



California ISO  
Shaping a Renewed Future

# Integration of Transmission Planning and Generator Interconnection Procedures

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(TPP-GIP Integration)

2<sup>nd</sup> Revised Straw Proposal

January 12, 2012

Market and Infrastructure Development

# TPP-GIP Integration

## Second Revised Straw Proposal

### Table of Contents

1	Executive Summary.....	2
2	Revised Initiative Schedule .....	5
3	Initiative Objectives .....	5
4	Proposed timeline for the integrated process.....	6
5	Second Revised Straw Proposal .....	8
5.1	Major differences between this proposal and the prior one .....	8
5.2	The revised straw proposal in detail .....	9

# Integration of Transmission Planning and Generator Interconnection Procedures (TPP-GIP Integration)

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## Second Revised Straw Proposal

### 1 Executive Summary

The present initiative continues the effort begun in 2010 to better integrate the transmission planning process (“TPP”) and the generator interconnection procedures (“GIP”). Until 2010 these two processes were essentially separate and parallel, each having its own study processes and assumptions, criteria for determining which transmission additions and upgrades should be built, and project funding and cost allocation provisions. Yet both processes have been vehicles for developing and ultimately constructing substantial amounts of costly grid infrastructure, with little provision for coordination between the two. Having two separate tracks has been workable in the context for which they were designed, where the TPP and GIP only needed to respond to relatively steady, predictable growth in load and incremental changes to the supply fleet. But these design assumptions have been overturned in recent years with California’s adoption of ambitious environmental policy mandates. The state’s renewable energy goals call for dramatic changes to the supply fleet within a decade, and thus have triggered a wave of commercial activity to build renewable resources and exposed the need to revise the TPP and the GIP to enable the ISO to plan grid infrastructure most effectively and efficiently to support the new policy mandates.

The ISO originally proposed to address the present topic in the context of the GIP-2 initiative,<sup>1</sup> in which Work Group 1 was formed to address two issues: (1) consideration of an economic test for GIP-driven network upgrades whereby interconnection customers could be required to pay

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<sup>1</sup> The tariff language to implement the final GIP-2 proposal as approved by the ISO Board of Governors was filed with FERC on November 30, 2011 and is awaiting a FERC decision. Documentation for the GIP-2 initiative can be found at the following link:  
<http://www.caiso.com/informed/Pages/StakeholderProcesses/GenerationInterconnectionProceduresPhase2.aspx>

a share of the upgrade costs without reimbursement by ratepayers, and (2) clarification of an interconnection customer's cost and credit requirements when GIP-driven network upgrades are enhanced through the TPP. The ISO and the GIP-2 participants soon realized, however, that addressing these issues effectively would require more comprehensive reconsideration of many aspects of the GIP, with particular attention to the transition from the extremely large existing interconnection queue to full application of the new approaches required by item (1) above. Resolving all the details would clearly require more time than the GIP-2 schedule provided. The ISO therefore decided to create a separate stakeholder initiative, with an extended timetable and an expanded scope as indicated by the title of this paper, to integrate aspects of the TPP and GIP to form a more comprehensive, holistic approach to transmission development that would address the two issues originally identified and would achieve other objectives stated in section 3 of this paper.

The present document provides the ISO's second revised straw proposal for this initiative.<sup>2</sup> The most significant differences between this proposal and the previous straw proposal (September 12, 2011), are the following:

1. The September 12 proposal allocated TPP-based deliverability to generation projects between GIP phases 1 and 2. In contrast, the present proposal performs this allocation after phase 2. Moving the allocation to occur after phase 2 is accompanied by changes to the phase 1 and phase 2 study approaches, which will enable these studies to provide more realistic and useful results.
2. Under this proposal the requirements for obtaining TPP-based deliverability would be the project's completion of all permitting required to begin construction and either a power purchase agreement (PPA) approved by the buyer's regulatory authority or suitable evidence of committed project financing to construct the project. Projects that obtain TPP-based deliverability would have to complete development milestones by dates specified in their interconnection agreements in order to retain their TPP-based deliverability status.
3. Between phases 1 and 2 under the current proposal, a generation project that wants to continue to phase 2 would indicate that it either (A) is viable only if it obtains TPP-based deliverability status, or (B) is willing to pay for delivery network upgrades (DNU) in order to obtain its desired deliverability status. An interconnection customer's election at this

