator for actual study costs  
16 be calculated?**

17 **A.** The ISO and each applicable participating transmission owner will track the time  
18 and expenses it incurs in connection with conducting the generator downsizing  
19 study and with the development and issuance of the generator downsizing study  
20 reports. This tracking of time and expenses will form the basis for calculating the  
21 actual study costs incurred by the ISO and applicable participating transmission  
22 owners. Each downsizing generator’s share of the actual study costs will be  
23 determined by dividing the total amount of actual study costs by the number of  
24 valid generator downsizing requests.

1 **Q. Did the ISO determine the likely amount of responsibility of downsizing**  
2 **generators for study costs?**

3 **A.** Yes. The ISO reviewed historical cost data from past queue cluster studies to  
4 attempt to estimate, as well as possible, the likely amount of responsibility of  
5 downsizing generators for the costs of the generator downsizing study and  
6 generator downsizing study reports. The ISO's review indicated that, on  
7 average, queue cluster study costs for either a Phase I or Phase II  
8 interconnection study have not exceeded \$50,000 per interconnection customer.  
9 This includes costs incurred, on a per-interconnection customer basis, to perform  
10 interconnection studies, hold results meetings, and develop and issue study  
11 reports. The ISO's review was based on a sample of large clusters and noted a  
12 fairly wide range of queue cluster study costs that ran from significantly less than  
13 \$50,000 to approximately \$70,000 per interconnection customer.

14  
15 The ISO also recognized, however, that the actual number of generator  
16 downsizing requests under the one-time downsizing proposal is a significant  
17 variable in the size and scope of the downsizing study efforts, particularly with  
18 respect to how many non-downsizing generators are identified as affected  
19 generators – that is, generators who do not choose to downsize but whose  
20 requirements for network upgrades and or participating transmission owners'  
21 interconnection facilities may change, with the result that the study efforts not  
22 only need to identify changes in the methods of service, but also need to be  
23 presented a supplemental study report for each downsizing generator.

1 Therefore, the ISO estimated that the downsizing generator's cost responsibility  
2 will likely exceed the \$50,000 historical average, because of this variable. For  
3 estimating purposes, then, the ISO doubled that historical average so as to  
4 account for study efforts and supplemental report creation related to the affected  
5 generators, in which case each downsizing generator should assume that its  
6 obligation for the costs of the generator downsizing study and generator  
7 downsizing study reports could be as high as approximately \$100,000.

8 Acknowledging that the variability of actual costs depends on the number of  
9 generators who actually submit downsizing requests, the ISO has also offered an  
10 opportunity for downsizing generators to withdraw their requests after the ISO  
11 receives the requests and creates and posts a preliminary cost estimate for the  
12 aggregated study cost effort. The ISO anticipates that it will post this preliminary  
13 cost estimate before January 30, 2013.

14  
15 The estimated study cost amount of up to \$100,000 comes to about half the  
16 amount of the \$200,000 generator downsizing deposit that each downsizing  
17 generator is required to provide, as I discuss below.

18  
19 **Q. Please describe the cap that the ISO proposes on study costs.**

20 **A.** Each downsizing generator's obligation for actual study costs will be no higher  
21 than a capped amount equal to 150 percent of its equal share of the preliminary  
22 cost estimate that I just discussed. The cap for each downsizing generator will  
23 be determined by dividing the preliminary estimate of the aggregate study costs

1 by the number of valid generator downsizing requests and then multiplying the  
2 resulting amount by 1.5 (*i.e.*, 150 percent).

3  
4 **Q. Why does the ISO propose that cost cap?**

5 **A.** The ISO proposes the 150 percent cap on study costs in order to address  
6 stakeholder concerns about the uncertainty of those costs. The limitation on  
7 costs offered by the cap will allow each downsizing generator to better gauge the  
8 costs associated with its generator downsizing request. The ISO has also  
9 included this cost cap feature to incorporate the possibility of an overlapping  
10 effect by two or more downsizing generators who are located in a common  
11 electrical area such that each downsizing request affects upgrades common to  
12 multiple affected generators. In such cases, it is reasonable to expect that there  
13 will be some cost savings with respect to the downsizing study work associated  
14 with common affected generator study report supplements, and so it is also  
15 reasonable for the downsizing customers to share in these cost savings. In  
16 contrast, the ISO does not expect such a cost savings in the work that needs to  
17 be done to amend the GIAs, even if there is an overlap of downsizing generators  
18 and affected generators.

1 **II. Responsibility for GIA Amendment Costs**

2  
3 **Q. What responsibility will each downsizing generator have for GIA**  
4 **amendment costs?**

5 **A.** The downsizing generator will be charged \$10,000 for the costs to amend its own  
6 GIA to incorporate the refreshed or modified network upgrade and participating  
7 transmission owner’s interconnection facilities and resulting changes into the  
8 method of service set out in the downsizing generator’s GIA, and will also be  
9 charged \$10,000 for the ISO and participating transmission owner to similarly  
10 modify each GIA of an affected generator whose method of service is amended,  
11 in whole or in part. Also, each downsizing generator and affected generator will  
12 be responsible for its own costs of amending its own GIA.

13  
14 In cases where multiple GIAs relate to multiple generator downsizing requests,  
15 the cost responsibility of each downsizing generator that submitted one of the  
16 multiple generator downsizing requests will be calculated by (i) multiplying the  
17 number of GIAs required to be amended by \$10,000 and then (ii) dividing the  
18 resulting amount by the number of generators that requested downsizing.

19  
20 **Q. Why does the ISO propose to charge the amount of \$10,000 to amend each**  
21 **GIA?**

22 **A.** The \$10,000 amount is a fee that covers the various negotiation and  
23 administrative costs related to amending GIAs. The ISO, in consultation with

1 stakeholders, determined that using \$10,000 as a proxy for the costs of  
2 amending each affected GIA is appropriate and reasonable for several reasons.

3  
4 First, based on its experience, the ISO identified the primary tasks that it expects  
5 will need to be performed in coordination with the participating transmission  
6 owners in order to amend the GIAs affected by downsizing, along with the  
7 estimated costs of doing so. In the case of a GIA amendment to true-up the  
8 GIAs to the downsizing study results, the ISO expects the tasks and effort to  
9 amend the methods of service will be approximately the same whether the  
10 generator is the downsizing generator or an affected generator. In this regard,  
11 ISO personnel who prepare GIA amendments and budgets as part of their day-  
12 to-day responsibilities developed a reasonable estimate of the hours and  
13 corresponding costs for preparing a hypothetically straightforward GIA  
14 amendment that would include the removal or updating of the network upgrades  
15 and participating transmission owner's interconnection facilities described in the  
16 GIA and associated changes to the costs and schedules set forth therein. In this  
17 estimation, the ISO also assumed that the participating transmission owner  
18 performed its work over the same amount of time and had the same hourly rates  
19 as the ISO. The estimate is depicted in the following itemized table, which is  
20 broken out by the amount of time and the cost to complete each primary task. As  
21 shown in the last row of the table, the total of the estimated costs to amend this  
22 hypothetical GIA is approximately \$11,000.

23

**Table of Estimated GIA Amendment Costs**

<b>Primary Task</b>	<b>Estimated Time Required to Complete (Hours)</b>	<b>Estimated Cost, Including Overhead (\$/Hour)</b>	<b>Estimated Cost Total (\$)</b>
<u>Prepare draft GIA amendment –</u>			
• Participating Transmission Owner (PTO) Contracts Staff	12	\$125	\$1,500
• PTO Engineering Staff (prepare / review appendices)	4	\$150	\$600
• PTO Legal Staff (conduct initial review / prepare for negotiations)	2	\$200	\$400
• ISO Contracts Staff	8	\$125	\$1,000
• ISO Engineering Staff (prepare / review appendices)	4	\$150	\$600
• ISO Legal Staff (conduct initial review / prepare for negotiations)	2	\$200	\$400
<u>Negotiate GIA amendment –</u>			
• PTO Contracts Staff	8	\$125	\$1,000
• PTO Engineering Staff	4	\$150	\$600
• PTO Legal Staff	4	\$200	\$800
• ISO Contracts Staff	12	\$125	\$1,500
• ISO Engineering Staff	4	\$150	\$600
• ISO Legal Staff	4	\$200	\$800
<u>Prepare and execute final GIA –</u>			
• PTO Contracts Staff	2	\$125	\$250
• ISO Contracts Staff	10	\$125	\$1,000
<b>Total of Estimated GIA Amendment Costs</b>			<b>\$11,050</b>

1 **Q. Is it possible that even this estimated cost of \$11,000 per amended GIA**  
2 **may be conservative?**

3 **A.** Yes. Even the \$11,000 figure may be conservative, because the ISO would  
4 probably need to engage additional resources, such as outside contractors or  
5 outside legal counsel, in order to assist with the primary tasks listed in the table if  
6 the ISO receives a large number of generator downsizing requests. And if the  
7 ISO were to try to project costs to include such work, the ISO would have to  
8 attempt to create a blended rate to incorporate some component of outside  
9 vendor costs, which are typically more expensive than the ISO's internal rate  
10 estimates. In addition, as stated above, the ISO assumed that the participating  
11 transmission owner performed its GIA amendment work over the same amount  
12 of time and at the same rates as the ISO.

13  
14 **Q. Why else is it reasonable to use this proxy for the estimated costs of**  
15 **amending each affected GIA?**

16 **A.** Although the ISO has prepared the cost estimate provided in the table above, the  
17 ISO has not separately tracked and billed the costs of negotiating and preparing  
18 individual GIAs in the past, because the interconnection customers do not pay  
19 itemized costs for such work pursuant to the ISO tariff appendices under which  
20 interconnection requests are being processed. The ISO, therefore, would need  
21 to establish new procedures in order to do so. This would not be a rational  
22 expenditure of the ISO's resources, however, given the one-time nature of the  
23 proposed generator downsizing opportunity and the fact that the opportunity will

1 need to be as streamlined as possible so as not to interfere with the ISO's normal  
2 interconnection queue processing activities, which require the work to be  
3 completed in a relatively compressed timeframe. Therefore, separately tracking  
4 and billing the GIA amendment costs rather than using a reasonable proxy for  
5 those costs is not a viable option.

6  
7 **Q. Please describe the cap the ISO proposes on GIA amendment costs.**

8 **A.** Each downsizing generator's cost responsibility for amending GIAs will be  
9 capped at \$100,000. This cap on GIA amendment costs comes to exactly half  
10 the amount of the \$200,000 generator downsizing deposit that each downsizing  
11 generator is required to provide, as I discuss below.

12  
13 **Q. Why does the ISO propose that cost cap?**

14 **A.** Based on a high-level review of the average number of electrically  
15 interdependent projects in an electrical area, the ISO believes that few, if any,  
16 generator downsizing requests will have so significant a ripple effect as to impact  
17 more than ten generators (including the downsizing generator) and thus require  
18 more than ten amendments to affected GIAs at a cost of \$10,000 each.  
19 Consequently, the ISO anticipates that GIA amendment costs will likely be  
20 \$100,000 or less for the majority of downsizing generators. However, the ISO  
21 proposes the \$100,000 cap to ensure that GIA amendment costs are limited to  
22 \$100,000 in the relatively rare cases where amendments are required to more  
23 than ten GIAs.

1 **III. The Generator Downsizing Deposit**

2  
3 **Q. How does the ISO propose to pay for study costs and GIA amendment**  
4 **costs under its proposal?**

5 **A.** The ISO proposes that each downsizing generator be required to provide a  
6 generator downsizing deposit in the amount of \$200,000. This \$200,000 deposit  
7 will serve as a pool of funds used to pay for the sum of the downsizing  
8 generator's obligations for study costs and GIA amendment costs as adjusted  
9 using the cost caps I have discussed.

10

11 **Q. What happens if the sum of the downsizing generator's study costs and**  
12 **GIA amendment costs is more than its generator downsizing deposit?**

13 **A.** If the total amount required to fund those costs is determined to be more than  
14 \$200,000, the downsizing generator will be obligated to provide the additional  
15 amount, subject to the cost caps.

16

17 **Q. What happens if the sum of the downsizing generator's study costs and**  
18 **GIA amendment costs is less than its generator downsizing deposit?**

19 **A.** If the total amount required to fund those costs is determined to be less than  
20 \$200,000, then the downsizing generator will be refunded the unused balance of  
21 its deposit, together with applicable interest from the interest-bearing account at  
22 the bank or financial institution into which the funds were deposited.

23

1 **Q. Could you please provide hypothetical examples of how these payment**  
2 **rules will work?**

3 **A.** Certainly. Consider the three different scenarios I discuss below, each of which  
4 involves different amounts of study costs and GIA amendment costs that one  
5 particular downsizing generator, designated as downsizing generator A, is  
6 obligated to pay. Also assume that, under each of the three scenarios, the  
7 preliminary estimate of the aggregate study costs for conducting the generator  
8 downsizing study is \$1,000,000 and that downsizing generator A is one of ten  
9 downsizing generators that submitted valid generator downsizing requests.  
10 Thus, the applicable cap on each downsizing generator's share of the downsizing  
11 study costs is \$150,000 (*i.e.*, \$1,000,000 divided by 10 and then multiplied by  
12 1.5), and the cap on each downsizing generators GIA amendment costs is the  
13 uniform cap of \$100,000. The following examples illustrate the operation of the  
14 payment rules under each of the three scenarios:

15  
16 • Scenario #1 – If downsizing generator A is obligated to pay \$70,000 for study  
17 costs and \$70,000 for GIA amendment costs after the cost caps are applied  
18 (equaling a total cost obligation of \$140,000), then downsizing generator A will be  
19 refunded \$60,000, *i.e.*, the difference between its \$200,000 generator downsizing  
20 deposit and its total payment obligation of \$140,000. Note that neither the  
21 applicable cap on study costs nor the cap on GIA amendment costs comes into  
22 play under this example. Also note that the actual study costs were \$70,000 and

1 did not reach the preliminary cost estimate for downsizing generator A of  
2 \$150,000.

- 3
- 4 • Scenario #2 – If downsizing generator A is obligated to pay \$130,000 for study  
5 costs and \$70,000 for GIA amendment costs after the cost caps are applied  
6 (equaling a total cost obligation of \$200,000), then downsizing generator A will  
7 not be refunded any amount or be required to provide any additional amount,  
8 because its \$200,000 generator downsizing deposit will equal its total payment  
9 obligation of \$200,000. Again, neither the applicable cap on study costs nor the  
10 cap on GIA amendment costs comes into play under this example.

