

**Stakeholder Comments Template**

**Subject: Generation Interconnection  
Potential Revision to Cluster 4  
Phase 1 Study Methodology**

This template was created to help stakeholders structure their written comments on topics detailed in the *Generation Interconnection Procedures Potential Revision to Cluster 4*

Submitted by	Company	Date Submitted
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Study Methodology paper located at <http://www.caiso.com/Documents/GenerationInterconnectionCluster4Phase1MethodologyDiscussionPaper.pdf>. We ask that you please submit your comments in MS Word to [regionaltransmission@caiso.com](mailto:regionaltransmission@caiso.com) no later than the close of business on **August 5, 2011**.

Your comments will be most useful if you provide the reasons and the business case for the issue(s).

**Please respond to the question, “Do you generally support the proposal?”**

BrightSource Energy, Inc. (BSE) appreciates the opportunity to review and submit comments on the CAISO’s proposal on the Potential Revision to Cluster 4, Phase I Study Methodology (Proposed Cluster 4 Revision). While BSE supports the CAISO’s efforts to resolve the complicated issues created by the exceptionally large number of megawatts in the interconnection queue, BSE can only support the Proposed Cluster 4 Revision if the CAISO provides parity to Cluster 3, either by (1) including Cluster 3 projects in the new methodology and delaying the postings or (2) separating the two clusters and studying them independently. These comments will address the reasons, as well as the proposed solutions that would remedy the deficiencies of the Proposed Cluster 4 Revision as currently offered. As a general matter, BSE believes it is unduly discriminatory and inappropriate to use a different Phase I methodology for each cluster if it is going to continue to study the clusters as one large cluster in Phase II. BSE’s proposals under which it could support the Proposed Cluster 4 Revision are set forth in Section 4 of the “Other Comments” section.

**1. If yes, please provide comments on the details of the proposal.**

See below

**2. If no, why not?**

See below

**Other Comments:**

If you have other comments, please provide them here.

1. Changing Cluster 4, Phase I Methodology Without a Commensurate Change for Cluster 3, Phase I Methodology Would be Unduly Discriminatory.

As noted above, BSE does not believe that it is just and reasonable to apply two different Phase I methodologies to cluster groups that are being studied together in Phase II. The proposed approach will result in different way cost caps are established among the two clusters, and the differing methodologies could result in Cluster 3 “subsidizing” upgrades for Cluster 4 in a way that was not contemplated. Since these cost caps will be carried forward into Phase 2 and will represent the maximum cost responsibility of each project, BSE believe it is critical to use a consistent approach to ensure the projects in both clusters are treated equally. If the CAISO does not apply the same standards and methodology in the development of costs caps of both clusters, then the Phase 2 studies for QC3 and QC4 must be conducted independently.

Under the original Generator Interconnection Process (GIP) reform allowing the CAISO to combine Clusters 3 & 4 in the Phase II study, the CAISO represented that the same methodology and cost allocation would be used for both clusters in all of the studies. The current proposal will actually render developers who applied in Cluster 3 *worse off* than those applying in Cluster 4, even though they applied to the queue a full year earlier. The CAISO has clarified that under the current methodology, Cluster 3 projects will not get any priority in terms of cost or timing with respect to deliverability upgrades. Moreover, the CAISO has tacitly acknowledged in the GIP-TPP integration Straw Proposal that the Phase I estimates are not an accurate representation of actual costs and are rather high. Yet, the CAISO is not offering the same relief to Cluster 3 that it is offering to Cluster 4, and is planning to continue to study the clusters together. BSE is concerned that the Proposed Cluster 4 Revision could place costs on Cluster 3 projects – up to their cost caps – that otherwise would not have been placed on Cluster 3. Unless the CAISO can demonstrate that the Proposed Cluster 4 Revision would not have that result, BSE cannot support it.

## 2. The CAISO Should Consider All Generator Interconnection and Transmission Planning Process Initiatives in a Comprehensive Manner.

BSE is also troubled by the CAISO's attempt to compartmentalize the numerous stakeholder initiatives affecting generator interconnection that are currently underway, rather than acknowledging that the various initiatives must be considered together so that a comprehensive plan to deal with the issues can be formulated. At several stakeholder meetings, CAISO staff has indicated that certain related issues were "beyond the scope" of the issue at hand, but in order for the CAISO to solve the underlying problem, it must take a coordinated and comprehensive approach to any reform. A piecemeal approach that does not consider the effects of all of the stakeholder initiatives – including GIP/TPP integration, Portfolio Development for the transmission plan, and GIP II – will only create more confusion and a mismatch among the various rules and initiatives.

For example, in its initial draft of the GIP-TPP Integration proposal, the CAISO is proposing to include Cluster 3 and Cluster 4 retroactively in the TPP-GIP integration, which could lead to substantial additional costs not contemplated by developers. It is unclear whether the cost caps will even remain in place if the TPP-GIP integration is successful, but if they do, BSE believes that the cost caps must be set under the same methodology so as not to give Cluster 4 projects an unfair advantage over Cluster 3 projects that were not provided the same relief. BSE believes these initiatives should not be conducted separately but rather that the CAISO should provide stakeholders a comprehensive view of how the various initiatives will interact.