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<sup>2</sup> All prior documentation associated with this initiative, including papers posted by the ISO and comments submitted by stakeholders, can be found at the following link:  
[http://www.caiso.com/informed/Pages/StakeholderProcesses/TransmissionPlanning\\_GenerationInterconnectionIntegration.aspx](http://www.caiso.com/informed/Pages/StakeholderProcesses/TransmissionPlanning_GenerationInterconnectionIntegration.aspx)

point will have implications for subsequent requirements and options open to the project.

4. The ISO clarifies in this proposal that the new TPP-GIP cost allocation approach whereby some costs for network upgrades may be borne by interconnection customers without cash ratepayer reimbursement is intended to apply only to delivery network upgrades. The proposal would retain existing GIP provisions regarding interconnection customer posting for reliability network upgrades, with reimbursement when the generation project achieves commercial operation, as well as customer cost responsibility for the project's interconnection facilities.
5. In response to concerns raised by stakeholders regarding the impacts of the extremely large existing interconnection queue (serial queue up to and including cluster 4) on both the ability of existing queue projects to obtain PPAs and project financing, and on the likely availability of TPP-based deliverability (or lack thereof) for cluster 5 and later projects, the ISO developed and posted a discussion paper on a revised approach for identifying the delivery network upgrades needed for projects in clusters 1 and 2, which also has implications for clusters 3 and 4. The ISO developed that approach to enable cluster 1 through 4 projects to proceed with greater certainty about their exposure to delivery network upgrade costs and to provide for a reasonable transition from the current GIP rules applicable to the existing queue to the application of the new TPP-GIP process proposed here starting with cluster 5. The ISO encourages participants in the present initiative to become familiar with that discussion paper.<sup>3</sup>

The rest of this paper is organized as follows. Section 2 lays out a timetable for this initiative, with dates for key stakeholder activities leading up to presentation of the final proposal to the ISO Board of Governors at their March 2012 meeting. Section 3 states the objectives for the initiative, which are largely unchanged from the prior proposal. Section 4 provides a process timeline for the integrated TPP and GIP process as proposed in this paper. Section 5 then lays out the second revised straw proposal in considerable detail.

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<sup>3</sup> The ISO posted a revised discussion paper describing the approach for clusters 1 and 2 deliverability on January 10, 2012, which may be obtained at the following link:  
[http://www.caiso.com/Documents/RevisedDiscussionPaper-GenerationInterconnectionProceduresCluster1\\_2DeliverabilityConcerns.pdf](http://www.caiso.com/Documents/RevisedDiscussionPaper-GenerationInterconnectionProceduresCluster1_2DeliverabilityConcerns.pdf)

## 2 Revised Initiative Schedule

ISO management now intends to take this initiative to its Board of Governors for approval at the March 2012 Board meeting. Accordingly the ISO proposes the following dates for the remaining steps of the stakeholder process.

January 19	Stakeholder meeting to discuss this second revised straw proposal
January 31	Stakeholder written comments due
February 9	ISO will post draft final proposal
February 16	Stakeholder meeting to discuss draft final proposal
March 1	Stakeholder written comments due
March 22-23	Board meeting

## 3 Initiative Objectives

In the previous proposal the ISO identified six key objectives for this initiative, plus a seventh objective comprised of a list of open issues from prior GIP initiatives that may be suitable for inclusion in the current scope. The present paper retains those seven objectives, and adds an eighth objective regarding the allocation of TPP-based (i.e., ratepayer-funded) deliverability to eligible generation projects, which has emerged as important in discussions with stakeholders over the past several months of this initiative.