- 11
- 12 • Scenario #3 – If downsizing generator A is obligated to pay \$130,000 for study  
13 costs and \$100,000 for GIA amendment costs after the cost caps are applied  
14 (equaling a total cost obligation of \$230,000), then downsizing generator A will be  
15 required to cover the costs above its generator downsizing deposit by paying an  
16 additional \$30,000, *i.e.*, the difference between its total payment obligation of  
17 \$230,000 and its \$200,000 deposit. In this example, downsizing generator A  
18 reaches the cap on GIA amendment costs but is below the applicable cap on  
19 study costs.

20

1 **Q. Does the ISO plan to earmark a portion of each downsizing generator’s**  
2 **generator downsizing deposit to pay for study costs and earmark the rest**  
3 **of the deposit to pay for GIA amendment costs?**

4 **A.** No. As I have explained, each \$200,000 generator downsizing deposit will serve  
5 as a pool of funds used to pay for the downsizing generator’s study costs and  
6 GIA amendment costs, subject to the caps on each of those types of costs.  
7 Thus, no portion of the \$200,000 generator downsizing deposit will be earmarked  
8 to pay for the downsizing generator’s study costs or GIA amendment costs.  
9 Instead, as illustrated in the examples above, the amount of the deposit that will  
10 be used to pay for study costs and the amount used to pay for GIA amendment  
11 costs can vary based on the amounts for which the downsizing generator is  
12 responsible.

13  
14 **Q. Why does the ISO propose to set the level of the generator downsizing**  
15 **deposit at \$200,000?**

16 **A.** The ISO proposes this level of the generator downsizing deposit in order to strike  
17 a reasonable balance between ensuring that downsizing generators have  
18 enough “skin in the game” to participate meaningfully in the one-time generator  
19 downsizing opportunity, while at the same time not being subject to a level of  
20 deposit so high as possibly to discourage them from participating in the  
21 opportunity. Further, if the ISO determines that the sum of the downsizing  
22 generator’s study costs and GIA amendment costs is less than its deposit, the  
23 downsizing generator will be refunded the balance, with interest accruing from

1 depositing those funds in an interest-bearing account. Thus, the downsizing  
2 generator can be assured that it will get back the portion of the \$200,000 deposit  
3 not used to cover those costs.

4  
5 The ISO also considers it unlikely that the sum of a downsizing generator's  
6 obligations for study costs and GIA amendment costs will exceed its \$200,000  
7 generator downsizing deposit. As I have explained, the ISO doubled the  
8 historical average amount of study costs so each downsizing generator should  
9 assume that its cost share for the generator downsizing study and generator  
10 downsizing study reports could be up to approximately \$100,000. Thus, the ISO  
11 believes that \$100,000 is the "high water mark" for likely study costs and that  
12 each downsizing generator's equal share of the study costs will probably be  
13 below that mark. Also, the cost responsibility of each downsizing generator will  
14 be limited by the 150 percent cap on its study costs. As to GIA amendment  
15 costs, the ISO proposes to cap the obligation of the downsizing generator at  
16 \$100,000 – a high water mark that the ISO expects will not be reached by the  
17 majority of downsizing generators. Accordingly, the ISO believes that the  
18 \$200,000 deposit amount will be more than sufficient to cover these costs and  
19 that as a consequence most or all downsizing generators will be refunded  
20 unused portions of their deposits.

21  
22 **Q. Does this complete your testimony?**

23 **A.** Yes, it does.

UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System )  
Operator Corporation )

Docket No. ER13-\_\_\_\_-000

DECLARATION OF WITNESS

I, Deborah A. Le Vine, declare under penalty of perjury that the statements contained in the Prepared Direct Testimony of Deborah A. Le Vine on behalf of the California Independent System Operator Corporation in this proceeding are true and correct to the best of my knowledge, information, and belief.

Executed on this <sup>sh</sup>25 day of October, 2012.



Deborah A. Le Vine

**Attachment E – Draft Final Proposal**

**Tariff Amendment to Implement Downsizing Opportunity for Interconnecting Generator Projects**

**California Independent System Operator**

**October 26, 2012**



# **Generator Project Downsizing**

## **Draft Final Proposal**

July 19, 2012  
Market and Infrastructure Development

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## 1 Executive Summary

The impetus for this initiative was the concern expressed by generation developers that they could advance their project through an interconnection agreement and then determine, as the milestone dates for project commencement approached, that they were not in a position to construct the full megawatt (MW) capacity of the proposed generator facility that was set out in their interconnection agreement. A related concern expressed by developers was that failure to fully construct the MW capacity of a project specified in their interconnection agreement can lead to breach of the generator interconnection agreement which, in turn, raises the possibility of triggering a termination of the generator interconnection agreement. Investors and financiers of the developed portion of a project that proceeds to completion are thus concerned about the effect, on the developed portion of the project, of the consequences of failure to perform the terms of the generator interconnection agreement with respect to the undeveloped portion of the facility. Accordingly, developers have continued to request that the ISO provide additional project downsizing opportunities at various times after the completion of the Phase II interconnection studies through the triggering dates for milestone achievement under the interconnection agreement.

The purpose of this initiative is therefore to explore the possible expansion of opportunities for generator interconnection customers in Cluster 4 and earlier to downsize the MW capacity of their proposed generating facilities. More specifically, the goal of the proposal described in this document is to facilitate completion to commercial operation of projects that are viable but for the need to downsize to match their MW generating capacity size to a level that will enable the project to meet its milestones in a timely manner and exit the interconnection queue. This proposal is targeted at such projects that are ready to make the downsizing decision and proceed with project development. This proposal is not intended to provide ongoing, flexible downsizing options and opportunities that will enable all projects, regardless of their viability, to remain indefinitely in the interconnection queue without progressing toward commercial operation in accordance with the milestones specified in their interconnection agreement. In this manner the present proposal complements the ISO's queue management efforts.

In this draft final proposal, the ISO proposes a new, one-time downsizing window for active projects in Cluster 4 and earlier in the interconnection queue. This new downsizing opportunity will be a one-time opportunity that would be offered shortly after the Federal Energy Regulatory Commission (FERC) issues an order approving this proposal. No further downsizing opportunities will be offered.

This draft final proposal is the work product of a stakeholder process launched in April of this year. Since that time the ISO has issued two straw proposal papers, held both a stakeholder meeting and a stakeholder web conference, and received and considered two rounds of written comments from stakeholders. All of this constructive stakeholder interaction has culminated in the draft final proposal presented here. This work product also benefits from input received on the subject of downsizing through two other relevant stakeholder processes: Generator Interconnection Procedures Phase 2 (GIP 2) held in 2011 and Generator Interconnection

Procedures Phase 3 (GIP 3) started in early 2012 but later deferred while this downsizing initiative is pursued.

Following one more round of stakeholder interaction (a stakeholder web conference on July 27 and receipt of stakeholders' written comments on August 3), the ISO plans to present this proposal to the ISO Board of Governors at the September 2012 meeting.

The draft final proposal reflects many changes made to the revised straw proposal in response to stakeholder input. These are summarized in the following section of the present paper.

## **2 Changes and clarifications to revised straw proposal**

In response to input that has been received from stakeholders, the ISO has made the following changes to the revised straw proposal to create this draft final proposal.

1. Instead of distinguishing study groups or clusters, the ISO proposes that restudy costs be allocated to all downsizing generators equally (with no cap on restudy costs). The ISO also provides historical cost data from past cluster studies to help a downsizing customer estimate its restudy costs.
2. A downsizing customer's cost responsibility for the costs to modify generator interconnection agreements will be \$10,000 per affected generator interconnection agreement, with a \$100,000 cap. Cost responsibility will be shared when multiple downsizing requests made in the same study area affect the same generator interconnection agreements.
3. In order to give the downsizing generators some additional ability to estimate costs, the ISO will post on its website, prior to initiating the restudy, which projects (identified by queue number) have submitted a downsizing request and the MW amount requested.
4. In the revised straw proposal, the ISO proposed that generators be committed to downsizing once they had submitted their request. In this draft final proposal, the ISO proposes that after the downsizing requests have been posted (as described in (2) above) but prior to the commencement of restudies, generators be provided with the option of withdrawing their downsizing request and having their full \$200,000 downsizing deposit refunded.
5. In the rare instance that restudies identify a circumstance in which a downsizing generator's network upgrade cost may significantly exceed its network upgrade cost responsibility as identified in its Facility Study, Phase II study, or its generator interconnection agreement, the ISO proposes that such a downsizing generator be provided an opportunity to withdraw its downsizing request, forfeiting any unused portion of its deposit.
6. In the revised straw proposal, the ISO proposed to eliminate further generation interconnection agreement suspension rights and limit any further generating facility commercial operation date extensions to force majeure events for downsizing generators. In this draft final proposal, the ISO proposes to grant no further suspension

rights for downsizing generators, but continue to allow downsizing generators to submit a material modification request for an extension of commercial operation date.

7. In rare cases where a downsizing request may adversely impact WDAT customers, the ISO clarifies that downsizing generators will have to bear the cost consequences of these effects.

In addition to the above changes, the ISO has made the following clarifications to the revised straw proposal to create this draft final proposal.

1. Although the ISO is not categorically prohibiting the future use of the partial termination, the ISO will only consider it in very limited circumstances.
2. The ISO is not offering additional downsizing flexibility beyond the narrowly tailored downsizing opportunity described in the present paper. The proposal is not intended to provide ongoing, flexible downsizing options and opportunities that will enable all projects, regardless of their viability, to remain indefinitely in the interconnection queue without progressing toward commercial operation in accordance with the milestones specified in their interconnection agreement.
3. Despite the theoretical possibility of increased network upgrade costs, neither the ISO nor stakeholders have thus far been able to identify an example where this could occur.
4. This draft final proposal document does not endorse an expectation that the participating transmission owner, and ultimately the ratepayers, should “pick up” costs due to downsizing. Where a downsizing request would result in increased network upgrade costs that make it impossible to maintain the “no worse off” guideline, the intent is for the downsizing generator to cover any additional costs.
5. The ISO will make every effort to minimize impacts to participating transmission owners due to generator project downsizing. Despite this, there could be rare instances for which it may not be feasible for the ISO to absolutely guarantee that every impact to a participating transmission owner will be mitigated.
6. Although it may not be possible to mitigate all impacts to schedule, every effort will be made to minimize such impacts.
7. The ISO does not propose to make an exception for serial group projects but to instead apply the general guideline of “no worse off” to all pre-cluster 5 projects.
8. A downsizing interconnection customer shall be required to submit an updated interconnection request to the ISO which includes all attachment and technical data pertaining to the generating facility as modified at the time the downsizing request is made. The downsizing generator may change the step-up transformer and generation tie-line parameters, but other changes to the generator facilities will not be accepted as part of the downsizing request.
9. All previous withdrawals from the queue will be properly accounted for while conducting the restudies. In the rare case of increased network upgrade costs, the ISO and the applicable participating transmission owner will isolate the network upgrade costs attributable to downsizing generators from the withdrawals.

### 3 Introduction

The impetus for this initiative was the concern expressed by generation developers that they could advance their project through an interconnection agreement and then determine, as the milestone dates for project commencement approached, that they were not in a position to construct the full MW capacity of the proposed generator facility that was set out in their interconnection agreement. In some cases, this situation stems from the fact that the developer has not secured a power purchase agreement to cover the full output of its originally planned megawatt capacity. The ISO interconnection process does not permit an interconnection customer to split a project which has been studied in interconnection studies as one project into multiple projects with multiple interconnection agreements, nor does it offer an opportunity for the interconnection to downsize to “shed” the uncommitted megawatts when such downsize is a material modification. As a result, a developer who cannot complete its generator project at the full MW capacity specified in its interconnection agreement must either qualify to reduce the size of its project under the “substantial performance” provisions discussed later in this document, or be found to be in breach of its interconnection agreement.

A further concern expressed by developers was that failure to fully construct the MW capacity of a project specified in their interconnection agreement can lead to breach of the generator interconnection agreement which, in turn, raises the possibility of triggering a termination of the generator interconnection agreement. Investors and financiers of the developed portion of the project that proceeds to completion are thus concerned about effect on this portion of the project of consequences of failure to perform the terms of the agreement with respect to the undeveloped portion of the facility. Accordingly, developers have continued to request that the ISO provide additional project downsizing opportunities at various times after the completion of the Phase II interconnection studies through the triggering dates for milestone achievement under the interconnection agreement.

Stakeholders have commented that the ability to downsize is important to the continued viability of generator projects currently under development. Stakeholders cite many reasons for this, including the inability to secure a power purchase agreement for the full amount of the project, as well as reasons that may be beyond the control of interconnection customers such as the inability to obtain permitting and governmental approvals for the full MW capacity.<sup>1</sup> In either case, interconnection customers may find themselves in a situation where the project size in their original interconnection request may be too large, thereby impeding their ability to comply with the requirements of their interconnection agreement, and the financial liabilities associated with failing to construct the full amount of capacity may potentially jeopardize the entire project.

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<sup>1</sup> Failure to achieve full MW build-out for permitting and other reasons beyond the control of a developer is mentioned here only because it may be a reason why a developer chooses to downsize under the path discussed in this proposal instead of demonstrating to the ISO that, for these reasons, the customer can only tender substantial performance (not full performance) under the large generator interconnection agreement (LGIA) provision developed in the generator interconnection procedures phase 2 (GIP 2) process. As the ISO said last year during that process, the substantial performance principle is one of contract law and is ISO practice and the GIP 2 LGIA provision was added to clarify the point in the LGIA.

In response the ISO launched this initiative to specifically explore the possible expansion of opportunities for generator interconnection customers in Cluster 4 and earlier to downsize the MW capacity of proposed generating facilities.

