

Stakeholder Comments Template

**Integration of Transmission Planning and Generation
Interconnection Procedures (TPP-GIP Integration)
Straw Proposal, July 21, 2011**

Submitted by	Company	Date Submitted
Phillip Muller philm@scdenergy.com 415-479-1710	Ormat Technologies	8/9/11

This template is for submission of stakeholder comments on the topics listed below, covered in the TPP-GIP Integration Straw Proposal posted on July 21, 2011 and discussed during the stakeholder meeting on July 28, 2011.

Please submit your comments below where indicated. At the end of this template you may add your comments on any other aspect of this initiative not covered in the topics listed. If you express support for a preferred approach for a particular topic, your comments will be most useful if you explain the reasons and business case behind your support.

Please submit comments (in MS Word) to TPP-GIP@caiso.com no later than the close of business on Tuesday, August 9, 2011.

1. The ISO has laid out several objectives for this initiative. Please indicate whether you organization believes these objectives are appropriate and complete. If your organization believes the list to be incomplete, please specify what additional objectives the ISO should include.

Ormat generally agrees with the identified objectives, but is concerned that the reliance on “feasible resource scenarios” may not reflect actual commercial realities in generation development which can and do change significantly over time. Over-reliance on these scenarios could create a self-fulfilling prophesy wherein resource scenario forecasts, developed to approximate anticipated resource development patterns given some set of assumptions, become the criteria by which transmission investment decisions are made. To reflect that concern, we propose a revised objective #1 as follows:

“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 approach that addresses all the needs of the transmission system holistically while also considering the overall value/cost of proposed generation projects under development, to make the most cost-effective overall use of ratepayer funding.”

An additional consideration stems from the observation that the almost annual need to reform GIP has resulted from changes that were not anticipated in the prior reform processes. For example, the huge number of interconnection requests submitted in Cluster #4 has overwhelmed the ISO and IOU interconnection processes and led to the need for this process. However, with the limited window for submitting requests, the high demand for renewable generation and the variety of procurement opportunities expected this year (three IOU PV PPA programs, the CPUC's RAM mechanism and the three IOUs' RPS RFOs), the massive response should not have been a surprise. Likewise, the implications for future interconnection clusters is not clear. Will there be another flood of applications for Cluster #5, or will projects already in queue need to modify existing interconnection requests in response to new opportunities? Will we need a mechanism to clear moribund projects from the queue to better determine actual transmission needs? What about a mechanism so that transmission upgrades already planned for projects that for whatever reason become moribund can be reassigned to other more viable projects? In other words, a more forward-thinking proactive approach might help spare the agony of expedited fire drills every time conditions change. Ormat suggests the following objective be added to the proposal:

“Evaluate the likely impact of policy developments related to GIP on future cluster windows and develop contingency plans accordingly.”

2. At the end of the Objectives section (section 4) of the straw proposal, the ISO lists seven previously identified GIP issues that may be addressed within the scope of this initiative.
 - a. Please indicate whether your organization agrees with any or all of the identified topics as in scope. If not, please indicate why not.

The topics identified certainly warrant resolution and generally appear to be consistent with the intended scope of this initiative.
 - b. Please identify any other unresolved GIP issues not on this list that should be in scope, and explain why.
3. Stage 1 of the ISO's proposal offers two options for conducting the GIP cluster studies and transitioning the results into TPP.
 - a. Which option, Option 1A or Option 1B, best achieves the objectives of this initiative, and why? Are there other options the ISO should consider for structuring the GIP study process?

A single stage GIP process (Option 1B) followed by TPP assessment appears to be the most reasonable, particularly to the extent that it shortens the study process.

- b. What, if any, modifications to the GIP study process might be needed?

For the reasons discussed below, separation of the deliverability assessment from the GIP process probably makes the most sense.

4. Stage 2 of the straw proposal adds a step to the end of the TPP cycle, in which the ISO identifies and estimates the costs of additional network upgrades to meet the interconnection needs of the cluster. Please offer comments and suggestions for how to make this step produce the most accurate and useful results.

The Stage 2 process is the heart of the GIP/TPP integration and the one that raises the most concerns. To the extent that policy driven transmission elements are determined based on existing “preferred portfolios,” some mechanism for market testing those portfolios becomes important. One option would be for LSEs to identify preferred resource locations based on their resource commitments. This could take the form of something like long-term deliverability requests, and possibly be integrated into the CPUC’s Transmission Ranking Cost Report process. It would allow more accurate consideration of potential deliverability network upgrade costs in assessing the overall cost of various resource options. LSEs could identify the locations and amounts of new deliverable capacity they would like to obtain, and perhaps a cost cap (\$/kW year) for the rate-based transmission. This could resemble, or perhaps be integrated into, the Congestion Revenue Rights (CRR) process. However it is structured, the objective is to have LSEs either confirm or revise the preferred portfolios to better reflect their commercial commitments.

5. Stage 3 of the straw proposal identifies three options for allocating ratepayer funded upgrades to interconnection customers in over-subscribed areas.
 - a. Please identify which option, Option 3A, 3B, or 3C, your organization prefers and why. Are there other options the ISO should consider?

Ormat believes that Option 3C provides the best alternative because it has the potential to recognize the relative value that different ICs may place on deliverability.

- b. If Option 3A is selected, what are appropriate milestones to determine which projects are the “first comers?”

