



Comments on the Draft 2010 California ISO Transmission Plan San Francisco Write-Up

Introduction

PG&E appreciates the opportunity to provide comments in response to the Draft 2010 California ISO Transmission Plan San Francisco Write-Up released for review on March 9, 2010 and due by close of business March 11, 2010. Below are comments that address the transmission system studies performed as part of the CAISO's Transmission Planning Process.

General Comments

PG&E would like to highlight that the methodology used by the CAISO for the analysis of Category C3 contingencies in San Francisco is conservative and as such the results obtained may not appropriately reflect actual PG&E system performance. As a result, PG&E believes that the results obtained while using the current methodology should not be the sole basis for the determination of reliability issues as being reported in the PG&E Service Area Reliability Assessment section and the Reliability Analysis for the City of San Francisco (Section 7.3) of the Draft 2010 CAISO Transmission Plan.

Table 1 in the NERC TPL Standards defines Category C3 events as:

“SLG or 3-phase fault, with Normal Clearing, Manual System Adjustment, followed by another SLG or 3-phase Fault, with Normal Clearing:

3. Category B (B1, B2, B3 or B4) contingency, manual system adjustments, followed by another Category B (B1, B2, B3 or B4) contingency.”

As stated in the above definition, when these events are being studied, the system must be adjusted following the first Category B contingency and prior to the second contingency. PG&E believes that, in an effort to simplify the analysis for these multi-step contingencies, the CAISO staff may not be performing a system adjustment in between the two contingencies being analyzed. Consequently, the results reported may be more severe than in actuality and beyond what is stated for Category C3. PG&E believes that the methodology currently being used can be an effective method to flag contingencies for further review. Nevertheless, once these contingencies have been identified the manual adjustment in between the contingencies should be simulated correctly to reflect

what methods the CAISO would take in preparation for the next contingency. In this manner a more accurate analysis of system performance for these contingencies is obtained.

For Category C3 events studied as part of the San Francisco assessment, PG&E believes there are feasible operating solutions that may be deployed during the manual system adjustment period that will correct the majority of the identified thermal overloads without the need to drop firm load in San Francisco. Furthermore, PG&E is also investigating short-term emergency rating possibilities for all the internal 115kV cables in San Francisco. Higher emergency ratings may decrease the need for operating solutions in the future.

Comments on Reliability Analysis for the City of San Francisco

PG&E in general agrees with the study results presented by the CAISO for this area with exception of the following:

1. The Martin-Larkin (HY-1) 115 kV cable overload should not be presented as an overload for the Mission-Larkin (XY-1) 115 kV and Potrero-Larkin No. 1 (AY-1) 115 kV cable outages because CB No. 192 at Larkin Substation is operated normally closed as of March 2009. Therefore, the N-1-1 contingency should not remove the Potrero-Larkin No. 2 (AY-2) 115 kV cable. This overload and contingency also appear in Table 3-3.5.3, ID GBA-SF-T-004.
2. The Potrero-Mission (AX) 115 kV cable overload for the Potrero-Larkin Nos. 1 and 2 (AY-1 & AY-2) 115 kV cable outages will be greatly reduced with the DC runback scheme that will be placed into service with the Trans Bay Cable. In the event where the loss of Potrero-Larkin No. 2 (AY-2) 115 kV cable is first N-1 contingency, the DC runback scheme will operate before the second contingency, resulting in a thermal overload less than 106 percent. This overload and contingency also appear in Table 3-3.5.2, ID GBA-SF-T-005.
3. Section 7.3.3, pg 296, indicates that the DC runback scheme that will be placed into service with the Trans Bay Cable would ramp down the Trans Bay Cable output from 400 MW to 300 MW to relieve the Potrero-Mission (AX) 115 kV cable overload when the Potrero-Larkin No. 2 (AY-2) 115 kV cable is out of service. PG&E would like to point out that per the CAISO Draft Operating Procedure T-126 San Francisco Dispatch Instructions, the DC runback scheme will ramp down the output to 200 MW further reducing the possibility of thermal overloads on the Potrero-Mission (AX) 115 kV cable.

Conclusion

PG&E looks forward to working with the CAISO staff on the methodology for studying Category C3 events and to continue working in identifying the appropriate system adjustments for the identified issues. PG&E requests the CAISO staff consider the above

comments on the CAISO reliability analysis of San Francisco. PG&E believes these actions are essential in order for both parties to be in full agreement on future studies and results. For follow-up or questions, please contact Marco Rios (415-973-8460).