



2016-2017 Transmission Planning Process (TPP)

Submitted by	Company	Date Submitted
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Comments on Stakeholder Meeting of September 21-22

PG&E provides the following comments on the stakeholder meeting held September 21-22, 2016, which presented the CAISO’s Reliability Study preliminary results, as well as updates on the 2016-17 TPP Special Studies.¹

Reliability Studies – PG&E Area

Oakland East Bay Sensitivity Study

PG&E appreciates the CAISO evaluating as a sensitivity scenario the potential retirement of the current RMR contract with the ageing local generation plant in the Oakland area and the assessment of local reliability needs in the event this plant is taken out of service. We look forward to the next step in the evaluation, which should consider mitigation options and specify the requirements for any new local reliability resources that may be needed. As both the PTO and an LSE serving load in the local area, PG&E is performing its own studies and will coordinate its activities in front of both the CAISO and CPUC to ensure procurement of the best combination of resources that balances the interests of affordability with the reliability needs of PG&E customers.

Fresno Local Area/Re-evaluation of Previously Approved Projects

PG&E generally agrees with the CAISO’s presentation during the Stakeholder Meeting of the revised load forecast in the Fresno Area, including increased growth in behind-the-meter PV,

¹ PG&E’s comments on the Slow Response Local Capacity Resources Special Study will be submitted separately on Monday, October 10.



which has the effect of pushing out the reliability need that was the primary driver for approval of the Gates-to-Gregg (Central Valley Power Connect) 230 kV project.²

In light of the diminished reliability driver, PG&E Transmission Planning and CAISO continue to evaluate the economic value of the project, which was a supporting factor in the original approval. We look forward to presenting the results of this analysis at the November meeting.

Bulk Energy Storage Special Study

PG&E supports the CAISO's efforts on bulk energy storage study in the 2016-17 planning cycle and offers the following recommendations.

Study assumptions:

- PG&E supports the use of the LTPP default scenarios and recommends that since the bulk energy storage case study is being conducted for 50% RPS, the 43.3% RPS portfolio should be replaced with a 50% RPS portfolio.
- Since the CAISO is planning to use a Grid View nodal model for locational benefits analysis, PG&E recommends using the same model for system-wide study also. This approach will eliminate any risk of discrepancies between the results of a zonal model study and a nodal model study.
- With the assumptions that the CAISO will adopt the "Mid-case" assumptions of 2,000 MW net exports for this study, PG&E recommends at least one additional level of net export level ("High-case" assumption of 5,000 MW net export level) for a sensitivity study to capture any interaction between storage and exports.
- CAISO's previous studies have assumed a \$300 curtailment price for renewable energy. PG&E recommends that the CAISO revisit the curtailment price assumption and revise it to reflect the latest CPUC assumptions.³

Revenue Requirement Assumptions:

- **Generation Resource:** The revenue requirement assumptions for generation resources are higher than the latest assumptions used by the CPUC for developing the renewable portfolio. Therefore PG&E recommends that the revenue requirement assumptions for this study should be aligned with the assumptions used in CPUC's RPS calculator.
- **Transmission Upgrade:** The information included in the CAISO's presentation is not sufficient to understand the source of the transmission upgrade costs. PG&E

² The Gates-Gregg 230 kV project (also known as "Central Valley Power Connect") was competitively awarded to a partnership of PG&E Transmission Project Development, Berkshire Hathaway Energy (BHE) and Citizens Energy in the 2012-13 TPP.

³ <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M162/K005/162005377.PDF> (see p. 32).

recommends that the CAISO include the source of the transmission upgrade costs in the assumptions.

- **NQC factor:** PG&E recommends that the NQC factors should be aligned with the most recent ELCC values for the renewable resources to ensure that the NQC factors reflect the impact of the different technologies on peak load.

Other comments:

- The CAISO has listed reduction in line losses (calculated using a power flow analysis) as one of the potential locational benefits. Since a power flow model captures a single snapshot of the system only, use of a power flow analysis may not be sufficient to quantify the change in line losses. Therefore in order to determine any change in line losses for the whole year, the CAISO may have to supplement the power flow analysis with the results from the nodal model production simulation results.
- PG&E concurs with CAISO's recommendation to study distributed batteries as a sensitivity scenario. This sensitivity study will allow a comparison of the benefits of the two different types of storage technologies.