Leading up to the generator interconnection procedures phase 3 initiative (GIP 3), stakeholders had requested that there be an exploration of the possibility of creating a new avenue enabling interconnection customers to request a downsize of generating facility MW capacity even when such requests would have a material impact on later queued projects. There are times when this need may arise due to circumstances beyond the interconnection customer's control<sup>2</sup>; however, the current generator interconnection procedures prohibit the ability to downsize if a later queued project is adversely affected and the interconnection customer requesting the downsizing is not willing to fund the network upgrades in their generator interconnection agreement<sup>3</sup>, or because of the downsizing an upfront financed cost is no longer upfront financed by the participating transmission owner. The ISO generator interconnection procedures do not allow an interconnection customer to pay a penalty, or compensate the materially affected later queued project. The interconnection customer's only recourse is to withdraw from the queue and re-enter in a later cluster with a downsized MW capacity.

In the GIP 3 initiative the ISO solicited stakeholder comments on the relative priority of issues that should be considered, on downsizing as well as on a couple other dozen topics. The ISO explained that a limited number of topics would be included in the initial stakeholder effort to ensure timely resolution and implementation. Stakeholders expressed broad support for only one topic, the extent to which an interconnection customer could downsize the MW capacity of its proposed generating facility. As a result of this stakeholder feedback, the ISO decided to defer work on the other topics that did not receive such broad support and to focus the ISO's efforts on project downsizing through this separate stakeholder initiative. The GIP 3 initiative has been deferred while this initiative is pursued.

#### 4 Stakeholder process and next steps

The ISO intends to take this initiative to its Board of Governors for approval at their September 2012 meeting. Accordingly, the ISO's proposed schedule in this initiative is as follows:

May 7	ISO posts straw proposal <i>[Completed]</i>
May 14	Stakeholder meeting <i>[Completed]</i>

<sup>2</sup> Having said this, the downsizing sometimes arises from an interconnection customer's decision to consolidate what it considers separate projects into a single interconnection request, so as to pay only one study deposit. This point has been discussed in earlier GIP stakeholder efforts, where some customers have indicated that they follow this practice because they consider the capital outlay for multiple interconnection requests to be cost prohibitive.

<sup>3</sup> Generator interconnection agreement is a generic term. In fact, a generator signs either a Large Generator Interconnection Agreement (LGIA) or a Small Generator Interconnection Agreement (SGIA), depending on the size of the project. However, for the most part, the term 'generator interconnection agreement' is used in this paper for the sake of simplicity.

May 22	Stakeholder comments due <i>[Completed]</i>
June 8	ISO posts revised straw proposal <i>[Completed]</i>
June 25	Stakeholder web conference <i>[Completed]</i>
July 3	Stakeholder comments due <i>[Completed]</i>
July 19	ISO posts draft final proposal <i>[Completed]</i>
July 27	Stakeholder web conference (1:00 p.m. – 4:00 p.m.)
August 3	Final stakeholder comments due
Sept 13-14	ISO Board of Governors meeting
October	File tariff amendment at FERC

Stakeholders should submit their written comments on the draft final proposal to [GPD@caiso.com](mailto:GPD@caiso.com) by August 3, 2012. A stakeholder comment template will be posted by the July 27 stakeholder web conference.

Additional information in this initiative can be found at:

<http://www.caiso.com/informed/Pages/StakeholderProcesses/GeneratorProjectDownsizing.aspx>

## 5 Objectives of this initiative

The goal of this proposal is to facilitate projects in queue cluster 4 and earlier that would be viable except for the inability to complete the full MW of generating capacity that was specified in the interconnection request. In such cases the opportunity to downsize the project will help ensure that the project can reach commercial operation on a timely basis, and thereby facilitate the development of viable projects while contributing to the ISO's queue management efforts.

To support these goals, the ISO has developed a specific list of objectives to guide this initiative:

1. Improve flexibility for active generator projects in interconnection queue cluster 4 and earlier to downsize MW capacity.
2. Mitigate material impacts to later queued generator projects, including those that do not request downsizing, due to generator downsizing.
3. Minimize risk to ratepayers of stranded transmission investment due to generator downsizing.
4. Minimize impacts to participating transmission owners due to generator downsizing.
5. Contribute to the ISO's queue management efforts by enabling viable projects to reach commercial operation on a timely basis.

In their written comments stakeholders broadly support the five objectives. The Large-scale Solar Association (LSA) and several generation developers suggested the addition of a sixth objective that reads as follows: "Facilitate downsizing of otherwise viable generation projects in

the CAISO interconnection queue, to help meet state policy and reliability objectives in the most efficient manner.” The ISO believes that the intent of LSA’s suggested objective is already met by objective 5 and the goals of this proposal as described above.

The participating transmission owners expressed concern about use of the term “minimize” in objective 4. As is discussed later in the proposal, the ISO will make every effort to ensure that all impacts to the participating transmission owners due to generator project downsizing are covered by the projects triggering those costs through their requests to downsize. However, it may not be possible in each and every instance to guarantee that this is achieved (e.g. the costs to modify generator interconnection agreements affected by a downsizing request may not be completely covered by interconnection customers due to the ISO’s proposal of a cap on those costs, as discussed later in the proposal); hence, the use of the term “minimize.”

## 6 Scope of initiative

In exploring the possible expansion of opportunities for generator interconnection customers to downsize the MW capacity of proposed generating facilities, the scope of this initiative is limited to active<sup>4</sup> projects in Cluster 4 and earlier.<sup>5</sup> This means active generator projects in the following study processes: pre-Amendment 39, Amendment 39 (Appendix W), Serial LGIP (Appendix U), Transition Cluster (Appendix Y), SGIP (Appendix S), SGIP – Transition Cluster (Appendix Y), Clusters 1 – 4 (Appendix Y).

Although the ISO received stakeholder comments suggesting that a limited number of topics from the deferred GIP 3 stakeholder initiative be added to the scope of the present initiative, the ISO has declined to expand the scope of the present initiative, though with one exception as discussed in the following paragraph. As was previously announced to stakeholders, the ISO intends to resume the GIP 3 initiative and its issue topics at some point in the future.

Through the now completed generator interconnection procedures phase 2 (GIP 2) initiative, substantial performance provisions were adopted regarding a “safe harbor” for generator capacity reductions by up to 5 percent and the ability to request size reductions greater than 5 percent upon demonstration of circumstances driving the megawatt reduction that are beyond the interconnection customer’s control (discussed further in section 7.3 of this paper). These provisions were incorporated into Appendix Y and therefore only apply to cluster projects.

Stakeholders’ written comments on previous versions of the proposal in this initiative requested that the ISO extend these provisions to Serial Group and small projects.

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<sup>4</sup> For purposes of this proposal, the term “active” is used to refer to projects in good standing and does not include those projects in breach of their generator interconnection agreement. Projects must cure the breach prior to submitting a downsizing request. In addition, projects may not be in suspension and must come out of suspension to process the downsizing request.

<sup>5</sup> The ISO’s TPP-GIP Integration initiative, which was approved by the ISO Board on March 23 and filed at FERC in May, includes several new provisions to allow interconnection customers in Cluster 5 and beyond to downsize their projects. The present initiative is therefore limited to Cluster 4 and earlier.

The ISO does not have an objection to this suggestion and proposes to make the appropriate tariff changes to extend these tariff provisions to Serial Group projects and small projects, as a part of the present initiative. Specifically, this involves making the appropriate tariff changes to Appendix U and Appendix S, respectively.

In the most recent set of written comments from stakeholders, broad support was expressed for the scope of this initiative. LSA suggests adding to the scope the topic of revising rules about use of forfeited study deposits and IFS amounts so these funds can be used to help cover the costs of downsizing studies and modification of generation interconnection agreements. The ISO is not inclined to add that topic to this initiative as that is a topic that will be addressed in GIP 3. Wellhead believes the proposal presented in this initiative discriminates against cluster 5 and later projects which may also need to downsize. The ISO disagrees (see footnote 5).

## 7 Current downsizing opportunities

This section describes current downsizing opportunities available to interconnection customers under certain circumstances. This is the pre-existing “baseline” onto which the ISO is proposing the new downsizing opportunity described in section 8 of the present paper.

The ISO generator interconnection procedures anticipate that interconnection customers will put into commercial operation the full MW capacity of its generating facility as specified in its interconnection request at the time it entered the Phase II study process. The ISO pro forma generator interconnection agreement includes a description of the generating facility, including MW capacity. Under the generator interconnection agreement, an interconnection customer's obligations include, besides paying for the upgrades specified in the generator interconnection agreement, the completion of the generating facility as described.<sup>6</sup> Despite this expectation, interconnection customers may encounter circumstances during the course of the interconnection process that trigger the need to modify the size of their project.

### 7.1 Material modification review

Today, any interconnection customer requesting to make a change to a project's MW capacity can do so between the Phase I and Phase II interconnection studies. However, once the results of the Phase II study are complete, the only downsizing opportunity available to an interconnection customer requesting to make a change to a project's MW capacity is to undergo a “material modification” review. When an interconnection customer submits such a request to modify the MW capacity size of the project, the ISO evaluates its impact on projects with later queue priorities. If there is no impact, and the ISO and participating transmission owner agree that the capacity can be downsized, then the material modification request can be approved.

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<sup>6</sup> An important point to remember here is that the ISO is an outlier within the organized markets, in that pre-Cluster 5 projects receive full cash repayment for funding of network upgrades, unlike other organized markets where the customer generally receives compensation in transmission credits (including financial transmission rights). So ratepayers ultimately pay cash for all such network upgrades. Accordingly, there may be adverse consequences to the ratepayer if the originally intended MW amount of generation does not subscribe to the lines.

This existing ability to submit a material modification request will continue to be available to interconnection customers along with the new downsizing opportunity presented in this proposal. If the modification review identifies a material impact on later queued project costs or schedule (which may often be the case), then the request is determined to be a material modification and denied. This leaves some projects with withdrawal from the interconnection process as their only option if they cannot proceed with the project as originally studied.

## 7.2 Partial termination

In the case of a generating facility being constructed in phases, such that each phase may achieve commercial operation at a different time, the failure of the interconnection customer to construct one or more later phases of the project can lead to breach of the generator interconnection agreement. This, in turn, has the potential for triggering termination of the interconnection and even the potential for disconnection of earlier phases of the generating facility that have achieved commercial operation.

In 2010, the ISO developed “partial termination” provisions for a small number of non-conforming interconnection agreements in an effort to address the concerns of certain phased generating facilities in the context of a specific set of circumstances. In certain customer generator interconnection agreement negotiations during 2010, the situation arose where the time to complete the final segments of required network upgrades was particularly long (some 84 months in the future). Those customers indicated that the long lead time for these upgrades created a business uncertainty at the time of generator interconnection agreement execution as to whether the interconnection customer could build the later phases of the generating facility if it had to tell prospective power purchasers that it could not deliver power from those later phases until these long lead-time transmission upgrades were completed. Because of this uncertainty, the interconnection customer was reluctant to commit to full build-out of the generating facility at the time of generation interconnection agreement execution.

In these situations, the customers asked that the ISO and PTO consider a contractual path to deal with the contingency that the later phases could not be built, so as to avoid the contractual uncertainty that would result if the parties simply took a “wait and see” approach to see if the contingency arose. The ISO worked with specific interconnection customers and PTOs to develop non-conforming “partial termination” provisions (which were incorporated in the projects’ generation interconnection agreements; not in the ISO tariff) whereby the interconnection customer could elect to structure the project as a phased project with specific phase sizes and different commercial operation dates for each phase, and include in the generator interconnection agreement an option to terminate later phases of the generating facility without breaching the interconnection agreement. Upon exercise of the partial termination option the interconnection customer would pay a pre-specified “partial termination charge,” which would be secured through a posting of security at the time of the execution of the generation interconnection agreement or by a date certain specified in the generator interconnection agreement. In this way, the interconnection customer could exercise partial termination of the generator interconnection agreement with regard to later phases without

breaching the generator interconnection agreement and without adverse impacts on the earlier phases of the project.

The scope of interconnection requests for which partial termination was previously included in generator interconnection agreements was limited to those transition cluster projects where the deliverability network upgrades were to be built over a period of approximately 84 months, where the PTO had agreed to upfront fund the network upgrades, and where there would be no adverse impacts on later queued projects and little likelihood of stranded investment or under-utilized transmission capacity if the partial termination option were exercised.

Although the ISO is not categorically prohibiting the future use of the partial termination mechanism, the ISO will only consider it in very limited circumstances (such as the historical circumstances described above) and on a project-by-project basis. Going forward, these limited circumstances could include, for example, phased generating facilities seeking full capacity deliverability status for which there is a significant time lag between the estimated in service date for the entirety of the network upgrades and the commercial operation date for the second phase of the generating facility (in the non-conforming interconnection agreements that have been filed this time lag was three years or more), where there would be no adverse impacts on later queued projects, and where there is little likelihood of stranded investment or under-utilized transmission capacity.

### **7.3 Substantial performance provisions**

Although not to be considered downsizing opportunities, the substantial performance provisions adopted in the GIP 2 initiative provide a means for addressing discrepancies between a generator's final build-out MW capacity and the interconnection request MW capacity.

The ISO clarifies here that the new downsizing opportunity described in this draft final proposal does not impact the provisions adopted in the GIP 2 initiative, including the provisions submitted to FERC in the February 29, 2012 compliance filing, which (1) allow a project, for any reason, to be completed with a final MW capacity that is below the MW size specified in its generator interconnection agreement by 5 percent or less<sup>7</sup>, and (2) allow a project, under certain limited circumstances summarized below, to be completed with a final MW capacity that is below the MW size specified in its generator interconnection agreement by more than 5 percent, subject to ISO verification of the specific circumstances of the project. In the latter instance, the generator interconnection agreement would be amended to the lower MW capacity value once it is known.

The substantial performance provisions interrelate to the new downsizing approach described in this proposal in this way: the reference point for applying a substantial performance 5 percent or greater than 5 percent reduction shall be, the *downsized* MW capacity of the project (i.e., its MW capacity after any downsize through this proposal) which would be the project size as reflected in a revised generator interconnection agreement that implements this proposal.

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<sup>7</sup> The reference point for the 5 percent reduction is the MW capacity of the proposed generating facility as it was studied in its Phase II interconnection study.

