

Integration of Transmission Planning and Generation Interconnection Procedures (TPP-GIP Integration) Second Revised Straw Proposal, posted January 12, 2012

Submitted by	Company	Date Submitted
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Wellhead applauds the CAISO for the significant changes it proposed to the interconnection process in the Second Revised Straw Proposal. The proposal sets forth a framework that can resolve the fundamental problems with the current procedures, including: i) revising study methodology to take account of the fact that all projects making Interconnection Requests IRs will not be developed in a competitive market structure; ii) informing procurement activities with much better information regarding needed upgrades and costs; iii) giving projects which are ready to proceed with construction (and subsequent operation) a clear path for obtaining deliverability; and iv) providing merchant plants the ability to move forward pursuant to federal regulations. Though there are still critical details to be worked out, Wellhead is optimistic the CAISO is on the right track to ensuring developers get good interconnection information, developers will be treated fairly without any discrimination, and available transmission capability will only be committed to projects clearly moving towards commercial operation.

Section 1. High-level structure of the TPP-GIP Integration proposal. (Please use section 2 below to comment on the details of each element.)

1. The process as described in the January 12 paper and outlined below reflects the proposed process for projects in GIP cluster 5 and later. The process for existing queue projects (serial through cluster 4) will proceed according to the ISO's January 10, 2012 revised discussion paper.

Wellhead agrees that the TPP-GIP changes to the interconnection process are prospective. However, as noted later, the CAISO must be careful to avoid retroactive changes that create discrimination against developers that made decisions based on prior interconnection procedures. Specifically, for pre cluster 5 interconnection customers to avail themselves of the benefits of the new rules, they must accept treatment on a level playing field with cluster 5 projects. Thus, if a cluster 5 project meets all milestones before a cluster 2 project that has elected the new rules, the available capacity should be allocated to the cluster 5 project. And if the cluster 2 project in this example did not agree to the new rules, they should not receive the benefits of the revised deliverability methodology.

2. After GIP Phase 1, each generation project advancing to GIP Phase 2 must elect either (A) – project requires TPP-based deliverability; or (B) – project is willing to pay for delivery network upgrades.

This is an essential step to allow the CAISO to take account of whether an Interconnection Request (IR) has the possibility of creating excessive cost responsibility for end-use consumers. Wellhead questions why this decision is not required at the time of the IR. Requiring such would better inform the CAISO for purposes of preparing the Phase 1 studies. For example, if

an area did not have significant requests for interconnection, the CAISO would not need to look at the cost of incremental upgrades beyond those otherwise required for reliability or policy purposes. Similarly, if the IRs were significantly more, the CAISO should probably assess the cost of more incremental upgrades so that LSE procurement and TPP activities would be correctly informed. And if there are a significant number of type B projects, the CAISO may need to look at more incremental upgrades in order to provide the project developers with more accurate facilities/cost information. There are clear implications to the identification of needed facilities from a project's decision to be type A or B project. This is the CAISO's opportunity to ensure accurate information is incorporated into interconnection studies and the best information possible is provided to developers and LSE procurement efforts.

3. The requirement for customer-funding of network upgrades (option (B)) would apply only to delivery network upgrades (DNU); posting and reimbursement for reliability network upgrades (RNU) for all projects would remain as today.

Wellhead requests the CAISO to rethink this element of the proposal. As prior cluster studies have shown, RNU's can be triggered by multiple projects with the RNU costs allocated to the multiple projects. It is inappropriate to retain the old, incorrect paradigm (all IR projects will be developed) for determining RNU's. The CAISO should use consistent assumptions in determining both RNUs and DNUs. For example, RNUs should not be based on 3,000 MW of IRs in an area when the DNUs are based on 1,000 MW in that same area. Not making this change will simply result in perpetuation of the current problem wherein interconnection studies identify excessive facilities/costs which misinforms developers and procurement activities of LSEs.