1. Integrate the GIP and the TPP as far as possible so that decisions to approve new rate-based transmission can be based on a comprehensive planning approach that addresses all the needs of the transmission system holistically and thereby makes most cost-effective use of ratepayer funding.
2. Rely more on the TPP and less on the GIP as the venue to identify and approve new rate-based transmission.
3. Provide incentives through appropriate cost allocation for developers of new resources to select the most cost effective grid locations for interconnection.
4. Limit the potential exposure of transmission ratepayers to the costs of building transmission additions and upgrades that are inefficient or under-utilized.
5. Provide greater certainty to developers of new generation resources that the network upgrades they need will be approved for siting by the CPUC or other siting authorities, by utilizing the ISO's collaboration with the CPUC on portfolio development and the TPP study

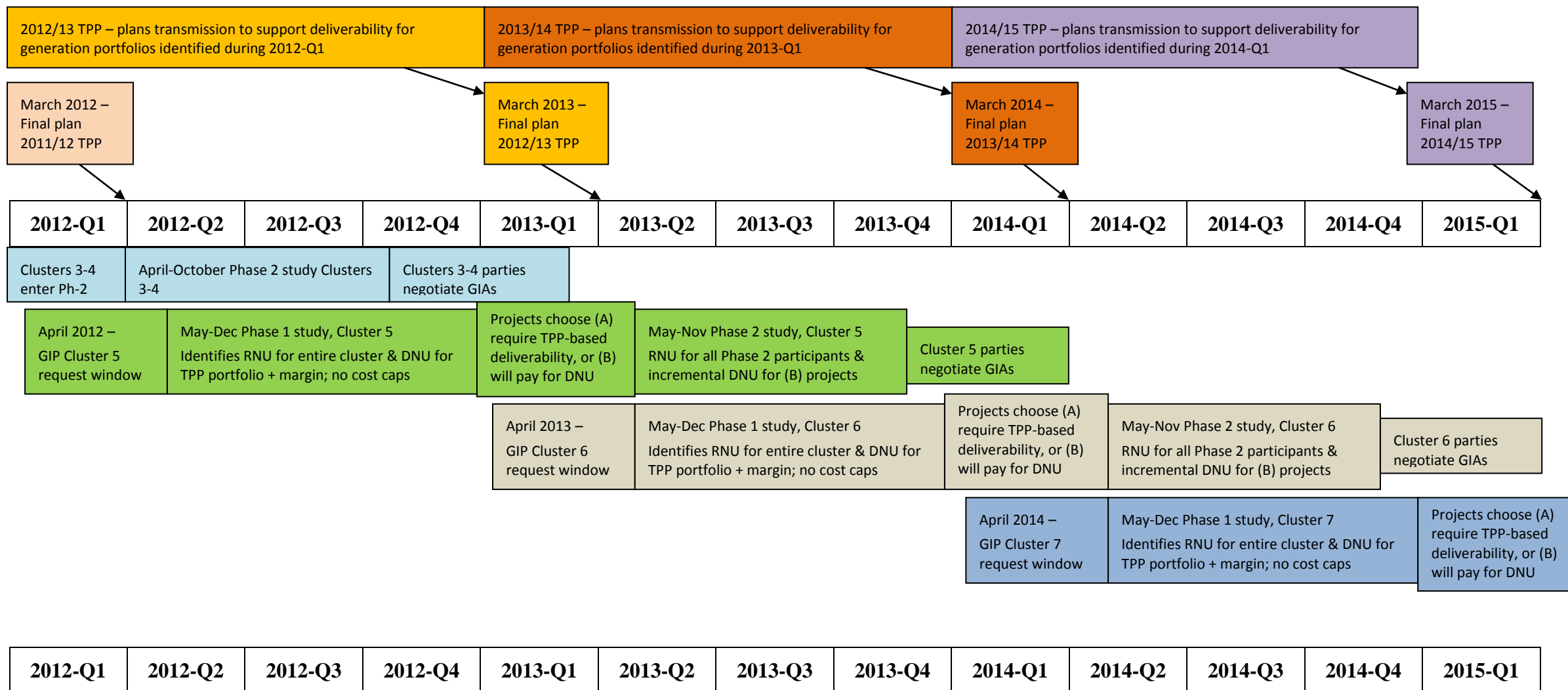
process to support the need for these upgrades, rather than relying solely on the GIP study process to justify the need for GIP-driven network upgrades.