Option 3A basically turns what should be a rational assessment and cost-effectiveness analysis into a lottery. Being earlier in line does not make a

project more viable or cost effective than later projects. If it is not possible to develop a rational process for ranking applications, a lottery would make more sense than a “first come” ranking process.

- c. If Option 3B is selected, what is the appropriate methodology for determining pro rata cost shares?

Option 3B also fails to consider the relative economics of alternative projects – allocating pro rata costs equally to highly viable cost-effective projects and to more marginal projects. As a rationing approach, it would provide a potential valuable commodity (deliverability) to projects that might otherwise not be particularly viable. The prospect of receiving a share of rate-based deliverability could also induce more marginal interconnection requests that might otherwise not bother to submit an application.

- d. If Option 3C is selected, how should such an auction be conducted and what should be done with the auction proceeds from the winning bidders?

The idea of an auction process through which ICs can gain advantage by paying more, provides the proper signals and opportunities. Lower cost, high value generation projects should be willing to pay more for access (deliverability) than other projects. Furthermore, the auction could be structured so that it could finance larger scale transmission expansion beyond the rate-based upgrades identified in the TPP if there is sufficient interest. If not, revenues from the auction should be credited back against the transmission revenue requirement, offsetting ratepayer funding or perhaps transferred to the LSE contracting with the generator owner. The idea of refunding auction revenues once a project achieves commercial operation would tend to benefit developers with deep financing, not those with “better” projects. Development of an effective and rational auction design would require careful analysis, but should be feasible.

6. The straw proposal describes how the merchant transmission model in the current ISO tariff could apply to network upgrades that are paid for by an interconnection customer and not reimbursed by transmission ratepayers. Do you agree that the merchant transmission model is the appropriate tariff treatment of such upgrades, or should other approaches be considered? If you propose another approach, please describe the business case for why such approach is preferable.

The merchant transmission model has the problem of providing a benefit (CRRs) that is devalued by the transmission project that the merchant is financing. Rights to congestion revenues are of limited value if the investment that creates those rights eliminates the congestion and thus the value of the CRRs. One way to overcome this paradox could be to develop a “deliverability right” that allows

the holder to attach resource adequacy deliverability to generating resources that it designates. Future generation using the same transmission would not be designated as deliverable without acquiring deliverability rights from the owners. This would coordinate well with the TPP mechanism through which LSEs obtain deliverability rights.

7. Stage 3 of the proposal also addresses the situation where an IC pays for a network upgrade and later ICs benefit from these network upgrades.

- a. Should the ISO's role in this case be limited to allocating option CRRs to the IC that paid for the upgrades?

Here again, the use of deliverability rights rather than CRRs could provide the platform for providing access to future generators. The ISO's role could be limited to allocating these rights initially and registering their assignment to various resources over time.

- b. Should the ISO include provisions for later ICs that benefit from network upgrades to compensate the earlier ICs that paid for the upgrades?

Here again, allowing for the trading of deliverability rights would facilitate the compensation of the sponsoring ICs.

8. In order to transition from the current framework to the new framework, the ISO proposes Clusters 1 and 2 proceed under the original structure, Cluster 5 would proceed using the new rules, and Clusters 3 and 4 would be given an option to continue under the new rules after they receive the results their GIP Phase 1 studies.

- a. Please indicate whether you agree with this transition plan or would prefer a different approach. If you propose an alternative, please describe fully the reasons why your approach is preferable.

Providing an option to Clusters 3 and 4 appears to be a reasonable approach.

- b. If the straw proposal for the transition treatment of clusters 3 and 4 is adopted and a project in cluster 3 or 4 drops out instead of proceeding under the new rules, should the ISO provide any refunds or other compensation to such projects? If so, please indicate what compensation should be provided and why.

Any refunds provided to Cluster 3 or 4 drop outs should generally be consistent with the terms in place when the applications were submitted.

If Cluster 3 or 4 ICs are required to operate under different rules than they applied under, they should be able to receive a full refund if they choose to withdraw. Refunds of incurred engineering costs could come from the funds the ISO has accumulated from prior interconnection queue drop outs.

9. Some stakeholders have expressed a need for the ISO to restudy the need for and costs of network upgrades when projects drop out of the queue. The ISO seeks comment on when and restudies should be conducted, in the context of the proposed new TPP-GIP framework.

If the ISO removes the deliverability assessment from the GIP, the need for re-study would be reduced to reliability issues – primarily short circuit duty. This should be much less of a concern than re-study of the deliverability assessment.

10. Some stakeholders have suggested that there may be benefits of conducting TPP first and then have developers submit their projects to the GIP based on the TPP results. Does your organization believe that conducting the process in such a manner is useful and reasonable?

Conducting the TPP first could be a viable solution provided that LSE needs form the basis of the TPP. The problem is that any requirement in resource solicitations to enter the GIP prior to submitting a resource bid would mean that LSEs would have to identify their transmission preferences prior to knowing the generation portfolio they want to access.

11. Please comment below on any other aspects of this initiative that were not covered in the questions above.

The primary issue in the interconnection process is the need for and resolution of deliverability network upgrades. By acknowledging that deliverability is a policy issue rather than a reliability requirement, it would be possible to reform the deliverability assessment process in a manner that allows for market-based integration of GIP and TPP. Further stages in the process could help facilitate resource re-powering and thus support replacement of older, less efficient generation and optimize transmission system utilization.