

## Stakeholder Comments Template

### **Deliverability for Distributed Generation**

#### **Revised Straw Proposal, posted February 28, 2012**

***Please submit comments (in MS Word) to [DeliverDG@caiso.com](mailto:DeliverDG@caiso.com) no later than the close of business on March 13, 2012.***

<b>Submitted by</b>	<b>Company</b>	<b>Date Submitted</b>
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This template is for submission of stakeholder comments on the topics listed below, which were discussed in the Deliverability for Distributed Generation Revised Straw Proposal posted on February 28, 2012, and during the stakeholder call on March 6, 2012.

Please use the list of topics below to structure your comments. At the end of the document you may offer comments on any aspect of this initiative not covered by the topics listed. When you state a preference for a particular approach on a topic or issue, your response will be most helpful if you clearly explain the reasoning and business case for your preference.

#### **Section 1 – Please comment on the clarifications and refinements made between the 2/28/2012 revised straw proposal and the earlier 12/12/2011 issue paper and straw proposal.**

1. The revised straw proposal specifies six objectives that this initiative seeks to achieve.

The objectives listed are commendably constructive, forward thinking, and very worthwhile; however, the approaches employed are unnecessarily limiting, as discussed below.

2. In response to stakeholder questions about the definition of DG resources in the previous proposal, the revised straw proposal clarifies that the definition of DG resources as used in the proposal is limited to facilities that are connected at the distribution level and that are not connected to the ISO grid; moreover, the proposal does not specify MW size limits and is intended to apply to both renewable and non-renewable resource types.

20 MW is the usual maximum size for DG under numerous State and Federal definitions and the interest in allowing assignment of Deliverability to DG is properly focused on the smaller DG projects for which additional studies represent a disproportionate barrier. We

support a focus on projects  $\leq 5$  MW in LRA allocation, however the definition of DG need not be restrictive and we strongly support the clarification that DG includes facilities used for wholesale supply of electricity.

3. In response to stakeholder questions about the relationship between the proposed process for DG deliverability determination/allocation and the relevant processes for generation interconnection, the revised straw proposal clarifies that the proposal is solely a means to provide deliverability status to DG resources, that DG projects must still apply for and obtain interconnection through either Rule 21 or WDAT, that a DG project awarded deliverability through this proposal may still be responsible for reliability network upgrades (RNU) or distribution system upgrades, and that the proposal is not applicable to projects requesting interconnection through the ISO's GIP.
4. Several stakeholders make the argument that DG resources should be considered deliverable as long as the total DG production below any given ISO network node does not exceed the amount of load below that node (i.e., no "backflow"). The revised straw proposal explains that such a backflow criterion is not sufficient and, in fact, it not even relevant for establishing deliverability of DG resources.

The Clean Coalition understands that assignment of deliverability is based on both physical capacity to deliver energy to load and on prior commitments of that capacity. Determination of physical capacity is an engineering study, and assignment of that capacity between generators is a policy determination. We fully support the ISO's approach in analysis of current total, assigned, and unassigned deliverability available throughout the ISO's system, and the determination that the addition of DG serving local load does impact the transmission system.

As such, network upgrades may be required to maintain existing deliverability for transmission interconnected generation if local load is reduced as a result of any changes, including the introduction of DG, energy efficiency, peak reduction measures, or departing loads.

It would seem, however, that an existing DG facility that has been delivering energy will have already had its impact on ISO deliverability included in the most recent load analysis for a deliverability study, and as such, recognizing its ability to provide a deliverable resource would not impact the status of other facilities and network loads. In fact, such considerations are addressed during the interconnection study and mitigated prior to coming on line.

DG does in fact typically deliver its output to load and will impact the net remaining load available to be met by other generators, as accurately reflected in the annual ISO study. Despite this actual delivery of energy, DG is not automatically credited toward Resource Adequacy at the time of interconnection approval due to network constraints that would result in a potential counter-balancing loss of deliverability by other generators. This accurately reflects ISO Resource Adequacy accounting and respects prior assignments of deliverability, but is not necessarily aligned with the ability of individual projects to most efficiently provide RA in association with CEC loading order priority.