6. Provide greater transparency for all stakeholders regarding transmission upgrade decisions.
7. Resolve several previously identified GIP issues. The ISO expects that the following list of issues will be addressed in the course of developing the final proposal for this initiative.
  - a. Clarify how an IC's funding and posting requirements will be affected when transmission additions and upgrades approved under the TPP provide some or all of its interconnection needs or GIP-driven upgrades are modified through the TPP.
  - b. Allow for a plan of service re-study process whereby network upgrade needs can be re-evaluated when earlier ICs drop out of the queue. A related issue is whether the GIP Phase 1 cost cap for an IC should be over-ridden in cases where the re-study results in increased cost of network upgrades.
  - c. Design a study process that will yield meaningful results (particularly Phase 1 cost caps) when the volume of MW in the cluster is drastically excessive.
  - d. Consider whether to allow additional opportunities in the new TPP-GIP process for ICs to downsize their projects before executing the generation interconnection agreement (GIA).
8. The process for allocating TPP-based deliverability to generation projects should be structured to:
  - a. Allocate to projects that demonstrate a high likelihood of successful completion, to minimize the need to withdraw and reassign TPP-based deliverability allocations;
  - b. Limit the ability of non-viable projects to retain TPP-based deliverability if they are not progressing toward commercial operation; and
  - c. Provide sufficient certainty for viable projects to obtain financing.

## 4 Proposed timeline for the integrated process

The diagram below captures the main features of the revised process as explained in detail in section 5. The ISO is still considering whether any of the process changes proposed in this paper will require changes to the timing of any of the elements of the overall process, and will revise this timeline as needed in the draft final proposal.

**Integrated TPP-GIP Process and Timeline**





## 5 Second Revised Straw Proposal

### 5.1 Major differences between this proposal and the prior one

The September 12 proposal allocated TPP-based deliverability to generation projects between GIP phases 1 and 2. In contrast, the present proposal performs this allocation after phase 2. Moving the allocation to occur after phase 2 is accompanied by changes to the phase 1 and phase 2 study approaches, which will enable these studies to provide more realistic and useful results.

Under this proposal the requirements for obtaining TPP-based deliverability would be the project's completion of all permitting required to begin construction and either a power purchase agreement (PPA) approved by the buyer's regulatory authority or suitable evidence of committed project financing to construct the project. Projects that obtain TPP-based deliverability would have to complete development milestones by dates specified in their interconnection agreements in order to retain their TPP-based deliverability status.

Between phases 1 and 2 under the current proposal, a generation project that wants to continue to phase 2 would indicate that it either (A) is viable only if it obtains TPP-based deliverability status, or (B) is willing to pay for delivery network upgrades (DNU) in order to obtain its desired deliverability status. An interconnection customer's election at this point will have implications for subsequent requirements and options open to the project.

The ISO clarifies in this proposal that the new TPP-GIP cost allocation approach whereby some costs for network upgrades may be borne by interconnection customers without cash ratepayer reimbursement is intended to apply only to delivery network upgrades. The proposal would retain existing GIP provisions regarding interconnection customer posting for reliability network upgrades, with reimbursement when the generation project achieves commercial operation, as well as customer cost responsibility for the project's interconnection facilities.

In response to concerns raised by stakeholders regarding the impacts of the extremely large existing interconnection queue (serial queue up to and including cluster 4) on both the ability of existing queue projects to obtain PPAs and project financing, and on the likely availability of TPP-based deliverability (or lack thereof) for cluster 5 and later projects, the ISO developed and posted a discussion paper on a revised approach for identifying the delivery network upgrades needed for projects in clusters 1 and 2, which also has implications for clusters 3 and 4. The ISO developed that approach to enable cluster 1 through 4 projects to proceed with greater certainty about their exposure to delivery network upgrade costs and to provide for a reasonable transition from the current GIP rules applicable to the existing queue to the

application of the new TPP-GIP process proposed here starting with cluster 5. Participants in the present initiative are encouraged to become familiar with that discussion paper.<sup>4</sup>

## 5.2 The revised straw proposal in detail

Consider the following as a description of the end-state process; issues around the transition from the existing queue to the new process are addressed later.