4. The allocation of TPP-based deliverability to generation projects would occur after GIP Phase 2, rather than after Phase 1 as in the previous proposal.

Wellhead understands why the allocation of deliverability to be a "once a year" activity aligned with the annual TPP effort. This is probably workable but there should be a robust discussion to ensure this will not conflict with the needs of developers and utilities.

5. Allocation of TPP-based deliverability – and project's ability to retain allocation – will depend on the project's completion of significant development milestones that demonstrate high confidence in attaining COD. (Specification of appropriate milestones is covered in the next section.)
6. The allocation of TPP-based deliverability should achieve the following objectives as far as possible: (a) select projects with high probability of completion; (b) limit ability of non-viable projects to retain the allocation; (c) provide sufficient certainty to enable financing of viable projects; (d) objectivity and transparency.

Wellhead supports the allocation of deliverability to projects that are getting developed based on objective and transparent criteria. Meeting ongoing milestones, including achieving commercial operation, should be required to retain an allocation. These milestone requirements for participating in the deliverability allocation would also support the CAISO's queue management efforts.

However, as Wellhead noted in comments on the Deliverability Requirements for Clusters 1 and 2, the significant retroactive changes to prior clusters' interconnection procedures will be unfair and discriminatory if the earlier cluster projects receive preferential treatment for the

advantages/benefits of TPP-GIP reforms. Many project developers did not remain in the prior clusters because of the then-current rules. Allowing such projects to rejoin the earlier cluster would be a way to address the problem but Wellhead believes that would create too much disruption and is not the right solution. The correct solution is to require beneficiaries of the retroactive change to accept the new deliverability allocation procedures/milestones (i.e. projects would have to be bound by the new procedures in order to receive the significant relief/benefit offered by the retroactive change). This is the correct way to mitigate the discriminatory treatment that would otherwise result from the retroactive changes to DNU cost/responsibilities under prior interconnection procedures.

Section 2. Details of individual elements of the proposal.

GIP Phase 1

7. For extremely large cluster groups compared to the amount of “TP deliverability” (the amount supported by existing grid plus all approved upgrades to date), GIP phase 1 will study deliverability in each area up to the amount of TP deliverability plus a reasonable margin. The intent is to avoid excessive DNU costs that can result from extremely large clusters, while providing useful information on needed DNU and associated costs if generation development exceeds grid capacity.

The proposal to change the methodology for Phase 1 studies is a reasonable way to address/resolve the “excessive facilities and costs” for deliverability upgrades that currently plagues the interconnection process. However, it will be important for the CAISO to ensure that the study groups will need to be small enough to address the queue as it relates to available capacity at individual substations. Otherwise, available capacity will likely go unutilized.

8. Phase 1 will study RNU for all projects in the cluster.

As demonstrated in prior cluster studies, significant RNUs can be triggered by or attributable to a combination of projects. Though the allocation of such costs to the multiple triggering projects is fair, it does not address the fact that such facilities can have the same excessive/unnecessary facilities problems which plague the current methodology for identifying DNUs. Requiring IRs to identify themselves as a type A or type B project would allow the CAISO to identify/estimate RNUs consistent with the methodology for identifying DNUs. Without this change, the RNU study methodology will simply continue to misinform developers, LSE and procurement staff, and TPP planners. The current flawed study approach for RNUs should not be continued.

9. As a result of Phase 1 each project will know its RNU and associated costs, and these results will establish cost caps for RNU as they do today.

As indicated in the preceding comment, the methodology for determining RNUs needs to be reformed similar to how the DNU methodology is being reformed to resolve the “excessive/unnecessary” upgrades problem.

10. The DNU and associated costs resulting from phase 1 will be advisory. The only formal use of Phase 1 DNU costs in the TPP-GIP process will be to establish posting requirements for projects advancing to phase 2 under option (B), as described below.

