

## Comments of Pacific Gas and Electric Company on the 2012-2013 Transmission Planning Cycle December 11-12, 2012 Stakeholder Meetings

Submitted by	Company	Date Submitted
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### Comments

Pacific Gas and Electric Company (PG&E) values the opportunity to participate in the annual Transmission Planning Process. PG&E submits these comments 2012-2013 Transmission Planning Cycle stakeholder meetings held December 11-12, 2012 and looks forward to continued participation in the TPP.

#### General

PG&E appreciates the detail provided by the CAISO on the process, methodology, and study assumptions used in this year's studies. That said, PG&E has the following general comments about the presentations:

- PG&E believes that in many cases the presentation does not provide sufficient details on the renewable generation (and associated network upgrades) modeled in the study base cases to fully understand the study results and the proposed mitigations. PG&E would like to request more details on the base case modeling assumptions.
- For PG&E areas, the CAISO has proposed a number of solutions including SPS's to trip existing generation and congestion management. PG&E is concerned with the proliferation of SPS's to curtail existing generation and the use of congestion management as a long term planning solution, as we believe these are frequently suboptimal solutions. We seek to have a dialogue with the CAISO and its stakeholders on ways to improve planning such that these tools are used less frequently.
- For PG&E areas, several violations have been categorized as "Localized concerns" and the proposed mitigation points to GIP for solutions. The presentation does not provide clarity on whether the network upgrades associated with the renewable generators have been modeled in the cases. PG&E would like to request clarity on the CAISO's criteria for identifying violation as "Localized concerns."

Questions, comments and recommendations specific to individual studies follow.

### **Economic Planning Study (by Xiaobo Wang)**

Certain assumptions remain unclear to PG&E, particularly in light of the CAISO's preliminary finding that the Delany-Colorado River Project appears economic. While we understand that additional study still needs to be done in order for the CAISO to make a final determination on this project, PG&E has the following requests with respect to the preliminary findings:

- PG&E understands that the TEAM method was utilized to determine benefits for each project. The benefits presented in the preliminary results should provide additional granularity to stakeholders as to the specific dollar amounts of each type of benefit identified for the project.
- The CAISO should clearly outline what specific assumptions (both in-state and out-of-state) were adjusted in the TEPPC cases for the economic study and production simulation. This will help stakeholders understand the basis for the identified congestion. For example, loads and net interchange assumptions could heavily influence the results.
- The CAISO should provide greater transparency to stakeholders as to the specific sensitivities that were conducted, and which of the assumptions were tested.
- The CAISO should indicate the flexible reserve requirement assumptions for the study.
- The CAISO should provide greater transparency to stakeholders as to the criteria are for determining that something "appears economic." PG&E would like to know the planning horizon over which costs and benefits were evaluated.

### **Central California Study (by Jeff Billinton)**

PG&E appreciates the details provided by the CAISO on the Central California Study, and has no questions or clarification requests at this time.

### **Policy Driven Planning Base Cases and Study Assumptions (by Yi Zhang):**

PG&E requests that the CAISO provide the following clarifications:

- On slide #16, please include dispatch factor for renewable resources that were modeled in peak and off-peak base cases.
- Also on slide #16, please describe the methodology of modeling DG in PF base cases that include location and MW of DG.
- On slide #18, please describe the hour/date/month in production cost simulation results that were used to model renewable output and import level in peak and off-peak base cases.

### **North PG&E Policy Driven Power Flow and Stability Results (by Rajeev Annaluru)**

PG&E offers the following clarification requests, comments, and recommended corrections to the North PG&E Policy Driven Power Flow and Stability Results:

- On slide #3, please provide the renewable dispatch modeled in peak and off-peak base cases.
- On slide #8, PG&E strongly recommends changing the potential mitigation for Delevan-Vaca Dixon 2&3 230kV lines outage from “SPS to curtail Colusa generation” to “Reconductor the Delevan-Cortina 230kV line.” There are more than 6 contingencies that would require tripping or curtailing Colusa generation and would therefore violate the CAISO’s Planning Standard SPS6.
- On slide #44, the SPS to trip Colusa generation is not an acceptable mitigation because there are more than 6 contingencies that would require tripping the generator. The potential mitigation should be to upgrade the line.
- On slide #45, PG&E strongly suggests deleting “Trip Hyatt generation” as potential mitigation to relieve Table Mt 500/230kV transformer overload for (1) Round Mt 500/230kV bank outage, (2) Malin-Round Mt 500kV DLO, and (3) Round Mt – Table Mt. 500kV DLO. It is not a viable solution.
- Also on slide #45, the SPS to trip Colusa generation to relieve Round Mt 500/230kV bank and Olinda 500/230kV bank emergency overloads is not an acceptable mitigation because there are more than 6 contingencies that would require tripping the generator therefore violate the CAISO’s SPS6.
- On slides #45 and #46, PG&E advises deleting the Table Mt 500/230kV transformer outage without SPS because it is a Category “D” contingency, not a “B” contingency. In addition, it is not a viable solution to modify the SPS to trip additional existing generation; however, it may be possible to trip future new generators in the area.
- On slide #47, please check the Table Mt 500/230kV bank overload for “B&C” contingencies in high DG case. How much DG and Feather River hydro generation were dispatched in the high DG off-peak case?
- On slides #47 and 48, “modify existing Colusa SPS” is not a potential mitigation for reasons stated above.
- On slide #49, PG&E advises to delete “Table Mt 500/230kV outage if no SPS.”

### **Policy Driven Planning Deliverability Assessment Results – PG&E Area (by Binaya Shrestha)**

PG&E offers the following requested clarifications and recommended corrections to the Policy Driven Planning Deliverability Assessment Results – PG&E Area:

- The CAISO’s determination of which mitigation measures are localized concerns lacks necessary details for stakeholders to understand the criteria used to determine their classification as local versus area. PG&E believes this clarity is particularly important due to the markedly different classification results between the PTOs. For example, only two (2) of the 26 mitigation measures in SDG&E territory were identified as localized concerns to be addressed by GIP measures, while 19 of the 21 mitigation measures in PG&E’s territory were identified as localized concerns. This is especially relevant for

PG&E given the impact such decisions will have on the substantial number of interconnection driven upgrades in the Central Valley due to the proliferation of new RPS generation in the region.

- On slide #5, the Normal overload identified on the Los Banos – Westley 230kV line is not a localized issue because a 500kV contingency on Path 15 would also cause emergency overloads. The potential mitigation should be upgrading the line.
- With respect to the CAISO's study assumptions, PG&E believes additional information should be provided to stakeholders. On slide #2 specifically, PG&E requests that the CAISO provide the specific assumptions with respect to the MWs of generation dispatched and imports from the base case are provided.

Again, PG&E appreciates the CAISO's continuous collaboration with and responsiveness to stakeholders throughout the 2012-2013 TPP cycle, and thanks the CAISO for its consideration of our feedback on the December 11-12 stakeholder presentations.