1. The request window for cluster N closes at the end of April.
2. The GIP phase 1 study will identify: (1) reliability network upgrades (RNU) for all projects in cluster N, and (2) delivery network upgrades (DNU) for a “GIP phase 1 study portfolio” that is derived from the latest comprehensive transmission plan, the existing queue and cluster N, and specifies MW quantities of new generation in each study area.
3. For this GIP phase 1 study portfolio, the MW amount to be studied for deliverability in each study area would depend on both the amount of deliverability provided by the current final transmission plan (called “TP deliverability”<sup>5</sup> in this proposal), the amount of full capacity generation projects in the queue, and the size of the largest generation project in the study area. For example, in a given study area the GIP phase 1 study MW amount might equal:

$\text{Min}[(\text{queue MW including cluster N}) ; \text{max}\{((\pi/2)*\text{TP deliverability}); (\text{TP deliverability} + \text{size of single largest generation project in the queue})\}]$ .

This provision adopts the suggestion made by many stakeholders that the ISO limit the amount of generation studied for deliverability in GIP phase 1 to an amount that is more in line with expected generation development, with an additional margin that would indicate the approximate incremental transmission cost if more generation develops in an area. The concept is that as long as the queue MW amount in an area, including cluster N, is within a moderate MW amount above the TP deliverability MW amount, the phase 1 deliverability study will look at the entire cluster study group. But if the queue plus cluster N is very large in a particular area, the ISO will limit the amount studied for deliverability to keep DNU

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<sup>4</sup> The ISO posted a revised discussion paper describing the approach for clusters 1 and 2 deliverability on January 10, 2012, which may be obtained at the following link:

[http://www.caiso.com/Documents/RevisedDiscussionPaper-GenerationInterconnectionProceduresCluster1\\_2DeliverabilityConcerns.pdf](http://www.caiso.com/Documents/RevisedDiscussionPaper-GenerationInterconnectionProceduresCluster1_2DeliverabilityConcerns.pdf)

<sup>5</sup> The term “TP deliverability” is intended to capture the MW amount of deliverability for new generation projects that is provided by the existing transmission system as expanded by approved projects up to and including the latest approved comprehensive transmission plan. The ISO expects that this amount will be greater than or equal to, in each study area, the amount of deliverability specified in the latest TPP base case resource portfolio. The reason for this is that the current TPP cycle will plan to provide deliverability for the base case portfolio at a minimum, and this amount could be augmented by a combination of latent deliverability capacity in the existing system or from previously approved upgrades, or the lumpiness effects of new transmission facilities.

facilities, costs and construction times within the realm of expected generation development. In areas where the cluster group is larger than the limit, the ISO would make assumptions about the distribution of MW over the grid. As a result, in such cases the phase 1 study would not provide a deliverability plan of service (POS) for all generation projects in each area, though it would provide a POS for the RNU and the generator interconnection facilities (IF) for each project. For this study the ISO would model a mix of resource types in each area that reasonably reflects the latest TPP base case portfolio and the GIP queue.

4. Clearly this special GIP phase 1 study portfolio would likely achieve more than 33% RPS when we consider the ISO system as a whole, but still it is a reasonable approach because it provides information for the possible situation where a particular grid area develops more than expected under the TPP base case portfolio, while another area develops less. Using this approach, the phase 1 study would identify the needed incremental DNU and estimated costs if more generation develops in an area. This information should be helpful to LSEs and LRAs in evaluating alternative procurement options.
5. This study process remains within the structure of the GIP, so that current roles of the ISO and PTOs in performing the studies and the required study deposits for ICs that submit interconnection requests would not change from today.
6. As a result of the phase 1 study, each IC project would know its RNU and associated costs, and either (1) its expected DNU and associated cost share, if the cluster study group total MW amount was not so large as to exceed the MW modeling limit as described above, or (2) in the case of a large cluster study group, the DNU and costs to provide deliverability to the MW limit specified for the GIP phase 1 study portfolio. In either case, the DNU cost estimates from GIP phase 1 reflect what was called the “pro rata” method for allocating TPP-based deliverability in the prior ISO proposal. In other words, in areas where the MW amount studied demonstrates a need for DNU, each generation project in the group will be allocated a share of the DNU costs in proportion to its flow impact on the required DNU. This is also consistent with cost allocation under the GIP today. In case (2) where the DNU were identified to provide deliverability for a smaller MW study amount than the entire study group, the ISO will calculate a cost rate in dollars per MW of capacity equal to the cost of the DNU divided by the MW amount of generating capacity studied, and will use this to extrapolate the DNU cost estimate for the full study group as well as DNU cost estimates for each generation project in the group.
7. The ISO proposes to use the GIP phase 1 results to provide each generation project with a cost cap for its reliability network upgrades (RNU), and to retain today’s GIP provisions regarding the responsibility of ICs to post funding for RNU and be reimbursed by ratepayers after achieving commercial operation. The ISO does not, however, propose to use the phase