Project's Decision to Enter Phase 2 and Implications of Decision

11. After GIP Phase 1, each generation project advancing to GIP Phase 2 must elect either (A) – project requires TPP-based deliverability; or (B) – project is willing to pay for delivery network upgrades. Once a project chooses and the deadline for phase 2 is passed, the project cannot switch to the other option.

Wellhead agrees with the "no switching" limitation. As noted in comments above, Wellhead believes there would be benefits to the interconnection process of requiring developers to make this selection at the time of the IR (i.e. before the Phase 1 study).

12. A project choosing (A) will have to post for its RNU under today's rules, but not for DNU.

As noted in comments above, the methodology proposed for RNUs is still flawed. If it is not changed, the Phase 1 study should identify which RNUs are 100% the responsibility of the IC and only that amount should be used in determining posting requirements.

13. A project choosing (B) will have to post for both RNU and DNU. Its DNU posting amount will use phase 1 results for the project's study area, converted to a DNU rate (\$ per MW of deliverability) = (cost of incremental DNU)/(deliverability MW studied above TP deliverability amount). The posting amount will = rate x (project MW), where project MW reflects how the project is modeled in the deliverability study depending on the resource type, would typically be less than nameplate for renewables.
14. A project choosing (B) will be eligible for TPP-based deliverability if available, but should expect very low probability of obtaining it and should plan to fully fund its needed DNU.

GIP Phase 2

15. ISO will perform a baseline re-study at the start of each phase 2 study process. The re-study will assess impacts of status changes – project drop-outs or revised COD, new transmission expansion approvals, etc. As a result, the RNU or DNU for some projects may be modified and their GIAs revised.

Wellhead supports changes to the interconnection procedures that will promote linkages with reality. However, this item #15) implies the CAISO is anticipating significant changes. Wellhead can see how revisiting executed GIAs may be needed as a result of retroactive changes to prior clusters. But going forward, the LGIA should be able to address deliverability allocations in the same way as costs are reconciled in the current agreements.

16. Phase 2 will study RNU for all projects in phase 2.
17. Phase 2 study will assume that all TP deliverability is used up by (A) projects and existing queue, and then will model (B) projects at requested deliverability status to assess their incremental DNU needs.

Allocation of TPP-based Deliverability

For type A projects, an approved PPA and receipt of all necessary permits/approvals to construct the project are likely sufficient to make a deliverability allocation. This is because the CAISO should be able to rely on the LSE's and their approving authority to ensure there are appropriate, enforceable milestones. The CAISO would thereby ensure that projects with a PPA and permits will receive a deliverability allocation. The "however" would be that failure to meet the PPA or permit milestones or failure to meet other appropriate CAISO milestones would lead to an immediate loss of the deliverability allocation.

For type B projects, there is no PPA with enforceable deadlines. Hence the CAISO will need project specific own milestones. Simple transparency should be the drivers and would include start of construction promptly after completion of the Phase 2 study and diligent progress to commercial operation.

18. Once phase 2 results are completed and provided to the projects, the 120-day period for negotiating and executing the GIA begins. Option (A) projects that demonstrate completion of certain milestones within this period will be able to execute GIAs at their requested deliverability status, with no cost responsibility for DNU. Option (B) projects that complete the same milestones would be eligible for TPP-based deliverability, but would receive an allocation only if capacity is available.

A key element of the TPP-GIP reform is to ensure that deliverability, and the associated costs that will be incurred by end use consumers, is used by projects that actually get developed. The window the CAISO has identified for the allocation of deliverability should be managed in much the same way as cluster windows. If you are ready when the window closes you are in, if not, you have to wait until the window opens again. The elapsed time is simply a period during which a project can submit information to the CAISO to confirm it qualifies. Projects should be reasonably expected to be working on the requirements well before the window opens. However, the CAISO should rethink how long it will allow a project to remain in queue and thus be able to receive a deliverability allocation. Because a CAISO estimate of interconnection costs is a reasonable requirement to participate in a competitive procurement process (to ensure reasonable/prudent decisions are made), projects must enter the queue as much as a year before they are realistically able to compete for a PPA. This means that during the first allocation of deliverability following the IR, it may be impossible for the project to compete for a PPA. Hence, for type A projects, the CAISO proposal seems too limited. It can even be argued that there is no harm in a type A project remaining in queue for as long as its interconnection cost estimates are valid. For type B projects, there only needs to be one shot at an allocation of deliverability (the allocation following their Phase 2 study) because the project has declared it will proceed to operation as a merchant facility that is willing to recover the costs of generation and DNUs as a merchant provider.

