

Comments of Pacific Gas and Electric Company
CAISO Transmission Planning Standards
Draft Straw Proposal

Submitted by	Company	Date Submitted
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Pacific Gas and Electric Company (PG&E) appreciates the opportunity to provide comments on the California Independent System Operator's (CAISO) Revision to ISO Transmission Planning Standard Draft Straw Proposal and presentation from the April 11, 2014 stakeholder meeting. In the comments below, PG&E addresses each of the three main elements discussed in the policy paper and presentation.

1. San Francisco Peninsula Extreme Event Reliability Standard

PG&E supports the CAISO's proposal to add to its planning standards a specific recognition of the unique characteristics of the San Francisco Peninsula and acknowledgement that this study area requires the consideration and approval of transmission solutions as mitigation for Extreme Events. The CAISO's Draft Straw Proposal and stakeholder meeting presentation appropriately highlighted the unique risks and circumstances underlying the need for the San Francisco Peninsula to be explicitly recognized as a separate Extreme Event reliability standard. Beyond the risk of large magnitude seismic events, the San Francisco Peninsula is unique due to the urban load center, the geographic isolation of the Peninsula, its lack of diverse electric supply, and potential risk of challenging restoration times. PG&E supports the CAISO's comparison of the San Francisco Peninsula area to New York City for purposes of recognizing the need to require consideration of mitigation for extreme contingencies. In addition to identifying New York City, it would be informative for this stakeholder process for the CAISO to determine if similar extreme contingency reliability standards have been developed/adopted applicable to other large cities within the United States (e.g., Chicago, Houston, Philadelphia, Tampa) that have unique geographic attributes.

2. Non-Consequential load dropping: Category C Contingencies

PG&E is supportive of the CAISO's current and historical practice of not relying on load shedding as a long-term solution to Category C events in local area planning. However, PG&E believes that the application of the 1,000 people per square mile criterion will prove to be overly broad in practice and may be difficult to implement. In lieu of the CAISO's proposal as it applies to local area planning, PG&E recommends that the population density metric be scaled to a more restrictive value (i.e., increased to reflect a larger number of people per square mile) such that the scope of the load shedding restriction will be limited to the

highest density urban areas within the CAISO footprint. Establishing a tighter restriction on the use of load shedding will allow the CAISO to consider load shedding on a case-by-case basis in areas of the grid where minimal load shedding may prove to be appropriate mitigation for Category C events instead of new transmission or upgrades. PG&E supports the CAISO's risk assessment factors as identified on slide 17 of the stakeholder presentation and recommends that these factors be considered as part of the CAISO's assessment of load shedding as a viable mitigation option in areas not covered by the restriction. The expected frequency of the need to activate the SPS, the magnitude of the load drop, and the expected duration, in particular, are essential criteria to be factored into the case-by-case assessment. On balance, PG&E believes that adopting a slightly more restrictive definition of "high density urban load" area will provide needed flexibility for CAISO to consider small and targeted amounts of load shedding in areas of the grid where it makes sense while avoiding any adverse safety and economic consequences due to loss of load in the large urban areas of the CAISO footprint.

3. Changes to NERC Transmission Planning (TPL) Standards

PG&E supports updating the CAISO Planning Standards to incorporate changes from FERC approved TPL-001-4, Transmission System Planning Performance Requirements.

PG&E has the following comment regarding a reference to the CAISO's stakeholder meeting presentation at slides 36 and 37:

The slides state that after 1/1/2021, "non-consequential load loss" is no longer allowed in Corrective Action Plans for N-1 contingencies.

The TPL standard (Table 1, Steady State & Stability Performance Footnotes for Planning Events and Extreme Events, Footnote 12) includes the following statement:

"In limited circumstances, Non-Consequential Load Loss may be needed throughout the planning horizon to ensure that BES performance requirements are met."

In PG&E's view, the TPL standard does not reflect a blanket limitation for applicable P1 and P2 single contingencies as indicated in the presentation material. PG&E expects these types of details to be fleshed out further as more details are provided on the specific revisions to be incorporated in the CAISO Planning Standards.

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