- 1 results to cap the exposure of generation projects to DNU costs. The reason for this is explained further below.
8. Between the time that a generation project receives its phase 1 results and the deadline for posting for phase 2, the project must decide whether to remain in queue for phase 2 under one of two options: (A) the project indicates that it requires TPP-based deliverability to be able to continue to commercial operation, or (B) the project indicates that it is willing to pay for DNU without cash reimbursement by ratepayers. If the project elects (A) it must make the normal GIP phase 2 posting related to RNU, but does not have to post for DNU. If it elects (B) it must also post for DNU. Around the same time – the period between providing the phase 1 results to customers and starting the phase 2 study – the ISO would also produce and obtain Board approval for the latest comprehensive transmission plan and would establish the resource portfolios that will be used in the new TPP cycle. These items should provide additional useful information for interconnection customers to decide whether to enter phase 2 and, if so, under which option.
  9. Required posting amounts for phase 2 would be based on the phase 1 study results. For RNU this remains as it is today. For DNU, however, it requires a new approach. The Phase 1 study produces DNU cost estimates treating all generation projects the same and giving them each pro rata shares of the cost. But for entry into phase 2 the projects are now in two different groups. Projects in group (A) have indicated that they require TPP-based deliverability, and as such they would not have to fund DNU and would therefore not be required to post for DNU. By making this choice, however, a project must either qualify for TPP-based transmission within a specific time period (discussed below) or must withdraw from the queue or continue under an energy only (EO) GIA.
  10. DNU posting requirements for (B) projects would be calculated from the phase 1 results by assuming that the TP deliverability (as defined above) is fully utilized by (A) projects, so that the (B) projects would fully fund the incremental DNU required to provide the deliverability status requested by these projects. Thus the posting requirement for DNU for (B) projects would be based on the dollars per MW of capacity rate (as calculated above) in areas where the cluster study group is large, or on the actual DNU cost estimates in areas where the amount of (B) projects is within the MW amount studied in phase 1.
  11. The ISO does not intend the phase 1 DNU cost estimate provided to a (B) generation project and on which its posting requirements to enter phase 2 would be based to be a cost cap (referred to in the GIP tariff as maximum cost responsibility). Rather, under this proposal a project that elects (B) would be fully responsible for the actual cost of the DNU required for its requested deliverability status. In conjunction with this cost responsibility, the customer would be allowed to select its preferred developer to build the DNU, in accordance with

qualifications and restrictions comparable to existing tariff provisions regarding eligibility of non-PTO entities to build transmission.

12. The ISO is considering the need to perform a baseline re-study process at the beginning of each GIP phase 2. The purpose of a re-study would be to assess the impacts, on previously identified network upgrade needs, of project withdrawals from the queue since the ISO completed the last phase 2 study, generation project status on meeting milestones, and transmission additions and upgrades approved in the most recent TPP cycle. The re-study would include both deliverability and reliability assessments. In addition, the re-study could identify earlier queued projects that have met the eligibility requirements for TPP-based deliverability, as described further below, and on that basis the ISO could allocate TPP-based deliverability to them. With this new information the re-study would then update required network upgrades and plans of service for projects with queue positions prior to the current cluster. Thus the re-study could determine any or all of the following as impacts of the new information and circumstances listed above:

- The earlier queued generation projects that are awarded TPP deliverability;
- Updated DNU for earlier queued generation projects (including option (B) projects in previous clusters from cluster 5 on) that are not awarded TPP deliverability; and
- Updated RNUs for all earlier queued generation projects.