The eligibility requirements for a size reduction greater than 5 percent were specified in the ISO's February 29, 2012, compliance filing in FERC Docket ER12-502.<sup>8</sup> The interconnection customer must reasonably demonstrate that the reduction is warranted due to reasons beyond the control of the interconnection customer consisting of one or more of the following:

1. Failure to secure required permits and other governmental approvals to construct the generating facility at its total MW generating capacity specified in interconnection request after making diligent efforts.
2. Written statement from the permitting or approval authority indicating that construction of the facility at the total MW size specified in interconnection request will likely result in disapproval due to significant environmental or other impact that cannot be mitigated.
3. Failure to obtain legal right to use of the full site acreage necessary to construct/operate the total MW generating capacity size for the entire generating facility after making diligent efforts (only applies where an interconnection customer previously demonstrated and maintained its demonstration of site exclusivity).

If relying on item (1) or (2) above, the interconnection customer must also demonstrate to the ISO that the requested downsizing will likely overcome the objections of the permitting/approving authority. If relying on item (3), the interconnection customer must also reasonably demonstrate to the ISO that the downsized generating facility can be constructed on the site over which legal right to use has been obtained.

## 8 Downsizing proposal

The proposal presented here is narrowly tailored to fit projects in queue cluster 4 and earlier that would be viable except for the inability to complete the full MW generating capacity that was specified in the interconnection request. This proposal is targeted at such projects that are ready to make the downsizing decision and proceed with project development. This proposal is not intended to provide ongoing, flexible downsizing options and opportunities that will enable all projects, regardless of their viability, to remain indefinitely in the interconnection queue without progressing toward commercial operation in accordance with the milestones specified in their interconnection agreement. The goals of this proposal are to facilitate viable projects, help enable them to reach commercial operation on a timely basis, and thereby contribute to the ISO's queue management efforts.

The proposed new downsizing opportunity presented here has several key elements: (a) eligibility requirements to downsize, (b) number of downsizing requests permitted, (c) MW amount of downsizing allowed, (d) downsizing request window, (e) cost responsibility and downsizing deposit, (f) withdrawal of a downsizing request, (g) reduced future optionality for downsizing generators, (h) general guideline of "no worse off," (i) WDAT projects, and (j) the

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<sup>8</sup> In the ISO's compliance filing, the ISO modified Article 5.19.4 of the LGIA. See the ISO's February 29, 2012 GIP 2 compliance filing, accessible on the ISO's website at [http://www.caiso.com/Documents/2012-02-29\\_ER12-502\\_GIP11compliance.pdf](http://www.caiso.com/Documents/2012-02-29_ER12-502_GIP11compliance.pdf).

need for restudies. These elements of the proposal are discussed in more detail in the following sections.

## 8.1 Eligibility requirements

In the previous two straw proposals the ISO did not propose stringent eligibility requirements that interconnection customers must meet in order to submit a request to downsize (other than to be an active project as described earlier). The ISO does not depart from that approach in this draft final proposal. Accordingly, the proposed new downsizing opportunity presented here would be open to any active project in Cluster 4 or earlier that wants to downsize for any reason.

This element of the proposal continues to receive broad stakeholder support in written comments. Many stakeholders, including those from the generation development community, believe that it is reasonable to not place stringent conditions on eligibility. PG&E supports this element as proposed as long as the new downsizing opportunity remains a one-time opportunity. SCE states that to avoid gaming, downsizing requests should be limited to reasons that could not have been anticipated.

The ISO proposes not to adopt additional eligibility requirements, but to retain this element as it was stated in the revised straw proposal.

## 8.2 Number of downsizing requests

In the prior paper the ISO proposed a one-time downsizing opportunity. In stakeholders' written comments, this element of the proposal attracted many stakeholder comments with multiple perspectives expressed.

Generation developers hold a variety of viewpoints. Some do not want to be limited to a one-time opportunity and would instead prefer both a near-term downsizing opportunity as well as a later opportunity to downsize. Others do not object to a one-time opportunity but would prefer to choose the timing of when they exercise the one-time opportunity.

SDG&E believes the ISO should offer an additional downsizing opportunity six months after the initial opportunity.

Many other stakeholders (including PG&E, SCE, CPUC, IEP, CalWEA, Six Cities) support a one-time downsizing opportunity with some of these stakeholders arguing that a one-time window will avoid continual cycles of restudies, will limit uncertainty, and provide needed discipline regarding the timing and volume of downsizing.

The ISO believes that it is best to provide a narrow, one-time opportunity to downsize for projects that are ready to make a downsizing decision and, having made that decision, are viable and ready to meet GIA milestones. Accordingly, the ISO proposes to retain a limit of one downsizing request as an element of a one-time downsizing opportunity.

The ISO believes that the simpler approach of offering only a one-time downsizing window may prove to be the most pragmatic, rather than try to develop a pre-cluster 5 continuing downsizing

design feature that must converge with processes for cluster 5 and subsequent clusters. The ISO believes that this scope will simplify the completion of the proposal and its timely filing at FERC to maximize the likelihood of receiving FERC approval and opening the window for downsizing requests before the end of 2012.

### **8.3 MW amount of downsizing**

In the revised straw proposal the ISO proposed that there be no limit on the MW amount of downsizing permitted. In written comments stakeholders expressed broad support for this element of the proposal. However one stakeholder, SCE, expressed concern that very large reductions in project size may diminish the validity of the original studies performed and require a significant numbers of restudies. The ISO believes, however that the restudy element of this proposal (discussed later in this paper) will properly account for the MW amount of downsizing, regardless of the magnitude, and will produce revised study results identifying the resultant upgrades needed including any additional costs.

The ISO proposes to retain, as an element of this proposal, that there be no limit on the MW amount of downsizing permitted.

### **8.4 Downsizing request window**

In the previous proposal the ISO proposed a one-time downsizing request window that would be offered shortly after FERC issues an order approving this proposal. The ISO proposes to retain this element in the draft final proposal. Under the proposed approach, interconnection customers would submit their downsizing request into the one-time downsizing window, specify the downsizing MW amount, and include a “downsizing deposit” (the downsizing deposit is discussed further in the following section). The downsizing request window would be open for 30 days and would occur as soon as practical following receipt of an order from FERC approving this proposal. Assuming a FERC order is received in November of this year, the window would be open during the month of December.

The ISO intends to provide interconnection customers with a market notice 10 business days in advance of opening the downsizing request window.

Limiting the submission of downsizing requests to a window of limited time duration has the benefit of permitting the transmission planning engineers to evaluate the collective impacts of all downsizing requests in the most efficient manner possible, since so many of the network upgrades are common to multiple generating facilities or affect the base case for determining the upgrades for later queued projects. Additional efficiencies are gained to the extent the timing of this downsizing request window aligns with the restudies already anticipated to occur in the first quarter of 2013 as part of the implementation of GIDAP. This timing is important because it will enable the results of downsizing to be incorporated into the base model for the Cluster 5 Phase II studies.

In their written comments, stakeholders recognize the efficiencies gained by funneling all downsizing requests through one downsizing request window and are generally supportive of

this feature. However, some generation developers would prefer to exercise a one-time downsizing opportunity at a time of their choosing.

The ISO does not believe continuous submission of downsizing requests and the study requirements associated with such requests would allow this downsizing opportunity to align with and be accurately reflected in the other studies the ISO must conduct in the context of its annual generator interconnection and transmission planning cycles.

The ISO is not offering additional downsizing flexibility beyond this narrowly tailored, one-time downsizing opportunity. Accordingly, the ISO will retain the one-time downsizing request window as a necessary element of this proposal.

### **8.5 Cost responsibility and downsizing deposit**

Allowing generator project downsizing beyond that already provided in the ISO tariff triggers new incremental costs that would not otherwise exist, apart from any potential cost impacts due to changes in the network upgrades that are ultimately determined to be needed. In the revised straw proposal, the ISO identified four categories of new incremental costs that would be triggered solely by downsizing requests allowed under this proposal, and the ISO proposed that downsizing generators be responsible for the costs that they impose. The four categories of triggered costs were as follows:

- Interconnection restudy and associated study report costs for the downsizing project;
- Interconnection restudy and reporting costs associated with projects that did not request to downsize, but are affected by the downsizing of the project submitting the downsizing request;
- Costs for amending the generator interconnection agreement of the project submitting a downsizing request, if applicable; and
- Costs for amending the generator interconnection agreements of projects that did not request to downsize, but require amended generator interconnection agreements as a result of the downsizing request.

These involve costs that would be incurred by both the ISO and the participating transmission owners.

In the revised straw proposal, the ISO proposed that projects submitting a request to downsize be required to provide as part of the downsizing application a “downsizing deposit” in the amount of \$200,000. The interconnection customer making the downsizing request would be responsible for the actual costs, however, so that if the sum of the actual costs in the four categories listed above and attributable to a downsizing generator were ultimately less than the deposit amount, then the downsizing generator would receive a refund of the unused amount. However, if the actual costs were greater, then the interconnection customer would be charged the additional costs.

In written comments, there was broad stakeholder support for the concept of a downsizing deposit. Many stakeholders, including generation developers, believed that both the concept and amount were reasonable. However, various issues were raised in the comments. Many

generation developers do not believe it reasonable that they be held responsible for any costs exceeding \$200,000. Generation developers also expressed concern that the actual costs could exceed the amount of the deposit, that there would be no advanced certainty as to how high the actual costs could go and that their cost exposure would, in effect, be open-ended. Developers argue that they would not know at the time of their downsizing request whether they would be required to fund the entire restudy cost (because they were the only downsizing request submitted) or would share that cost with other downsizing requests.

To address the cost uncertainty, some developers suggested that the costs be capped at \$200,000 or some other amount deemed reasonable. Further, many developers find it unreasonable that downsizing projects be required to cover the cost to amend the generation interconnection agreements, arguing that this is not the case presently under ISO generator interconnection procedures.<sup>9</sup>

Other stakeholders, including the participating transmission owners and Six Cities, hold the opposing view that a project that submits a downsizing request should be responsible for paying all study costs and other administrative costs, even if the costs exceed \$200,000.

The ISO acknowledges the inherent tension presented by these comments. First, the ISO, as well as many stakeholders, firmly believe that a downsizing generator should be held responsible for the costs triggered by their downsizing request. Second, the ISO recognizes that the intent to facilitate viable projects may not successfully be met if the cost uncertainties of downsizing process are too onerous. Therefore, in an effort to strike the right balance, the ISO proposes to modify this cost responsibility element of the proposal as follows.

The downsizing deposit will remain at \$200,000.

Restudy costs will be allocated to all downsizing generators equally without distinguishing study groups or clusters (in other words, the actual cost of the restudy divided by the number of downsizing projects without regard to the respective MW amount of each individual downsizing request). There is no cap on restudy costs.

The ISO's review of historical cost data from past cluster studies indicates that, on average, the typical cluster study costs for either Phase I or Phase II have not exceeded \$50,000 per interconnection customer. This includes costs, on a per interconnection customer basis, to perform the studies, hold results meetings, and produce the study report. But since a downsizing request will likely trigger the need to revise the study reports for affected projects not requesting downsizing, the ISO estimates that cost responsibility will likely exceed the typical \$50,000 historical average. For estimating purposes then, the ISO would suggest doubling that historical average amount so that downsizing projects should assume that their cost share for

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<sup>9</sup> LSA suggests that funds could be provided from forfeited study deposits and IFS amounts to offset some of these costs. The ISO does not believe this would be appropriate as this one-time downsizing proposal is a one-time opportunity and not a normal feature of the ISO generation interconnection procedures and that the downsizing generators would be the only beneficiaries of these funds. This subject is an issue topic in the deferred generator interconnection procedures 3 stakeholder initiative that will be taken up at a later time and is outside the scope of the present initiative.

restudies could be closer to \$100,000. This should provide customers contemplating downsizing with increased cost certainty with regard to restudy costs. However, it needs to be understood that there is no cap on restudy costs.

The ISO proposes that a downsizing customer's cost responsibility for the costs to modify generator interconnection agreements affected by downsizing be \$10,000 per affected generator interconnection agreement; however, this cost responsibility will be capped at \$100,000 (e.g., if a downsizing generator affects nine generator interconnection agreements, including its own agreement, then the generator's cost responsibility will be \$90,000; however, if the same downsizing generator instead affects eleven generator interconnection agreements then the generator's cost responsibility will be capped at \$100,000). The \$10,000 per affected generator interconnection agreement will be used to defray the associated costs incurred by both the ISO and the participating transmission owners.<sup>10</sup> In the case of multiple downsizing requests made in the same study area affecting the same generator interconnection agreements the cost responsibility will be shared (e.g., if four downsizing projects in a study area similarly affect the same four generator interconnection agreements, then in this case each downsizing project's cost responsibility will be reduced from \$40,000 to \$10,000 or if there were two downsizing projects that impact six generator interconnection agreements, then each of the two downsizing projects would pay \$30,000).

Following receipt by the ISO of all downsizing requests and accompanying \$200,000 downsizing deposits submitted through the downsizing request window, but prior to initiating the restudy, the ISO will post on its website information regarding which projects (identified by queue number) have submitted a downsizing request and the MW amount requested. The purpose in the ISO providing this information on its website is to give the downsizing generators some ability to estimate the restudy and generator interconnection agreement modification costs that they may be responsible for. In this draft final proposal the ISO also adds a new feature, which is to provide downsizing generators at this step in the process with the option of withdrawing their downsizing request (not modify, but withdraw) and have their full \$200,000 downsizing deposit refunded. Assuming the downsizing request window is open during the month of December 2012, the ISO anticipates that it would post the information describing the downsizing requests received by mid-January 2013. The ISO would then give downsizing generators until late January to withdraw their downsizing request.

Lastly, the ISO proposes that in the rare instance (as described further in sections 8.8 and 8.9) that restudies identify a circumstance in which a downsizing generator's cost responsibility may significantly exceed (i.e., by more than 10 percent) its network upgrade cost responsibility as identified in its Facility Study, Phase II study or its generator interconnection agreement, and because it is part of the ISO's proposal that downsizing generators would be required to cover any such increased costs (as described further in sections 8.8 and 8.9), the downsizing generator will be provided an opportunity to withdraw its downsizing request.<sup>11</sup> However, the

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<sup>10</sup> The applicable PTO will receive from the ISO 50% of the modification of generator interconnection agreement amounts paid by the downsizing generator.

<sup>11</sup> Only downsizing generators in this rare circumstance will be given the opportunity to withdraw their downsizing request. A downsizing generator that has withdrawn its downsizing request will remain in the

downsizing generator withdrawing its downsizing request will forfeit any unused portion of its \$200,000 downsizing deposit to help defray the costs of further restudies that may be required as a result of its downsizing request withdrawal.

