

Comment Addendum of Pacific Gas and Electric Company on the 2013-2014 Transmission Planning Process Unified Planning Assumptions and Study Plan

Submitted by	Company	Date Submitted
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Based on feedback from CAISO staff following PG&E’s submittal of comments on March 14 on the 2013-2014 TPP, PG&E provides the following addendum to reformat our request to address Public Policy Objectives as shown in our redline to Sections 3, 4 and 4.2 of the draft plan as a request for two additional Economic Planning Studies in the 2013/2014 Transmission Planning Process. Our other March 14 comments, including our request for the Table Mountain Economic Planning Study, remain unchanged.

Economic Planning Study (Section 4.4, page 32)

Path 15/Path 26

The 2012/13 Central California studies showed that under certain conditions, high Path 15/Path 26 flows in 2022 would result in overloads on the Westley-Los Banos 230 kV transmission path and on the Gates-Arco-Midway 230 kV transmission path. These overloads could be addressed by new transmission or congestion management but a decision on the preferred solution to address these overloads was deferred. In addition, studies in the 2012-13 TPP found congestion between Midway and Vincent but concluded it was not economic to implement transmission upgrades at this time. However, new renewable integration study work in 2013 can be used to enhance the economic evaluation of Path 26 completed in 2012-13.

PG&E proposes that a Path 15/Path 26 Economic Study be undertaken in the 2013/14 TPP. This study would use the latest RPS portfolio for 2023. The study would consider the following:

- *Consider More Extreme Operating Conditions*
Because production simulation models are designed to utilize normative assumptions regarding load, hydro conditions, thermal resource outages, and other variables in order to produce reasonable, mid-range estimates of resource dispatch and prevailing power flows, analysis that relies on such models is generally suitable for long term economics but not to identify many operating issues in the near-term or longer-term. These operating issues occur during extreme events such as very high output of wind, solar and hydro resources combined with very low load conditions
- *Evaluate the economic costs and benefits of Transmission upgrades in the context of Load Following and Renewable Integration needs.*

The capability of the transmission system can support integration of needed renewable resources. For example, regulation units in Northern California may be needed to supply

system ramping capacity when Southern California renewable energy sources are quickly ramping up or down. Further, a strong backbone transmission system within California can allow loads in Northern California to be served during periods of over-generation in Southern California. When solar and wind output are high, sufficient transfer capability on Path 15 and Path 26 can avoid curtailments of renewable resources and support system-wide load-resource balance.

Greater Fresno Area

The CAISO approved a new Gates-Gregg 230 kV DCTL with one circuit strung in the 2012/13 TPP. The proposed operating date for this project is 2022.

PG&E proposes that an update and enhancement of the study of the Greater Fresno Area be undertaken in the 2013/14 TPP to evaluate the merit of stringing the second circuit between Gates and Gregg as part of the initial installation versus stringing the second circuit in a future year. The study would consider the following:

- *Increased Pumping and Generation capability at the Helms Pumped Storage Project*

Added transmission capability provided by a second circuit is expected to provide greater flexibility at Helms to support load following and renewable integration, as described above

- *Potential Cost Savings*

PG&E will submit for CAISO consideration a cost analysis comparing the cost of stringing the second circuit at the same time as the first versus deferring the second circuit. This analysis can be factored into the CAISO's economic assessment.

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