The application of the "Backflow" test would require a policy change in how deliverability is retained and maintained by generators. We support the current and proposed ISO approach toward implementing existing policy, but seek future alignment of interagency policy in achieving state goals.

In addition, we recommend reconsideration of automatic allocation of deliverability to existing projects that have been included in the load analysis of the most recent deliverability study, or that they not be counted against assignable deliverability under this program.

**Section 2 – Please comment on the three major components of Step 1 of the annual process to provide RA deliverability status to DG resources (i.e., determine MW amounts of deliverability available for DG resources at specific nodes on the ISO grid without requiring additional network upgrades).**

5. Development of the base case study model. The revised straw proposal describes a sequence the ISO proposes to follow in building the base case study model for use in the DG deliverability studies.

We want to confirm that DG procurement planned by publicly owned utilities (POUs) is included in the Base Case assumptions for target levels of DG from the TPP base resource portfolio.

In developing the study model, the ISO proposes to count all non-NEM generation projects currently in the WDAT and Rule 21 interconnection queues against the Base Case nodal DG allowance. Please clarify whether the ISO is referring to the queue of projects actually awaiting interconnection (having obtained an Interconnection Agreement) or also those awaiting study results. On the assumption that the ISO intends to include all projects in studies, we note that this will artificially reduce the available deliverability. Projects in the study queue may not be built and should not be counted to reduce allocations unless they have already applied for deliverability.

In addition, those seeking interconnection under the proposed approach appear to be counted in such a manner as to reduce the deliverable capacity available to them through LRA allocation. For example, if ten small projects totaling 15 MW are seeking interconnection through Rule 21 and are not applying for deliverability through the interconnection process, it appears that the study approach will still count these applicants against the Base Case DG allocation, using up 15 MW of deliverability capacity at that node. This capacity would not then be made available to the LRA for allocation to these projects even though the projects have not sought deliverability elsewhere and may not even reach an interconnection agreement.

The above stated recommendation that queued projects not be counted unless they have applied for deliverability would resolve this issue and ensure that this capacity is made available for assignment by LRAs, unless the prior recommendation for automatic assignment of deliverability is adopted.

6. Perform the DG deliverability analysis using the base case study model built for this purpose. To the extent the study reveals that the network cannot provide full deliverability to all the generation projects and DG per the modeling approach described above, the ISO will reduce the amounts of DG at each node as necessary to achieve full deliverability.

While we appreciate the methodology proposed here, we feel that the ISO has an opportunity to add additional value with the information it is gathering and analyzing. Specifically, the ISO notes: “For study purposes the ISO may add somewhat larger amounts of DG at specific network nodes to provide additional information regarding the potential for larger amounts of DG at such nodes.” However, the ISO also says: “Thus if the target MW amount of DG at a particular node is found to be fully deliverable, it may be possible that a greater amount would still be deliverable, but the proposed assessment will not provide that information”

We would recommend that any information about the potential for larger amounts of DG at a node should be shared with developers, thereby encouraging future development at nodes where there is likely to be available DG deliverability and, presumably, the possibility of easier interconnection. This will result in more efficient use of existing infrastructure and, ultimately, cost savings for ratepayers. It will also facilitate a more rapid rollout of renewable resource production.

7. Summarize the deliverable MW quantity of DG at each network node. The MW quantity at each node will be less than or equal to the amount that was specified in the 33% renewable base portfolio.

The ISO notes “the amount of DG deliverability made available at any particular network node will not exceed the amount specified for that node in the TPP base resource portfolio.” The reasoning for this is unclear, particularly when the ISO appears to be referring to cases where the actual DG development at a node already exceeds the target levels of DG in the TPP base resource portfolio. If this is the case, then clearly the base resource portfolio is no longer accurate. Presumably the ISO and CPUC will update the base resource portfolio during the next planning process and the allocation of DG deliverability should not be forced to wait for that update to occur.

We propose that any node that has already exceeded the target levels of DG (actively deployed, assigned a PPA, Interconnection Agreement, or under interconnection study) should have the base case target level automatically raised to accommodate the actual planned deployment in that location. Importantly, this proposed approach would not disadvantage other projects as the ISO methodology already prioritizes all other existing demand for deliverability. We recognize that a substantial proportion of projects in the interconnection queue have historically not achieved deployment, and as a result we recommend discounting the expected capacity of those planned facilities that have not signed an Interconnection Agreement. Base on past performance, we suggest initial use of a 50% discount for these projects, with annual revision to reflect current trends.