With the changed interconnection study procedures, the size of the queue becomes largely irrelevant (especially if the decision to be type A or B is at the time of the IR). Thus, for type A projects, the only need to limit time in queue is because the accuracy/validity of RNUs becomes stale over time.

19. The proposed milestones required are (a) completion of all permitting required to begin project construction, and (b) either a PPA approved by buyer's regulatory authority or demonstration of committed project financing. PLEASE COMMENT on whether these milestones are appropriate,

or if not, what milestones would be preferable and explain why. Please keep in mind the objective that milestones must provide a high confidence that the project will meet its planned COD.

Milestones that provide a high level of confidence that a project will achieve commercial operations should be a prerequisite for receiving a deliverability allocation. For type A projects, this should include permits required to begin construction and a PPA no longer subject to regulatory review/appeal. For type B projects, permits to begin construction should be the minimum requirement. In both cases, there should be ongoing milestones in order to keep any deliverability allocations, avoid triggering any applicable security forfeitures, and remaining in the queue. Two reasonable milestones would seem to be start of construction relatively soon after an allocation (or completion of the phase 2 study for type B projects) and achieving commercial operation on schedule.

The CAISO has also suggested that when a project is faced with a loss of deliverability it may be reasonable to allow the project to continue as Energy Only. However, Wellhead notes that the CAISO would then need to address the market operation implications of not providing scheduling priority for deliverable capacity; the practical reality is that failure to address this issue would likely result in stranded deliverability.

20. PLEASE COMMENT on what could constitute evidence of committed project financing as an alternative to regulator-approved PPA for item (b) above.

A requirement to begin construction within a relatively short time period after receiving a deliverability allocation (or getting phase 2 results for a type B project) would seem to obviate the need for a financing milestone. The time allowed would take into account how long it should reasonably take to close financing with the presumption that preparatory work was ongoing while the interconnection studies and/or PPA approvals were being conducted. The key is for the milestones to keep in mind the objective of ensuring that deliverability is not stranded (unavailable) for projects that would be able to use it.

21. All option (A) projects that meet the milestones by the time required would be able to execute FC GIAs at this time, even if the total amount exceeds the TP deliverability available. In that case, the ISO would expand the TPP planning portfolio in that area for the next TPP cycle, to provide sufficient deliverability.
22. Any project that obtains TPP-based deliverability would have additional milestones in its GIA which track progress toward COD. Failure to meet one of these milestones would cause the project to lose its deliverability allocation, but would not necessarily terminate its GIA if the project wishes to continue as EO.

As previously noted, simple transparency is key. Start of construction should promptly follow any deliverability allocation and continue on an agreed schedule to the commercial operation date (COD). Unfortunately there is probably not a single milestone schedule that fits all projects if the CAISO wants something more than “start of construction” and “COD”.

23. An option (A) project that does not meet the milestones by the time required would have an opportunity again in the next GIP phase 2 cycle, one year later. If it does not qualify by the end of the next year's 120-day GIA period, it must either withdraw from the queue or continue under an Energy Only (EO) GIA.

As noted above, this may not be a reasonable limitation when you take into account the requirements and time line to participate in a competitive procurement process. Projects need the ability to participate in at least two deliverability allocation cycles which may well be the two cycles following the Phase 2 studies for the next two cluster groups (e.g. for a cluster 5 project, the allocations following the phase 2 studies for clusters 6 and 7).