The timing of this second withdrawal opportunity is as follows. The ISO anticipates that the restudies would commence in early February 2013 immediately following the completion of the Cluster 5 Phase I studies in late January 2013 (these latter study results would become an input into the downsizing restudy base case assumptions). The downsizing restudies would be complete, including study reports, by late June 2013. However, the ISO believes the mid-summer completion of the restudies comes too late to offer this second withdrawal opportunity. To address this, the ISO intends to provide, in April 2013, a preview of the downsizing restudy results to only those downsizing generators whose cost responsibility is likely to significantly exceed its network upgrade cost cap (as identified in its Facility Study, Phase II study, or its generator interconnection agreement). On the basis of this preliminary information, such projects would be offered the opportunity to withdraw their downsizing request and forfeit their downsizing deposit.

Taken together, the ISO believes that these measures are responsive to stakeholders' concerns and will help reduce the uncertainty associated with the cost of downsizing.

## 8.6 Withdrawal of a downsizing request

In the revised straw proposal the ISO proposed that, once an interconnection customer submits a request to downsize under this approach, the ISO will consider the customer to be committed to downsizing, even though the interconnection customer will not learn the actual cost impact of the downsizing decision until after restudies have been performed and result reports published. The fact that the downsizing request could be irrevocable once submitted is a point of contention for generation developers. The ISO understands this concern and responds in the following paragraphs.

The concern that the ISO addressed in the revised straw proposal was that allowing downsizing generators to withdraw their downsizing request once restudies are conducted could result in the need to conduct another round of restudies. A resulting second round of restudy could potentially have markedly different results that may trigger another round of downsizing generators wanting to withdraw their downsizing request. The ISO believes that stakeholders' concerns about the inability to know the cost of downsizing in advance are legitimate; but, so is the need to avoid never ending iterations of restudies. However, in general, it is reasonable to assume that (i) the customer's cost responsibilities for network upgrades after downsizing will be no greater than the network upgrade costs the customer would already be responsible for as specified in its governing study report<sup>12</sup> or the generator interconnection agreement -- apart from

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ISO interconnection queue in its current cluster or serial group with the network upgrade cost from either the Facility Study, Phase II Study or generator interconnection agreement.

<sup>12</sup> An important exception relates to the situation where an interconnection customer's current project and generator interconnection agreement includes provisions for participating transmission owner upfront funding of network upgrades. SCE is the only participating transmission owner that has extended upfront funding, and only relating to certain interconnection requests related to certain transmission projects.

the potential loss of any participating transmission owner up-front funding -- and (ii) the downsizing customer's cost responsibilities may even be reduced. The ISO therefore believes that instances where there may be an increase in cost responsibility (that the downsizing generator would be required to cover) will be rare.

As a result, the ISO proposes to modify this element in this draft final proposal as described in the previous section and summarized below:

- Downsizing request withdrawal opportunity number one – In the month following the close of the downsizing request window, the ISO will post on its website which projects (identified by queue number) have submitted a downsizing request and the MW amount requested. In response to this information a downsizing generator will be permitted to withdraw its downsizing request and receive a full refund of its downsizing deposit. All downsizing generators are eligible to use this first downsizing request withdrawal opportunity.
- Downsizing request withdrawal opportunity number two – The ISO proposes that in the rare instance (as described further in sections 8.8 and 8.9) that restudies identify a circumstance in which a downsizing generator's cost responsibility may significantly exceed (i.e., by more than 10 percent) its network upgrade cost responsibility as identified in its Facility Study, Phase II study or its generator interconnection agreement, and because it is part of the ISO's proposal that downsizing generators would be required to cover any such increased costs (as described further in sections 8.8 and 8.9), the downsizing generator will be provided an opportunity to withdraw its downsizing request. However, in such an instance the downsizing generator withdrawing its downsizing request will forfeit any unused portion of its \$200,000 downsizing deposit to help defray the costs of further restudies that may be required as a result of its downsizing request withdrawal. Only those downsizing generators matching the narrow conditions described here are eligible to use this second downsizing request withdrawal opportunity.

Taken together, the ISO considers these downsizing request withdrawal opportunities as satisfying the intent of the "go/no-go" concept suggested by IEP in their written comments.

## **8.7 Reduced future optionality for downsizing generators**

In the revised straw proposal the ISO stated its position that it is appropriate for interconnection customers to be asked to accept some reduced optionality in return for their exercising the new downsizing opportunity. Specifically, the ISO proposed that for downsizing interconnection customers, there shall be no further generation interconnection agreement suspension rights,

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SCE's upfront funding includes various milestone conditions which the interconnection customer must fulfill with respect to the generating facility. Under these provisions, an election by the interconnection customer to downsize the generating facility may entitle SCE to revisit and possibly withdraw its up front funding commitment. If participating transmission owner upfront funding commitments were withdrawn or reduced because of customer project downsizing, then it is possible that the interconnection customer's interconnection financial posting requirements could increase from the cost responsibility set out in the original generator interconnection agreement.

and that any further generating facility commercial operation date extensions will be limited only to force majeure events.

This element of the ISO's proposal was strongly opposed by generators in their written comments. The generation developers argued that suspension and commercial operation date extension rights are unrelated to downsizing and should not be removed for downsizing generators.

The ISO notes that while some stakeholders (e.g., generation developers) are strongly opposed to this element, other stakeholders (e.g., the participating transmission owners) are in strong support.

The ISO has given this further consideration and is concerned that limiting any further generating facility commercial operation date extensions to only force majeure events may be in conflict with the goal of the proposal described in this document.<sup>13</sup> For example, a viable project that downsizes as a result of the opportunity made available by this proposal may be meeting its milestones and making good progress toward commercial operation only to later encounter an issue in the construction of the project that requires the need for an extension of its commercial operation date. Eliminating the ability to seek a commercial operation date extension for such a viable project would inadvertently be in conflict with the positive benefits presented by downsizing.

Given this valid concern, the ISO proposes, for downsizing interconnection customers, to retain only the element that there shall be no further generator interconnection agreement suspension rights. The ISO further clarifies that downsizing generators in good standing will not lose the ability to submit a material modification request for an extension of commercial operation date or any other agreement terms and conditions.

## **8.8 General guideline of “no worse off”**

Previous drafts of the proposal included the general guideline that an interconnection customer's cost responsibilities for network upgrades after downsizing should be no greater than the network upgrade costs the customer would already be responsible for as outlined in the governing study report or the generation interconnection agreement, apart from the potential loss of any participating transmission owner up-front funding. This general guideline has consistently received broad stakeholder support throughout this initiative and is retained in the present draft proposal document.

In cases where a network upgrade is still needed and cannot be downsized or cancelled, the interconnection customer originally assigned the cost of the network upgrade will have no reduction in network upgrade cost responsibility (i.e., the interconnection customer is “no worse off,” except for potential loss of participating transmission owner upfront funding—if as a result of the requested downsize the upfront funding of the network upgrades is revoked by the

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<sup>13</sup> As stated earlier, the goal of this proposal are to facilitate completion to commercial operation of projects that are viable but for the need to downsize to match their MW generating capacity size to a level that will enable the project to meet its milestones in a timely manner and exit the interconnection queue.

participating transmission owner the project would be responsible for those costs). In such cases the interconnection customer must continue to pay for the network upgrade(s) per the schedule and terms of its Facility Study, Phase II study or its generator interconnection agreement. If restudies determine that the network upgrade(s) can be downsized, the interconnection customer's cost responsibility may be reduced. If restudies determine that the network upgrade(s) can be cancelled, the interconnection customer's cost responsibility for the cancelled network upgrade(s) will be removed.

However, it is important to emphasize that, for purposes of this proposal, the concept of "no worse off" is stated as a general guideline and a general expectation, rather than a requirement that will be guaranteed in all cases. It is simply not feasible for the ISO and the participating transmission owners to make an absolute contractual commitment to guarantee that an interconnection customer's cost responsibility would never, in every case, and under every scenario, increase. That said, the basis for this guideline is derived from the experience of the ISO and the participating transmission owners that in most, if not the vast majority of cases, the collective downsizing of a large number of generator projects in a particular electrical area of the grid will tend to result in a general de-scoping of the overall network upgrades with a corresponding reduction of cost. Although this may generally be the case, there may be specific instances where this outcome is not achieved. In such rare instances, there may be a potential increase in network upgrade costs, and the generator(s) requesting the downsizing would be required to cover any such increased costs.<sup>14</sup> As earlier discussed, the ISO proposes that downsizing generators in such rare instances be given the opportunity to withdraw their downsizing request. If the downsizing generator in this circumstance nevertheless chooses to proceed with downsizing, the ISO proposes that any such additional network upgrade costs would be reimbursable back to the interconnection customer. Despite the theoretical possibility of increased costs, neither the ISO nor stakeholders have thus far been able to identify an example where this could occur.

In the previous versions of this proposal the ISO presented an example to solicit stakeholder comments on the applicability of the "no worse off" guideline in the case of serial group projects. That example is repeated here. Assume three projects in the serial study process -- project A (500 MW), project B (250 MW), and project C (250 MW), where A is the earliest queued project and B is next and then C. Assume all three serial projects are in a study area that could support 500 MW of deliverability without triggering network upgrades; hence, project A has no network upgrade cost responsibility. Assume project B has a \$200 million network upgrade cost responsibility because its interconnection request triggered the need for a 500 MW network upgrade (assume that due to the "lumpiness" of transmission, a precisely-sized 250 MW network upgrade was not feasible). Project C benefits as this network upgrade creates the transmission capacity it needs. Now assume that project A takes advantage of the new downsizing opportunity presented here and submits a request to downsize to 250 MW. Further assume that restudies determine that this would free up 250 MW of network transmission

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<sup>14</sup> The ability to distinguish any increased costs related to downsizing requests from those due to other factors, such as withdrawals since original interconnection studies were performed, is a related issue raised by stakeholders and is discussed in section 8.10.

capacity (previously reserved for project A) that could now be used by project B and project B would no longer trigger the 500 MW (\$200 million) network upgrade (in other words, project B could benefit from project A's downsizing). The 500 MW network upgrade is now, in effect, triggered by project C.

As a part of the example, the ISO suggested three possible ways to address this situation and asked stakeholders to comment on these. The three possible approaches are repeated here:

1. Project A would pay the \$200 million as the cost to downsize project A; but, only if project C is ever built (i.e., project A's funding obligation goes up by \$200 million);
2. Project B's cost responsibility would not be reduced and project C's would not increase; therefore, project B would still have to pay for the major upgrade, but only if project C is ever built (i.e., all projects' funding obligations remain unchanged);
3. Allow the cost to be passed on to project C and project B could receive the benefit by no longer having to pay the \$200 million (i.e., project B's obligation goes down by \$200 million and project C's obligation goes up by \$200 million).

Although this solicited many varied points of view from stakeholders, the majority of stakeholders selected outcome (2) as the most equitable outcome and the one most consistent with the guideline of "no worse off." In other words, requiring project B to continue to be responsible for funding the network upgrade needed by project C after project A downsizes is the only outcome that leaves none of the projects worse off.<sup>15</sup> Accordingly, the ISO proposes that under the new downsizing opportunity presented in this paper, the ISO would apply the "no worse off" guideline to try to keep all affected projects no worse off, including projects that did not request to downsize.

The guideline of "no worse off" is also relevant to participating transmission owners. The election to downsize is an affirmative decision by the interconnection customer in the interest of its project. The example discussed above recognizes the general point that other parties should not be expected to pick up the cost consequences of the election by the downsizing project. Accordingly, this draft final proposal document does not endorse an expectation that the participating transmission owner, and ultimately the ratepayers, should "pick up" the cost difference. In instances where a downsizing request would result in increased costs that make it impossible to maintain the "no worse off" guideline, the intent is for the generator(s) requesting the downsizing to cover any additional costs due to downsizing rather than requiring the participating transmission owner to cover such costs (i.e., assuming the downsizing generator in such a rare circumstance does not opt to withdraw its downsizing request).

The ISO will make every effort to mitigate impacts to participating transmission owners due to generator project downsizing. Despite this, there could be rare instances for which it may not

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<sup>15</sup> In the most recent written comments from stakeholders, SDG&E suggests a cost sharing approach between project A and B in which project B's responsibility could be reduced proportionally by the percent downsizing and project A's cost responsibility would increase to cover the remaining upgrade cost. The ISO is not persuaded that such an approach is superior to application of the general guideline of "no worse off."

be feasible for the ISO to absolutely guarantee that every impact to a participating transmission owner will be mitigated.<sup>16</sup> For example, the need to amend numerous generator interconnection agreements due to downsizing will cause the participating transmission owners to incur new costs that would otherwise not be incurred. As previously discussed in section 8.5, the ISO is proposing a charge of \$10,000 per amended generation interconnection agreement with \$5,000 of that going to cover the participating transmission owner's costs, or 50% of the total amount paid by the downsizing generator for modification of the generator interconnection agreement. But because the ISO is proposing to cap these costs for any given downsizing generator at \$100,000, the costs incurred above that amount would be picked up by the participating transmission owner (and likewise by the ISO).

In previous draft documents for this proposal the ISO proposed that, as a result of a downsizing request, a later queued project<sup>17</sup> should not be adversely affected. Stakeholders continue to broadly support this approach. In previous comments, some stakeholders requested that the ISO clarify that the potential adverse effects include not only cost effects but also effects on schedule, and that generators not requesting downsizing should also not be affected. In assessing the impacts of a downsizing request on later queued projects, impacts on cost will be considered, and generators not requesting downsizing should likewise not be affected. However, with regard to adverse effects on schedule, it may not be possible to mitigate such effects in all cases unless a downsizing request causing such impacts is rejected. In the most recent written comments two stakeholders (IEP and LS Power) expressed that avoidance of impacts to schedule is a vital consideration. The ISO clarifies here that although it may not be possible to mitigate all impacts to schedule, every effort will be made to minimize such impacts.

In the most recent written comments from stakeholders the general guideline of "no worse off" continued to receive broad stakeholder support. Some stakeholders (enXco, KRoad Power) believe that the general guideline of "no worse off" does not preclude assignment of cost of upgrades no longer needed for downsized projects to later-queued serial group projects because such projects do not have a network upgrade cost cap and always bear the risk of financing upgrades if higher-queued projects drop out. Although this latter point is true, the ISO does not propose to make such an exception for serial group projects but to instead apply the general guideline of "no worse off" to all pre-cluster 5 projects across the board.