Where the re-study finds changes to the previously-identified DNU and RNU and their plans of service, the ISO will use the results to amend the GIAs and then to develop the base case for the current cluster phase 2 study. The ISO will work with PTOs to establish a schedule for the re-study process, and will then determine the implications of this for the overall time line for the integrated TPP-GIP process.

13. The phase 2 study will determine all RNU requirements for all the generation projects that participate in phase 2. For determining needed DNU, the ISO would model (A) projects at their requested deliverability status, up to an amount of new generating capacity for which deliverability is feasible without further network upgrades and that fully uses up the available TP deliverability (as defined earlier). If the amount of (A) projects exceeds the TP deliverability in any study area, the ISO would still model all (A) projects for determining the RNU and would distribute the deliverability over a subset of (A) projects in a representative manner to use up the available deliverability. If the (A) projects and earlier queued projects in an area do not fully use up the TP deliverability in that area, some of the TP deliverability may be unencumbered in the model for phase 2. The ISO would then add all the (B) projects at their requested deliverability levels to determine the required incremental DNU. Thus the phase 2 study produces realistic RNU and costs for all projects in phase 2, plus realistic DNU results for the (B) projects. These results will then be used for developing GIAs.

14. Once the phase 2 study results are provided to the generation projects, the allocation of TPP-based deliverability must be addressed. The ISO proposes, first, that both (A) and (B) projects will be eligible to be allocated TPP-based deliverability within today's time frame for executing GIAs after phase 2. Second, to be eligible for this allocation the project must have all its required permits to begin project construction, plus either a PPA approved by the regulatory authority for the buyer of the PPA, or some other definitive demonstration of secured project financing (to be determined) that need not depend on having a PPA. The (A) projects that qualify by 120 days after they receive phase 2 results will obtain TPP-based deliverability and this will be reflected in their GIAs. The (B) projects that qualify in this time frame may or may not actually obtain TPP-based deliverability, depending on how much of the TP deliverability is utilized by the qualifying (A) projects.
15. Under the process described in the previous step, it is possible that the amount of (A) and (B) projects that meet the eligibility requirement for TPP-based deliverability could exceed the amount of TP deliverability that is available in the study area. This situation is where the ISO's revised approach mentioned above for determining the required DNU for projects in clusters 1 through 4 becomes relevant to the present TPP-GIP integration proposal.<sup>6</sup> The rest of this paragraph provides a brief summary of how deliverability for cluster 1-4 projects would be handled under that approach. Under the revised approach as described in the ISO's January 10 discussion paper, the ISO may execute full capacity GIAs in some study areas that add up to more deliverability than the transmission grid will support (i.e., the "TP deliverability" defined above). The basis for doing so is the recognition that the extremely large amount of generation in the queue is causing the GIP studies to identify required DNU that are extremely costly, will take a long time to be built, and will most likely not be needed or built because only a fraction of the generation projects will ultimately be successfully completed. This approach does admit some risk that an amount of full capacity generation could achieve commercial operation in a particular study area that is greater than the grid can support. The ISO's GIP studies would provide information to enable LSEs and their regulatory authorities to manage their procurement to stay below the thresholds that would trigger significant transmission upgrades. Nevertheless, although the risk of over-building in any area is small and manageable through the generation procurement process, the ISO must specify what responses would apply if over-building does occur.
16. The first response to over-building in an area would occur through the TPP. In the context of the current proposal, if the total MW amount in a study area of cluster N projects that qualify for TPP-based deliverability plus existing queue projects that are successfully moving toward commercial operation exceeds the amount of TP deliverability (as defined above),

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<sup>6</sup> Readers of the current TPP-GIP Integration proposal are encouraged to read the ISO's revised discussion paper on the cluster 1 and 2 deliverability assessment, for which the link is provided in a previous footnote.

the ISO would incorporate this information into its base case portfolio for the current TPP cycle to identify additional public policy-driven transmission elements to provide the needed deliverability. In this situation, the amount of expected development of new generation in the area has been shown to exceed what was assumed in the prior TPP cycle and committed to in executed full capacity GIAs, so it would be appropriate to identify and approve additional policy-driven transmission.