24. An option (B) project that does not obtain TPP-based deliverability in the current cluster cycle (120 days from phase 2 results to GIA execution) will no longer be eligible for TPP-based deliverability and must proceed to GIA that includes full self-funding of its DNU.
25. If a (B) project drops out after phase 2 instead of executing a GIA that includes self-funding of its DNU, it loses a portion of its posting. PLEASE COMMENT on how much of the posting should be forfeited, and explain your logic.

It there something with the current security requirements/forfeitures that the CAISO sees as problematic or ineffective for type B projects? It seems the key is that the requirements not be punitive.

Other Proposal Elements

26. DNU paid for by an interconnection customer would fall under the merchant transmission provisions of the ISO tariff and would be eligible for allocation of congestion revenue rights commensurate with the capacity added to the ISO grid. The customer would be able to select a non-incumbent PTO to build the project, provided it is a “green field” project and the builder meets qualifications specified in the ISO tariff.

As Wellhead has commented in prior interconnection reform initiatives, it is not clear that CRRs properly compensate a merchant for all of the value they are providing to the system. The CAISO should make it clear whether it expects to be “indifferent” to the merchant’s investment? If so, the CAISO should then undertake the appropriate review to ensure the stated objective is properly addressed/achieved.

27. If a (B) project funds DNU that provide more capacity for deliverability than the project needs, the funding party or parties would need to fully pay for the DNU, but would receive reimbursement for the excess deliverability from later projects that are able to use it.

Agreed and it needs to be clear how this will work, especially since DNU’s can be modifications to existing facilities that are part of current CAISO rates.

28. Some projects that go forward under these new provisions could be subject to reduction in annual net qualifying capacity (NQC) for one or more years. This could occur if transmission capacity in an area must be expanded through the TPP to accommodate the amount of deliverable capacity that achieves COD in that area. Consistent with the ISO’s January 10 discussion paper on cluster 1-2 approach, “existing” projects would not be subject to the reduction, but “new” projects would be. “New” would include all cluster 5 and later projects that elect option (A).

This distinction between “existing” and “new” will create discrimination against projects that dropped out of prior clusters under the procedures applicable at the time. It is patently unfair for the CAISO to make highly significant retroactive changes to prior clusters and not let projects revisit their decision to remain or drop from the applicable cluster. For a project to receive the

benefits of the retroactive deliverability methodology changes, the CAISO should require them to agree that they have no priority in the allocation of deliverability. Eligibility for a deliverability allocation in each respective window should look only at the key question – is it clear that the project will make use of the deliverability allocation. What cluster (or prior serial study) the project was in is not material to the gating question.

29. It was suggested by some stakeholders at the January 19 meeting that as an alternative to applying NQC reductions if the need arises, the ISO should allow the new projects to count fully for resource adequacy without any NQC reduction so that the projects and the LSE buyers are insulated from any direct impacts, and then make up for any resulting shortfall in resource adequacy capacity via ISO backstop capacity purchases. PLEASE COMMENT on this proposal.

The CAISO needs to keep its focus on its charter – reliability. As desirable as it may be, the CAISO cannot simply deem capability that does not exist. This is a contractual matter and the CAISO is best served by leaving this issue to those responsible for procurement.

30. Please use the space below to offer comments on any other aspect of the proposal not covered above.

Wellhead is pleased the CAISO has acknowledged the need to make significant changes to the interconnection procedures. The framework outlined by the CAISO is clearly headed in the right direction and as indicated, it has opportunities to assist in the CAISO's queue management efforts. As also noted in our comments, it is essential for the retroactive changes being made to prior clusters to be integrated (properly addressed) in the going-forward procedures. Failure to do so will result in discrimination and unfairness that will delay/disrupt the timely implementation of a much needed reform. We look forward to working with the CAISO and other stakeholders in finalizing the details of the TPP-GIP integration reform.