Two other stakeholders (PG&E, SCE) raise the concern that the general guideline of "no worse off" may violate FERC cost causation principals and suggest that their support for the guideline is contingent on how the guideline is viewed by FERC. The ISO understands these statements to mean that FERC cost causation principles may be violated if a customer who elects to make a change in its interconnection request does not pick up all the cost consequences of its election. While the point must be well considered, the ISO submits that the dynamics are different if the universe of potentially affected customers and the universe of customers who have an opportunity to avail themselves of the downsizing opportunity are one in the same.

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<sup>16</sup> This is why objective 4 in this initiative is stated as "minimize impacts to participating transmission owners due to generator downsizing."

<sup>17</sup> Later queued projects in possession of a Phase II study report at the time of the restudy will be assessed for impacts.

## 8.9 WDAT projects

In the previous proposal the ISO raised the possibility of adverse impacts due to downsizing on projects interconnecting under a participating transmission owner's wholesale distribution access tariff. Using the serial queue project A-B-C example discussed in the previous section, assume instead that project A and project C are seeking interconnection under the ISO's GIP and project B is requesting interconnection under a participating transmission owner wholesale distribution access tariff. Recall that in the prior example, project A's downsizing frees up network transmission capacity that can be used by project B and, as a result, project B no longer triggers a network upgrade. The ISO's proposal is that if all three projects are requesting interconnection under the GIP, then the general guideline of "no worse off" would dictate that project B's cost responsibility would not be reduced thereby ensuring that project C's responsibility does not increase. However, if project B is interconnecting under a wholesale distribution access tariff, the ISO cannot apply the guideline to require project B to fund a network upgrade its interconnection request no longer triggers. As a consequence, the costs would be passed on to project C and project C would be "worse off." This presents a conundrum because project C did not request to downsize but is being adversely affected by the downsizing of project A. Absent this problem being addressed through amendments to the wholesale distribution access tariffs, the only way to avoid project C being adversely impacted is to require project A (the downsizing project) to cover these costs. This is the only example of the increased cost scenario that the ISO has been able to identify.

In written stakeholder comments, many generation developers believe that the PTOs' wholesale distribution access tariffs should be amended to allow wholesale distribution access tariff projects to equally participate in and be impacted by the ISO's proposed new downsizing opportunity. Some developers went further and expressed that the participating transmission owners should be given the choice of either making conforming changes to their wholesale distribution access tariffs or picking up the costs themselves. One participating transmission owner, PG&E, supports making a wholesale distribution access tariff compliance filing with the "no worse off" guideline.

Because the scope of an ISO tariff amendment proposal can only extend to the ISO's interconnection process, this draft final proposal provides that downsizing generators will have to bear the cost consequences of effects on WDAT customers. However, the ISO anticipates that these situations will be rare and will permit a downsizing generator in such a situation to withdraw its downsizing request if the downsizing generator's cost responsibility significantly exceeds (i.e., by more than 10 percent) its network upgrade cost responsibility as identified in its Facility study, Phase II study or its generator interconnection agreement.

## 8.10 Restudies

The proposal contemplates that necessary restudies would take place after the ISO has received the requests to downsize from interconnection customers in the one-time downsizing window. In order to begin the restudies, certain information from the downsizing projects would be required. A downsizing interconnection customer shall be required to submit an updated

interconnection request to the ISO which includes all attachment and technical data pertaining to the generating facility as modified at the time the downsizing request is made. The downsizing generator may change the step-up transformer and generation tie-line parameters due to smaller generator size. Other changes to the generator facilities, such as inverter type or technology, will not be accepted and studied as part of the downsizing request and must go through the material modification review process.

The ISO in consultation with the applicable participating transmission owner(s) would commence the restudies in early February 2013 and the downsizing restudies would be complete, including study reports, by late June 2013. However, such a schedule assumes that a FERC order on this proposal is received in November 2012 and the one-time downsizing window is held in December 2012.

The restudy will consist of a technical reassessment (consisting of reliability and deliverability assessments) followed by an engineering review. Both the reliability assessment<sup>18</sup> and the deliverability assessment will be performed for the projects in the queue up to and including later queued projects in possession of Phase II study report, in a manner which reflects the downsizing requests. The technical reassessment will also review the interconnection plan of service. By mid-April, the technical assessment will identify any required network upgrades, as a whole for all projects up to and including later queued projects in possession of Phase II study report (i.e., up to and including those projects in cluster 4). Then the estimated cost of and time to construct the network upgrades and participating transmission owner's interconnection facilities will be updated based on their engineering review.

The purpose of the restudies is to make a determination of the material impact of each downsizing request on projects of later queue priority. Determination will be made whether a project's network upgrades, as specified in its Phase II study for cluster projects or Facility Study for serial projects, or its generator interconnection agreement, are still needed by the downsized project and by later queued projects or whether the network upgrades can be downsized or cancelled without adversely affecting other projects.

As was previously discussed in this draft final proposal, restudy costs will be allocated to all downsizing generators equally without distinguishing study groups or clusters (in other words, the actual cost of the restudy divided by the number of downsizing projects without regard to the respective MW amount of each individual downsizing request).

In their written comments on the prior draft, stakeholders were concerned about the ability to distinguish any increased network upgrade costs related to downsizing requests from those due to other factors, such as withdrawals since original interconnection studies were performed.

The ISO clarifies that all previous withdrawals from the queue will be properly accounted for while conducting the restudies. In the rare case of increasing costs, the ISO and the applicable participation owner will isolate network upgrade costs attributable to downsizing generators from the withdrawals.

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<sup>18</sup> The reliability assessment includes power flow studies, post-transient voltage stability analysis, transient stability analysis and short circuit duty evaluation.

**Attachment F – Addendum to Draft Final Proposal**  
**Tariff Amendment to Implement Downsizing Opportunity for Interconnecting Generator Projects**  
**California Independent System Operator**  
**October 26, 2012**



**Addendum to  
July 19, 2012  
Draft Final Proposal**

**Generator Project Downsizing**

August 16, 2012  
Market and Infrastructure Development

This addendum to the ISO's July 19, 2012, draft final proposal for the Generator Project Downsizing stakeholder initiative describes certain changes made to the draft final proposal in response to the July 27, 2012, stakeholder web conference and written stakeholder comments submitted August 3, 2012.<sup>1</sup> This addendum, in conjunction with the July 19, 2012, draft final proposal, represents the final Generator Project Downsizing proposal that will be presented to the ISO Board of Governors for approval at the September 13-14, 2012, meeting.

The Generator Project Downsizing proposal set forth in the July 19 document and this addendum are the work product of a stakeholder process launched in April of this year. Since that time the ISO has issued three proposal papers, held a stakeholder meeting and several stakeholder web conferences, and received and considered multiple rounds of written comments from stakeholders.

Following a stakeholder web conference on August 23, the ISO plans to present its final proposal to the ISO Board of Governors at the September 13-14, 2012 meeting.

The following table describes the changes the ISO is proposing relative to the draft final proposal.

#	Section # and Topic in Draft Final Proposal	Changes/Clarifications in this Addendum	ISO Comment
1	<p><u>8.5 Cost responsibility and downsizing deposit</u> – The draft final proposal specifies that restudy costs will be allocated to all downsizing generators equally without distinguishing study groups or clusters and without regard to the respective MW amount of each individual downsizing request. The draft final proposal specifies that there is no cap on restudy costs. The draft final proposal provides typical cluster study costs expressed in dollars per</p>	<p>Shortly after the close of the downsizing request window (but prior to initiating the restudy), the ISO will post on its website a preliminary estimate of total restudy costs based on the number of downsizing requests submitted in the downsizing request window. A downsizing generator's share of the restudy cost will be capped at an amount equal to 150 percent of that generator's share of the preliminary estimate of the</p>	<p>The ISO is making this change to address stakeholder concerns about the uncertainty of restudy costs. Establishing a cap on restudy costs will allow the interconnection customer to better gauge the costs associated with its downsizing request.</p>

<sup>1</sup> The draft final proposal can be found at: <http://www.caiso.com/Documents/DraftFinalProposal-GeneratorProjectDownsizing.pdf>

	<p>interconnection customer (derived from past cluster studies) to provide customers contemplating downsizing with increased cost certainty with regard to restudy costs.</p>	<p>total cost of the restudy.</p>	
<p>2</p>	<p><u>8.6 Withdrawal of a downsizing request</u> – When an interconnection customer submits a request to downsize, it does so without yet knowing the actual cost impact of its downsizing decision. The draft final proposal describes two opportunities for a downsizing generator to withdraw its downsizing request to reduce the risk due to these uncertainties. First, in the month following the close of the downsizing request window, the ISO will post on its website which projects (identified by queue number) have submitted a downsizing request and the MW amount requested. All downsizing generators will be permitted to utilize this first downsizing request withdrawal opportunity. Second, in the rare instance that the restudy identifies a circumstance in which a downsizing generator’s cost responsibility may significantly exceed (i.e., by more than 10 percent) its cost responsibility as identified in its Facility</p>	<p>First, once the ISO posts to its website which projects have submitted a downsizing request, the MW amount requested, and a preliminary estimate of total restudy cost, a downsizing generator will be given five business days to inform the ISO that it either intends to proceed with downsizing or withdraw its downsizing request and receive a full refund of its downsizing request. Second, the ISO is modifying the threshold for what constitutes a significant exceedance in cost responsibility in order to be eligible for downsizing request withdrawal opportunity number two. Specifically, if a downsizing generator’s cost responsibility exceeds its cost responsibility as identified in its Facility Study, Phase II study or its generator interconnection agreement, by 5 percent or \$5 million, whichever is lower, then the downsizing generator will be provided an opportunity to withdraw its downsizing request and</p>	<p>The ISO is making these changes to (1) clarify the amount of time a downsizing generator has to exercise the first downsizing request withdrawal opportunity as this was not specified in the draft final proposal, and (2) address stakeholder concerns that a 10 percent threshold is too high to become eligible for downsizing request withdrawal opportunity number two and a request by several stakeholders that the ISO establish a threshold that is defined by both a dollar amount and a percentage amount.</p>

	<p>Study, Phase II study or its generator interconnection agreement, and because it is part of the ISO's proposal that downsizing generators would be required to cover any such increased costs, the downsizing generator will be provided an opportunity to withdraw its downsizing request and forfeit any unused portion of its \$200,000 downsizing deposit. Only downsizing generators subject to such a significant increase in cost responsibility will be permitted to utilize this second downsizing request withdrawal opportunity.</p>	<p>forfeit any unused portion of its \$200,000 downsizing deposit.</p>	
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**Attachment G – ISO Board Memorandum**

**Tariff Amendment to Implement Downsizing Opportunity for Interconnecting Generator Projects**

**California Independent System Operator**

**October 26, 2012**

# Memorandum

**To:** ISO Board of Governors

**From:** Keith Casey, Vice President, Market and Infrastructure Development

**Date:** September 7, 2012

**Re: Decision on Generator Project Downsizing**

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*This memorandum requires Board action.*

## EXECUTIVE SUMMARY

The state's renewable policy goals have resulted in significant development of new renewable solar and wind projects. The design of these projects is often scalable and, as a result, the developer may find it desirable or necessary to reduce the size of the project from what was originally proposed. In some cases, interconnection customers in the ISO queue desire to downsize previously-submitted projects in response to changes in economic and financing conditions since the time they submitted their interconnection applications. In other cases, a customer may want to downsize because it does not expect to secure a power purchase agreement to cover the full output of its originally planned megawatt capacity. The proposal described in this memorandum is Management's response to requests from such generation developers for additional opportunities to downsize the megawatt capacity of their projects.

Current interconnection procedures permit an interconnection customer to make a change to the capacity of its generation project during the interconnection study process. However, once the study process is complete and the network upgrades have been sized to match the projects, the primary downsizing opportunity available to the customer is to request whether a project downsize would constitute a "material modification," meaning that it would disrupt the cost or timing of a later project relying on the customer's network upgrades. If there is no impact and the ISO and participating transmission owner agree that the capacity can be downsized, then, because it is not material to other customers, the modification request can be approved.<sup>1</sup>

Under the current process, certain projects that are viable for a portion of their total capacity may be unable to downsize their project due to material impacts on later queued projects. In such cases, the developer may be forced to withdrawal from the interconnection process.

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<sup>1</sup> Alternatively, if the modification review identifies a material impact on later queued project costs or schedule, then the request is determined to be a material modification and denied.

To address this situation, Management proposes to:

- Provide a new, one-time opportunity for projects in Cluster 4<sup>2</sup> and earlier in the interconnection queue that are in good standing to submit a request to downsize their projects, which would be in addition to the current procedures;
- Establish a one-time window for interconnection customers to submit downsizing requests all at once, to permit transmission planning engineers to evaluate the collective impacts of all requests in an orderly and efficient manner;
- Require a \$200,000 deposit to cover costs incurred by the ISO and the participating transmission owners to process the requests and perform studies;
- Include measures to mitigate the adverse impacts that a downsizing request may have on later queued projects; and
- Develop a solution that works in conjunction with other recently-approved ISO policy initiatives and contributes to the ISO's interconnection queue management efforts.

For the reasons summarized above and described in greater detail below, Management recommends that the Board approve the following motion:

***Moved, that the ISO Board of Governors approves the proposal for generator project downsizing as described by Management in the memorandum dated September 7, 2012; and***

***Moved, that the ISO Board of Governors authorizes Management to file the necessary tariff amendments with the Federal Energy Regulatory Commission to implement this proposal.***

## **DISCUSSION AND ANALYSIS**

The ISO's current generator interconnection process was designed under the expectation that customers will put into commercial operation the full megawatt capacity of their generating facility as specified in the interconnection request at the time the project entered the Phase II study process. To address the large number of interconnection customer requests to downsize and balance this need against the potential for destabilizing the interconnection study process, Management has worked with stakeholders to develop a new downsizing opportunity narrowly tailored to fit generation projects that would be viable but for the inability to complete the full megawatt capacity specified in the interconnection request.