17. The second response to over-building in an area could occur, if needed, through the ISO's annual process to determine net qualifying capacity (NQC) of generating resources. This response would be needed if the amount of full capacity generation in an area that reaches commercial operation by the start of a given resource adequacy compliance year is greater than the total amount of NQC the grid can support in that area. This would typically be a short-term problem that arises because transmission upgrades – which under this proposal would be identified in the TPP after the generation projects in the area have already met the qualifications for TPP-based transmission – generally take longer to complete and place into service than generation projects. In the discussion paper on the cluster 1 and 2 approach, the ISO explained that this risk can be managed by the LSEs and their regulatory authorities limiting the amount of procurement to stay within the thresholds that cause the planned transmission to be insufficient. Nevertheless, if the situation arises the ISO would apply NQC adjustments on an annual basis, as needed, to all “new” generation projects in the constrained area, where “new” would include generation projects in clusters 1 through 4 that have not achieved specified development milestones by a certain date,<sup>7</sup> and to all generation projects in cluster 5 and beyond that elect option (A).
18. A project in category (A) that does not obtain TPP-based deliverability within the current cluster time frame (i.e., within 120 days of receiving phase 2 results) would be allowed to either defer execution of its GIA for one more GIP phase 2 study cycle, or execute a GIA based on energy only deliverability status (EO). If it elects to defer the GIA and does not obtain TPP-based deliverability within the normal time frame of the next cycle, it must either withdraw from the queue or go forward as an EO project and meet all the normal requirements associated with an EO GIA. Once the project executes an EO GIA, any subsequent acquisition of deliverability status would be governed by existing GIP tariff provisions (tariff appendix Y section 8.2).
19. A project in category (B) that does not obtain TPP-based deliverability within the current cluster time frame must either proceed to execute a GIA that includes its funding of the

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<sup>7</sup> The ISO will specify the development milestones and cutoff date for cluster 1 through 4 projects in a technical bulletin to be published about the end of January 2012 that finalizes the approach described in the January 10 revised discussion paper.

incremental DNU and make the required postings within the normal time frame, or drop out of the queue. If the (B) project drops out at this time, it will forfeit some portion (to be determined) of its financial posting.

20. Once a project of either type (A) or (B) obtains TPP-based deliverability, the project's GIA will include specific development milestones (to be determined) that would, if not met, cause the project to lose its TPP-based deliverability without necessarily terminating the GIA. Such a project would be able to continue, if the customer so desired, under a GIA amended to reflect EO deliverability status.
21. The ISO proposes to retain the earlier proposal that: (a) incremental DNU required for (B) projects must be fully funded by the projects that utilize the DNU, even if the DNU provide more deliverability than those projects require, (b) such DNU would be incorporated into the ISO controlled grid as merchant transmission facilities and as such would be eligible for merchant congestion revenue rights (CRRs), and (c) subsequent generation projects that receive deliverability benefits from DNU funded by previous projects will reimburse the parties that originally paid for the DNU in proportion to the benefits received (i.e., flow impacts on the DNU). Because it is possible that a (B) project could be selected for TPP-based deliverability, this would then reduce the amount of MW driving any incremental customer-funded DNU and could either change the POS or the cost responsibility for the remaining (B) projects using the same DNU. If the POS remains the same, the remaining (B) projects would have to pay larger shares so that the DNU are fully customer-funded, and in return would receive commensurate amounts of CRRs as merchant transmission facilities and may be reimbursed by later projects that obtain deliverability status using capacity of the same customer-funded DNU.
22. In the event that the available TP deliverability in a study area in any given annual GIP cycle is not fully utilized by eligible generation projects, when the ISO performs the GIP studies for later clusters the ISO will continue to model the remaining deliverability as fully utilized as long as there are sufficient generation projects in the queue (including earlier queued projects) that could become eligible and obtain TPP-based deliverability. In areas where the TP deliverability has not been fully utilized by specific generation projects, the ISO will model generating capacity at specific locations in the study area to reasonably reflect the locations and resource types of generation projects in the queue that could qualify for TPP-based deliverability at a later date.
23. In the event that a generation project that was allocated TPP-based deliverability loses the allocation due to missing a milestone specified in its GIA, the generation project would not be modeled at full capacity deliverability status in subsequent GIA studies. The associated deliverability would then be available for other projects in the next GIP cycle.