**Section 3 – Please comment on the three major components of Step 2 of the annual process to provide RA deliverability status to DG resources (i.e., allocate the use of such deliverability to Regulatory Authorities (CPUC and LRAs)).**

8. ISO determines LRA shares of the total MW of DG deliverability available. This will be based on the share of system peak load forecast attributable to those LSEs subject to that LRA’s jurisdiction. The ISO will notify LRAs of their load share of the MW quantities of DG deliverability and any applicable geographic parameters that may limit eligibility to request specific nodes (e.g., it may be necessary to prevent the situation where the

simple load-ratio share rule might impede the ability of an LRA for a smaller LSE to procure deliverable DG close to its load). The ISO requests stakeholder comment on this potential situation and also requests stakeholders provide potential solutions for consideration.

We want to ensure that a small LSE gets at least a share related to its portion of peak load served at any given node that it uses, not relative to the ISO total peak. We propose that if an LSE uses 1% of ISO peak load, but 80% of the load at a node, it should get 80% of the available deliverability allocation at that node, up to a maximum of 1% of total ISO deliverability.

9. LRAs make nominations. Each LRA will make their nominations by submitting a request to the ISO for MW amounts of DG deliverability by node, up to each LRA's maximum MW amount as adjusted by any valid transfers and any locational limits. All nominations will be honored if nodal totals of all nominations are within the amount of DG deliverability available. Otherwise LRA nominations are reduced so that the total is deliverable while preserving LRA load-ratio shares. For any node where the total requested amount exceeds the available amount, each requesting LRA will receive a share of its requested amount proportional to its total share of system peak load. If the total MW amounts requested at each node are within available quantities, but the requested amount of some LRAs making up the total is greater than their maximum amount while others are less, then the requested amount of those exceeding their maximum amount will be reduced proportional to its total share of system peak load and those requesting less than their maximum amount will receive no adjustment.

We support the approach to allocation shares and transfers.

10. LRAs (or its regulated LSE) make assignments of DG deliverability to specific DG projects and these assignments become an attribute of the specific DG project and are not transferrable to another DG project. Each LRA reports assignments to the ISO before the start of the subsequent annual cycle. Each LRA will ensure that specific DG projects to which assignments have been made make satisfactory progress toward commercial operation (each specific DG project must meet LRA-specified retention criteria in order to retain the RA deliverability status). LRAs will monitor the progress of each specific DG project and compare that against the retention criteria and report to the ISO any assignments that are revoked. Any portion of deliverability not assigned by LRAs (or its regulated LSE) to specific DG projects in the current cycle will not carry over to the next annual cycle. The resulting outcome of these actions will be reflected in subsequent DG deliverability studies and GIP studies.

Given that the proposed schedule limits the assignment of DG deliverability to a two or three month period each year, it seems problematic to have no carryover of a portion of the unassigned deliverability. Consider the case of a project that clears Fast Track after this deliverability allocation window closes and would have to wait until the next window to potentially receive an allocation from an LRA. We repeat our recommendation that each LSE should be allowed to retain 20% of unused allocations at a node for projects that interconnect via Accelerated Options such as Fast Track or the Independent Study Process. Such reservation would be maintained until the next annual allocation, at which point any unassigned capacity would be subject to reallocation. This approach would both increase

the predictability and usefulness of allocations under this program, and reduce the “use it or lose it” pressures that may lead to sub-optimal allocation within the limited time window.

**Section 4 – Please use the space below to offer comments on any other aspect of the proposal not covered above.**

CAISO’s proposal to assess unallocated nodal deliverability capacity and allow LRAs to assign this to DG without further study is very helpful and we appreciate the staff’s efforts in developing this proposal.

Publishing gross unused deliverability capacity data, and not only capacity within the TPP Base Case DG assumptions, will help generators optimize use of existing capacity and reduce ratepayer costs.

The proposed use of Least Squares Weighting appears to be broadly advantageous in producing a more even distribution of deliverability allocations, however the actual total net reduction in assignable deliverability capacity must be determined in order to evaluate the cost-benefit of this approach.