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<sup>2</sup> Cluster 4 is the ISO's fourth interconnection queue cluster that had the application window open from March 1, 2011 to March 31, 2011. The proposal only applies to projects up through Cluster 4 because the ISO's transmission planning process-generator interconnection procedures integration initiative, which was approved by FERC on July 24, 2012, includes several new provisions to allow customers in Cluster 5 and beyond to downsize their projects.

The proposal includes the following key design elements:

**Study Approach:** One large re-study effort will be done, broken down by electrical areas in the grid and the projects (downsizing or not) as they are grouped in those areas, to determine the material impact of each downsizing request on projects that have a later queue priority. Determinations will be made whether a project's transmission upgrades are still needed by the project being downsized and by later queued projects, or whether the network upgrades can be downsized or cancelled without adversely affecting other projects. If the restudies determine that an upgrade is still needed and cannot be reduced in scope or cancelled, the customer originally assigned the cost of the upgrade will have no reduction in network upgrade cost responsibility. In such cases the customer must continue to pay for the upgrades.

**Eligibility:** The downsizing opportunity would be open to any active project in good standing in Cluster 4 or earlier that wants to downsize for any reason. There is no limit on the megawatt amount of downsizing permitted.

**Timing:** There would be a one-time downsizing request window open for 30 days, beginning as soon as practical following receipt of an order from FERC approving the downsizing proposal.

**Costs:** Projects submitting a request to downsize will be required to provide a downsizing deposit in the amount of \$200,000. The downsizing opportunity will trigger new incremental costs of two types: (1) restudy and associated study report costs for both the downsizing project as well as affected projects that did not request to downsize; and (2) costs for amending the generator interconnection agreement of both the downsizing project as well as the generator interconnection agreements of affected projects that did not request to downsize. The downsizing deposit would be applied toward these costs.

**Estimated Restudy Cost Information:** Shortly after the close of the request window but prior to initiating the restudy, the ISO will post on its website a preliminary estimate of total restudy costs based on the number of downsizing requests submitted. The total restudy cost will be allocated to all downsizing generators equally and without distinguishing study groups or clusters and without regard to the respective megawatt amount of each individual downsizing request. A downsizing generator's share of the restudy cost will be capped at an amount equal to 150 percent of that generator's share of the preliminary estimate of total cost of the restudy.

**Cost Caps:** For the costs of modifying interconnection agreements, a downsizing generator's cost responsibility will be \$10,000 per affected interconnection agreement. However, this cost responsibility for any individual downsizing generator will be capped at \$100,000. If the sum of the actual restudy costs and generator interconnection agreement modification costs are less than the deposit amount, then the downsizing generator would receive a refund of the unused amount. However, if the actual costs are greater than the deposit, then the interconnection customer would be charged the additional costs up to the two cost caps described above.

**Opportunities to Withdraw:** When an interconnection customer submits a request to downsize, it does so without knowing the actual cost impact of its request.

Management proposes two opportunities for a downsizing generator to withdraw its downsizing request to reduce the risk due to uncertainties.

1. In the month following the close of the request window, the ISO will post on its website which projects have submitted a downsizing request, the megawatt amount requested, and a preliminary estimate of total restudy cost. This information will be posted to enable downsizing generators to gauge the extent to which their cost responsibility for the restudy and modification of affected generator interconnection agreements may exceed the deposit. A downsizing generator will be given five business days to inform the ISO that it either intends to proceed with downsizing or withdraw its downsizing request and receive a full refund of its downsizing deposit.
2. In the rare instance that the restudy identifies a circumstance where a downsizing generator's cost responsibility may significantly exceed its current cost responsibility by more than five percent or \$5 million, whichever is lower, the downsizing generator will be allowed to withdraw its downsizing request and forfeit any unused portion of its downsizing deposit. Only downsizing generators subject to such a significant increase in cost responsibility will be permitted to use this second withdrawal opportunity.

**Reduced Options:** Customers that choose to exercise the downsizing option must accept reduced future options in return for their ability to downsize their project. Downsizing generators will have no further rights to temporarily suspend development of their projects.

**Concept of “No Worse Off”:** The proposal establishes the concept of “no worse off” as a general guideline intended to minimize cost shifting due to downsizing requests. A downsizing generator's cost responsibilities for upgrades after downsizing should be no greater than the upgrade costs the customer would already be responsible for as outlined in its Facility Study, Phase II study or its generator interconnection agreement, apart from the potential loss of any participating transmission owner upfront funding. Other parties should also be “no worse off” due to a project's decision to downsize. “No worse off” is stated as a general guideline rather than a requirement because there may be rare instances where there may be a potential increase in transmission upgrade costs, and the generator(s) requesting the downsizing would be required to cover any such increased costs. In such rare instances, downsizing generators will be able to withdraw their downsizing request as earlier discussed.

**Limitations:** The scope of this proposal can extend only to the ISO generator interconnection process. The downsizing opportunity presented here is available only to projects interconnecting through the ISO generator interconnection procedures and not to projects interconnecting under a participating transmission owner's wholesale distribution access tariff. Although likely to be rare, there is a possibility that downsizing projects could have adverse impacts on projects interconnecting under a participating transmission owner's wholesale distribution access tariff. In such rare instances, downsizing generators will have to bear the cost consequences to mitigate any adverse

impacts on projects interconnecting under a participating transmission owner's wholesale distribution access tariff to ensure that they are "no worse off." Because these situations are anticipated to be rare, a downsizing generator in this situation will be able to withdraw its downsizing request and forfeit any unused portion of its downsizing deposit if the downsizing generator's cost responsibility significantly exceeds (that is, by more than five percent or \$5 million, whichever is lower) its current cost responsibility.

## **POSITIONS OF THE PARTIES**

This proposal is the product of a comprehensive stakeholder process that began in April 2012. There were four rounds of ISO proposals followed by stakeholder meetings, web conferences and written comments. Overall, stakeholders are very supportive of both the objectives of this initiative and the proposal. Stakeholders widely acknowledge that the proposal offers significant benefits to facilitate the development of viable generation projects while contributing to the ISO's queue management efforts. Despite this broad support, some stakeholders still have concerns.

First, while stakeholders are supportive that this is a one-time downsizing opportunity and only one request may be submitted, some stakeholders do not believe that they are ready to make a downsizing decision now and have requested that the ISO offer a second downsizing request window a year or so after the proposed request window. Customers with projects in Clusters 3 and 4 and those with commercial operation dates far into the future (for example, 2015 or later) argue that it is unreasonable to expect them to be at the same point in the project development process as projects in earlier clusters.

Management recognizes these concerns, but believes it would be imprudent to commit to a second downsizing request window at this time. The new processes for the transmission planning process-generation interconnection procedures integration initiative will commence for the first time in early 2013. The resource adequacy for distributed generation initiative, if approved by FERC later this year, will commence its first cycle in late 2012. The proposed one-time downsizing request window in this proposal will coincide with the initial cycles of both of these two other critical initiatives.

To avoid compromising the successful implementation of any of these three initiatives, Management believes it would not be prudent to commit now to introduce a second downsizing request window without first reviewing the lessons learned from implementing the initial cycles of these initiatives. Once that point is reached, and if there is a demand and need for a second downsizing window, Management may consider a second window.

Second, some stakeholders are concerned that they would have to give up their right to suspend work on their project if they exercise the downsizing option. In an earlier version of the proposal the ISO proposed that a downsizing generator would give up both its ability to suspend work and request an extension of its commercial operation

date. This element of the previous proposal was strongly opposed by developers. However, it had strong support from the participating transmission owners. After further consideration, Management has become concerned that limiting commercial operation date extensions may be in conflict with the goal of the proposal in that a viable project that downsizes may be meeting its milestones and making good progress toward commercial operation only to later encounter an issue during construction that requires an extension of its commercial operation date.

Therefore, Management proposes that downsizing generators in good standing will not lose the ability to submit a material modification request for an extension of commercial operation date or any other agreement terms and conditions. However, to provide a balance among stakeholder positions, the proposal does not allow suspension rights if a project downsizes. The premise is that the project is ready to go into active development but for the need to downsize and suspension is at odds with that goal.

Stakeholder comments and Management's response to the concerns raised therein are described in the attached stakeholder matrix.

## **CONCLUSION**

It is important for the Board to act on this proposal expeditiously. To do so would enable tariff changes to be filed with FERC on a schedule that would maximize the likelihood of receiving FERC approval in time to open the window for downsizing requests before the end of 2012.

## **Stakeholder Process: Decision on Generator Project Downsizing**

### **Summary of Submitted Comments**

**Stakeholders have submitted four rounds of written comments to the ISO on the following dates:**

- Round One: Straw Proposal posted May 7, 2012; comments received May 22, 2012
- Round Two: Revised Straw Proposal posted June 8; comments received July 3, 2012
- Round Three: Draft Final Proposal posted July 19, 2012; comments received August 3, 2012
- Round Four: Addendum to Draft Final Proposal posted August 16, 2012

**Parties that submitted written comments:** 8minutenergy Renewables, AES Solar (AESS), BrightSource Energy, California Public Utilities Commission (CPUC), California Wind Energy Association (CalWEA), Independent Energy Producers (IEP), K Road Power, Large-Scale Solar Association (LSA), Pacific Gas and Electric (PG&E), San Diego Gas and Electric (SDG&E), Sempra US Gas and Power, Silverado Power, Southern California Edison (SCE), Tenaska, Wellhead

**Parties that participated in meetings or conference calls but did not submit written comments on Draft Final Proposal:** California Department of Water Resources, City of Anaheim, Clean Line Energy, Customized Energy Solutions, EB Energy Law, Federal Energy Regulatory Commission, First Solar, Geysers Power, LS Power, NextEra Energy, NRG, Phoenix Consulting, SAIC, Sempra USGP, Sun Edison, TES Solar, Thompson Coburn, Telegen Power, Transmission Agency of Northern California, Turlock Irrigation District, ZGlobal

**Stakeholder comments are posted at:**

<http://www.aiso.com/Documents/Generator%20project%20downsizing%20-%20stakeholder%20comments>

**Other stakeholder efforts have included:**

- One stakeholder meeting: May 14, 2012 to discuss Straw Proposal
- Three stakeholder calls: June 25, 2012 to discuss Revised Straw Proposal; July 27, 2012 to discuss Draft Final Proposal; and August 23, 2012 to discuss Addendum to Draft Final Proposal
- Numerous client services outreach calls

Management Proposal	Participating Transmission Owner	Other Stakeholders	Management Response
<p><b>1. Overall support for Draft Final Proposal –</b> Stakeholders were asked to <i>select one of the following options to indicate their organization’s overall level of support for the Draft Final Proposal: (1) fully support, (2) support with qualification, or (3) oppose.</i></p>	<p>PG&amp;E, SDG&amp;E and SCE - Support with qualifications.</p>	<p>CalWEA, CPUC, IEP – Fully supports.</p> <p>8minutenergy, AES Solar, BrightSource, K Road, LSA, Sempra US Gas and Power, Silverado, Tenaska – Support with qualifications.</p> <p>Wellhead – Opposes. Argues that this is retroactive ratemaking that will harm developers that made decisions based on existing tariff.</p>	<p>Overall, stakeholders support both the initiative’s objectives and Management’s proposal. Stakeholders acknowledge that the proposal offers significant benefits to facilitate development of viable generation projects while contributing to the ISO’s queue management efforts. Management believes it has struck an appropriate balance among diverse stakeholder positions. Management has attempted to address issues qualifying this support, as discussed further in the matrix, including making several modifications to the proposal.</p>
<p><b>2. Interconnection Restudies –</b> Restudies will be done to determine material impact of each downsizing request on later queued projects. The ISO will determine whether the downsizing project’s transmission upgrades are still needed either by downsizing project itself or by later queued projects (and, alternatively, whether network upgrades can be downsized to meeting continuing needs or cancelled)</p>	<p>PG&amp;E – No comments. SDG&amp;E – Supports. SCE – Supports proposal goal to reassess both reliability and deliverability requirements as well as interconnection plan of service for later queued generation projects due to downsizing requests.</p>	<p>Sempra US Gas and Power – Supports. 8minutenergy, IEP, KRoad, Silverado – Does not object or oppose. CalWEA – Supports, but dismayed that proposal scope limits project modification requests to size only. CPUC – No comments. Wellhead – Proposal should include provisions that downsizing customers financial security deposit for upgrades should be increased, partial refund of security deposits and customer should be required to accept-- in return for downsizing opportunity-- restrictions on other existing tariff opportunities for project modifications.</p>	<p>Management notes that stakeholders agree with need for restudies to assess impacts of downsizing generators.</p>
<p><b>3. Eligibility –</b> Downsizing opportunity is open to any active project in good standing in Cluster 4 or earlier that wants to downsize for any reason</p>	<p>SDG&amp;E – Supports. PG&amp;E, SCE – No comments.</p>	<p>8minutenergy, BrightSource, CPUC, CalWEA, IEP, K Road, LSA, Sempra US Gas and Power, Silverado, Tenaska – Supports. Wellhead – Opposes.</p>	<p>Management notes that there is broad support from most stakeholders for this element of the proposal; i.e., allowing a project to downsize for any reason.</p>
<p><b>4. Number of downsizing requests allowed –</b> Proposal provides a one-time downsize opportunity for generation projects.</p>	<p>PG&amp;E, SCE – No comments.</p>	<p>CPUC, CalWEA, IEP, BrightSource, Sempra US Gas and Power, Wellhead – Supports. AES Solar, LSA, Silverado, 8minutenergy – Does not object. K Road – By limiting requests to one, ISO misses out on meaningful reform.</p>	<p>Management believes that it is best to provide a narrow, one-time opportunity to downsize for projects that are ready to make a downsizing decision and, having made that decision, are viable and ready to meet generator interconnection</p>