## 3. The Proposed Methodology Raises Technical Questions

The Proposed Cluster 4 Revision also raises several technical questions about how the various clusters will be treated and how costs will be allocated. BSE believes this new approach could lead to discrepancies in the determination of cost allocations of each project, as detailed below.

- POI dependency: Cost allocations in QC3 were calculated as a function of project location. However, the proposed methodology in QC4 will disregard POI of the projects if they are in the same area.
- Number of projects sharing in the cost of each upgrade: The methodology used in QC3 attributes the cost of specific upgrades to a specific project based on its flow impact. Consequently, the number of projects contributing to each upgrade is varied depending on the study results and may not be limited to only the projects in the area where the upgrade is located. For example, from QC3 study results, there were some upgrades in PG&E area

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that projects in SCE and SDG&E service areas are also assigned cost responsibilities. On the opposite side, it is possible that not all projects in one study area will be assigned costs for an upgrade. This approach is different from the proposed methodology for QC4 where all projects in the same group will be pay pro-rata share according to their sizes.

- It is also not clear how the CAISO proposes to determine the incremental network upgrades, to the extent that the portfolio is higher than QC3. Theoretically, the CAISO can include some of the generation outside the area where the upgrade is located – depending on how the study is conducted. What is unclear is how the denominator would be determined. Theoretically, 1) if there are more generators in QC4, then the upgrade cost is divided by QC3 and QC4, but 2) if there are more generators in QC3, then are they going to divide the upgrades cost by CQ3 generators and assign them to QC4? If so, even within the same Cluster, identical generators at the same POI can be assigned different upgrade costs.
- For Reliability Upgrades, Phase I studies that were conducted for QC3 modeled generator at the location according to their Point of Interconnection (POI). This approach has driven a number of Reliability Upgrades with the costs assigned to Cluster 3 projects. Although the LGIP (Appendix Y) contemplates that the cost of Reliability Upgrades are allocated to projects in study area according to their sizes, the definition of group can be varied and is not always equivalent to all projects in the group. For example, costs of several SPSs identified in QC3 reports were assigned to only projects that contribute to upgrade which is a subset of study area. It is also unclear how the Proposed Cluster 4 Revision, which uses a “Cost per MW” approach can be used in this situation and how this will be comparable with the studies that were conducted for QC3.
- Translation of portfolio information to GIP study. Due to the nature of Portfolios that provide resources on the aggregate basis, it is unclear how the ISO will translate this information to the base cases for power flow, dynamic, short circuit and other studies in comparable with QC3 studies. In particular, the studies that were conducted for QC3 projects modeled new resources according to their specific POI(s) and voltage level(s). This could lead to a different set of upgrades and costs responsibilities. In addition, it is unclear how the study areas will be defined considering the discrepancies between the methodology used in Portfolios (defined by more than 20 CREZs) and QC3 (approximately 5-6 study groups).

#### 4. Proposed Solutions

As noted above, BSE is supportive of the CAISO's efforts to deal with the problem at hand. BSE believes that the Proposed Cluster 4 Revision would be acceptable if the CAISO either: (1) separates Clusters 3 & 4 and performs the Phase II study separately so that it can progress Cluster 3 forward without having to merge the two methodologies (the preferred approach); or (2) apply the Proposed Cluster 4 Revision methodology to both Clusters 3 & 4 to recalculate Cluster 3 cost caps. Under this approach the CAISO could take the plan of service developed in the initial Cluster 3, Phase I study, but instead of using the per MW cost allocation just for Cluster 4, as proposed, it could use the same cost allocation for Cluster 3 as well. Also under this approach, the CAISO would defer the Cluster 3 first financial security postings until the results of this study were forthcoming. While this is not the preferred approach, BSE believes that it would work to achieve parity between the two clusters and allow the CAISO to use the simplified methodology. BSE puts forth these potential solutions for discussion purposes, and still needs to understand some of the technical issues before it can fully support the use of the Proposed Cluster 4 Revision for both clusters. But BSE believes that this approach could be an acceptable compromise if the CAISO is not willing to separate Clusters 3 & 4 and have them proceed independently.

#### 5. Conclusion

BSE again appreciates the CAISO's efforts to tackle the thorny problems presented by the interconnection queue process, and generally, BSE does not object to the CAISO seeking to change the process where such changes are not unduly discriminatory, are well thought out, and consider how all of the proposed modifications work together to obtain a better result. As it stands, Proposed Cluster 4 Revision needs some modification to pass those tests. If the CAISO wishes to move forward with this proposal, it should mitigate the distinct treatment of QC3 and QC4 either by separating Phase II studies of QC3 from QC4 or by recalculating cost caps of QC3 projects using the same methodology proposed for QC4 projects. The CAISO also must provide more detail about how this methodology would be implemented, as well as explain what impact, if any, the GIP-TPP integration, GIP II, TPP, and other relevant stakeholder initiatives would have on the Proposed Cluster 4 Revision.