Management Proposal	Participating Transmission Owner	Other Stakeholders	Management Response
		Wellhead – Questions whether this proposal should provide Cluster 4 projects another downsizing opportunity since they have just recently had an opportunity to downsize following their Phase I study a few months ago.	agreement milestones.
<b>5. Magnitude of project downsizing</b> – No limit on downsizing MW amount. (such as a limitation to some percent of existing MW generating capacity size)	SDG&E – Supports. PG&E, SCE – No comments.	8minutenergy, CPUC, CalWEA, IEP, K Road, LSA, Sempra US Gas and Power, Silverado, Tenaska, Wellhead – Supports.	Based on stakeholder input, Management concluded to not limit the amount of downsizing permitted. This is widely supported by stakeholders.
<b>6. Number of request windows and timing to open the window</b> – Limit downsizing opportunity to one window (that would be open for 30 days). Would occur as soon as practical following receipt of an order from FERC approving the downsizing proposal (planning for request window in December 2012).	SDG&E – Supports downsizing request window concept to align with generation interconnection restudies/studies. However, recommends addition of one more downsizing opportunity. Additional opportunity should be available to project with an executed power purchase agreement awaiting regulatory approval. Recommends interconnection customer be allowed to downsize its project if regulatory approval is not obtained within six months of the initial downsizing window. PG&E, SCE – No comments.	<b>Number of windows</b> CPUC, Sempra US Gas and Power – Supports. CalWEA – Supports subject to better information and coordination among requests. Wellhead – Supports with qualification- there is no reason to delay requirement for projects to make decision. LSA, BrightSource, 8minutenergy- Supports timing. Window should be postponed if the Cluster 3-4 Phase II studies and/or the results meetings are delayed. 8minutenergy Renewables, AES Solar, K Road, LSA – Requests annual ‘true-up’ study under new TPP-GIP framework, re-setting base case for Phase II studies to account for downsizing of Cluster 5 and later projects. 8minutenergy Renewables, AES Solar, BrightSource, K Road, LSA, Silverado, Tenaska – Requests a second downsizing window. CalWEA, Tenaska – Requests additional downsizing opportunities for those willing to mitigate for impacts and leave other generators “no worse off.” Sempra US Gas and Power – ISO should not foreclose option of future downsizing opportunities. <b>Timing</b> Silverado – ISO should not open downsizing request window until at least 30-60 days after the results meetings for Cluster 3-4 Phase II studies. EP, K Road – Does not oppose timing.	Management believes that limiting scope to one downsizing request window will simplify completion of the proposal and its timely filing at FERC, to maximize the likelihood of receiving FERC approval and opening window for downsizing requests before end of 2012. Management notes that over the next year, the ISO will implement new processes for the transmission planning process-generator interconnection procedures integration, resource adequacy for distributed generation, and generator project downsizing initiatives. It would not be prudent to commit now to a second window without first reviewing lessons learned from these three efforts. In 2014, if there is a demand and need for second window, Management will consider a second downsizing request window.
<b>7. Deposit</b> – Require a \$200,000 deposit.	SCE, SDG&E – Supports. PG&E – No comments.	CPUC, LSA, K Road, BrightSource, IEP Sempra US Gas and Power – Supports.	Allowing generator project downsizing beyond that already provided in ISO tariff

Management Proposal	Participating Transmission Owner	Other Stakeholders	Management Response
		Silverado, Tenaska – Does not oppose/object. CalWEA – Structure could discourage downsizing. Study deposit should be refunded if requests lead to network upgrade reductions.	triggers new incremental costs that would not otherwise exist. Management’s proposal strikes a balance by placing burden for some of these costs on customer that requests downsizing.
<p><b>8. Cost responsibility –</b> Developers are charged for restudy costs and costs to modify interconnection agreements, but both cost exposures capped.</p>	<p>SCE – Participating transmission owners need to be compensated by downsizing generator for costs to amend impacted generator interconnection agreements. SDG&amp;E – Supports. PG&amp;E – Proposal objectives should reflect that participating transmission owner should not backstop incremental costs or stranded costs resulting from downsizing.</p>	<p>CPUC, IEP, Sempra US Gas and Power, Wellhead – Supports. 8 minutenergy, BrightSource, K Road, LSA – Opposes charging for costs of interconnection agreement modification 8minutenergy, BrightSource, K Road, LSA, K Road, BrightSource, Silverado – Study costs should be capped at higher of the \$200,000 deposit or level indicated by total study costs and number of downsizing requests. CalWEA – Unlimited cost responsibility could discourage requests. 8minutenergy, LSA, BrightSource, K Road – ISO should amend existing interconnection tariff provisions to allow use of forfeited study deposits and financial security to cover costs.</p>	<p>To address stakeholder concerns about uncertainty of restudy costs, Management issued an addendum to the draft final proposal. The addendum capped downsizing generator’s share of restudy cost at an amount equal to 150 percent of that generator’s share of preliminary estimate of total cost of restudy. This cap on restudy costs will allow interconnection customer to better gauge costs associated with its downsizing request. Modifications to existing rules for use of forfeited funds (study deposit, financial security) are a significant change. Management has identified the matter for consideration in the deferred generator interconnection procedures improvement phase 3 stakeholder initiative.</p>
<p><b>9. Ability to withdraw a downsizing request –</b> Provide two opportunities to withdraw downsizing request after submittal of such a request to reduce risk to developers.</p>	<p>SDG&amp;E – Supports. PG&amp;E – Does not oppose withdrawal opportunities, provided downsizing request window remains a one-time only opportunity. SCE – ISO will run risk of having to perform multiple iterations of restudies. Opportunity for generator to withdraw its downsizing request should be limited to instances where its network upgrade costs increase by more than 10% of its costs responsibility.</p>	<p>CalWEA, 8minutenergy, K Road, LSA, Tenaska, BrightSource, CPUC, IEP, Sempra US Gas and Power, Silverado – Supports. 8minutenergy, K Road, LSA – Threshold for early withdrawal opportunity should be changed to a dollar and a \$/MW threshold. Tenaska, BrightSource – Criteria for withdrawal of request should include both dollar and percentage thresholds. Silverado – Criteria for the withdrawal opportunity before the study is complete should be revised to be lesser of 5% of network upgrade costs or \$40,000/MW. Wellhead – Opposes. Sees no logic in allowing request to be withdrawn. Withdrawal should only be an option when non-reimbursable cost responsibility increase is more than 10%. 8minutenergy, K Road, LSA, BrightSource, Tenaska – If ISO does not cap study costs, projects withdrawing their requests should still be responsible for their share of study costs, even if</p>	<p>Management modified proposal through addendum to address most of stakeholder concerns. Under the addendum, a downsizing generator will be given five business days to inform the ISO that it either intends to proceed with downsizing or withdraw its downsizing request and receive a full refund of its downsizing request. The addendum also provides that if a downsizing generator’s cost responsibility exceeds its cost responsibility by more than five percent or \$5 million, whichever is lower, then the downsizing generator will be provided an opportunity to withdraw its downsizing request and forfeit any unused portion of its \$200,000 downsizing deposit.</p>

Management Proposal	Participating Transmission Owner	Other Stakeholders	Management Response
		<p>those costs exceed \$200,000.            CalWEA – Provide withdrawal opportunity if request does not lead to any network upgrade size reduction.</p>	
<p><b>10. Reduced options in return for the new opportunity to downsize</b> – Interconnection customer that has downsized gives up its rights to temporarily suspend work. Interconnection customer’s rights to seek an extension of its commercial operation date are not affected under this proposal if the customer exercises the option to downsize.</p>	<p>SDG&amp;E – Supports.            SCE – Supports. Suggests financial security and requirement to meet milestones.            PG&amp;E – No comments.</p>	<p>Wellhead – Strongly agrees there should be no future ability for a downsized project to voluntarily suspend activities under agreement. Strongly disagrees with proposal on right to change commercial operation date.            8minutenergy, K Road, IEP, LSA, Silverado, CalWEA – Support elimination of commercial operation date extension right restrictions.            Sempra US Gas and Power – Opposes reduced optionality.            8minutenergy, LSA, Sempra, Silverado – Oppose removal of suspension rights because suspension rights are not related to downsizing.            IEP – Requests reconsideration of suspension rights restrictions.            K Road – ISO is discouraging downsizing by requiring customers to sacrifice suspension rights.            Silverado – ISO should at least eliminate removal of suspension rights for Cluster 3-4 projects and those with commercial operation dates in 2016 and later.            Tenaska – ISO has not justified need to limit a project’s suspension rights.</p>	<p>Management believes that it is appropriate for interconnection customers to be asked to accept some reduced options in return for exercising the new downsizing opportunity under this proposal to reduce their project size to maximize their commercial business case. The ISO previously proposed to limit requests for extensions to commercial operation dates and not allow suspension, and now allows commercial operation date extensions but continues to not allow suspension. The downsizing proposal is intended for projects that are ready to go into active development but for need to downsize, and suspension is at odds with that goal. Under proposal developers are required to provide financial security and meet milestones.</p>
<p><b>11. General guideline of “no worse off”</b> – A downsizing generator’s cost responsibilities for upgrades after downsizing should be no greater than the upgrade costs the generator would already be responsible for as outlined in the governing study report or generator interconnection agreement , apart from the potential loss of any participating transmission owner up-front funding. Other parties should also be “no worse off” due to</p>	<p>SDG&amp;E – Supports.            PG&amp;E – Supports with caveat that FERC finds it does not run afoul of cost-causation principles. Proposal needs to be strengthened to reflect that participating transmission owner should not backstop incremental costs or stranded costs resulting from downsizing.            SCE – All adverse impacts to participating transmission owners should be fully mitigated. Concerned this aspect of proposal might violate FERC’s “cost-causation” and result in</p>	<p>CPUC, Sempra US Gas and Power, Silverado, IEP, LSA, 8minutenergy – Support.            Tenaska – Does not object.            8minutenergy, LSA, IEP – Criterion should explicitly consider project schedule as well as project costs.            BrightSource – Conditionally supports. Proposal should include discussion assuring that non-downsizing generators’ progression through queue will not be delayed. The ISO should clarify that original project’s obligation to fund should continue as long as later-queued project is a project in good standing in ISO interconnection queue and timing of cost responsibility will not shift unless and until the later-queued project now requiring those</p>	<p>This general guideline has consistently received broad stakeholder support, although some stakeholders sought to expand guideline scope to cover status quo conditions. The basis for this guideline is derived from experience of the ISO and participating transmission owners that in most, if not the vast majority of cases, collective downsizing of a large number of generator projects in a particular electrical area of the grid will tend to result in a general de-scoping of the overall upgrades with a corresponding reduction of cost. Although this may generally be the case, there may be specific instances where this outcome is</p>

Management Proposal	Participating Transmission Owner	Other Stakeholders	Management Response
<p>a project's decision to downsize its project.</p>	<p>wholesale shifting of financial responsibility from one party to another, potentially across queue clusters.</p>	<p>upgrades withdraws from the queue. K Road – Opposes. Principle will discourage downsizing. LSA, Silverado, 8minutenergy – Developers that wish to execute their agreements on schedule, subject to later amendment, should be accommodated. Those wanting to await results of downsizing studies should be able to postpone their agreement executions until that time.</p>	<p>not achieved and, in such rare instances, downsizing generator would be required to cover any increased costs. If a downsizing project has responsibility for upgrades needed by a later queued project, downsizing project remains responsible for upgrades as long as later queued project remains in good standing. In such cases, downsizing project must continue to pay for network upgrade(s) per schedule and terms of its Facility Study, Phase II study, or its generator interconnection agreement.</p>
<p><b>12. Wholesale distribution access tariff projects –</b> Downsizing generators will have to bear cost consequences to mitigate any adverse impacts on projects interconnecting under a participating transmission owner's wholesale distribution access tariff to ensure they are "no worse off." If a downsizing project has impacts on such projects, then the downsizing project must pick up those costs to prevent a project interconnecting under a participating transmission owner's wholesale distribution access tariff from being "worse off."</p>	<p>SDG&amp;E – Supports including wholesale distribution access charge projects in "no worse off" guideline. SCE – Supports proposal that downsizing generators will have to bear costs of effects on wholesale distribution access charge customers. PG&amp;E – No comments.</p>	<p>IEP – Does not oppose. Wellhead – Downsizing projects must take full responsibility to ensure no other projects are financially harmed by their downsizing decision. ISO should take all possible actions to ensure utilities make comparable changes to their wholesale distribution access charge tariff so that within California there is not disparate treatment for projects connecting to the 60/66/69-kV or 115-kV transmission systems. 8minutenergy, LSA – Oppose. Contradicts "no worse off" principle for their projects. Generation projects in ISO queue should not be forced to absorb costs that would otherwise be allocated to wholesale distribution access charge customers. Costs should be allocated to participating transmission owners. Silverado – Opposes. Participating transmission owners should have the choice of making conforming wholesale distribution access charge tariff changes or bearing the costs. CalWEA, LSA – ISO and its participating transmission owners should simultaneously reform their tariff for "identical" downsizing rules. Sempra US Gas and Power – Costs should be recovered from customers.</p>	<p>Because scope of an ISO tariff amendment proposal can only extend to the ISO's interconnection process, downsizing generators will have to bear the cost consequences of effects on wholesale distribution access tariff customers.</p>

**Attachment H – Listing of Key Dates in Stakeholder Process**

**Tariff Amendment to Implement Downsizing Opportunity for Interconnecting Generator Projects**

**California Independent System Operator**

**October 26, 2012**

<b>Date</b>	<b>Event/Due Date</b>
May 7, 2012	ISO issues paper entitled "Generator Project Downsizing Straw Proposal"
May 14, 2012	ISO hosts stakeholder meeting that includes presentation entitled "Generator Project Downsizing Straw Proposal"
May 22, 2012	Due date for written stakeholder comments on paper issued on May 7
June 8, 2012	ISO issues paper entitled "Generator Project Downsizing Revised Straw Proposal"
June 25, 2012	ISO hosts stakeholder web conference that includes presentation entitled "Generator Project Downsizing Revised Straw Proposal"
July 3, 2012	Due date for written stakeholder comments on paper issued on June 8
July 19, 2012	ISO issues paper entitled "Generator Project Downsizing Draft Final Proposal"
July 27, 2012	ISO hosts stakeholder web conference that includes presentation entitled "Generator Project Downsizing Draft Final Proposal"
August 3, 2012	Due date for written stakeholder comments on paper issued on July 19
August 16, 2012	ISO issues paper entitled "Addendum to July 19, 2012 Draft Final Proposal"
August 23, 2012	ISO hosts stakeholder web conference that includes discussion on paper issued on August 16
September 13-14, 2012	ISO Board of Governors approves proposal
October 8, 2012	ISO issues draft tariff language to implement generator project downsizing proposal approved by Board of Governors
October 15, 2012	Due date for written stakeholder comments on draft tariff language issued on October 8
October 17, 2012	ISO hosts stakeholder web conference that includes discussion on draft tariff language issued on October 8