

**SDG&E's Comments
on the CAISO's June 25, 2013
Contingency Modeling Enhancements Conference Call and Revised
Straw Proposal**

SDG&E's main issue continues to be the one we raised from the outset—namely, the CAISO's apparent unwillingness to consider controlled load drop as a mitigation solution for an N-1-1 contingency condition. This would obviate the need to take other actions such as starting inefficient boiler generation and running this generation at its minimum output level (either through the CAISO's minimum on-line commitment (MOC) mechanism or via exceptional dispatch).

Whether or not the CAISO decides to rely on controlled load drop, we continue to believe the CAISO's proposed contingency modeling enhancements represent an important step forward in capturing the economic impacts of reliability requirements in the CAISO's market mechanisms, rather than the less precise and less efficient judgment-based out-of-market actions.

SDG&E's view of controlled load drop is that it does not make sense to start a very costly unit in anticipation of a possible N-1-1 contingency condition when (1) there is more than enough gas turbine capacity in the area in question, and (2) NERC/WECC/CAISO reliability standards permit the use of controlled load drop to manage an N-1-1 contingency condition should it actually arise. SDG&E suggests that following the first N-1 contingency, the CAISO should rely on local area gas turbine capacity to prepare for a possible second contingency. (The CAISO has 30 minutes to start-up gas turbine capacity to prepare for a possible second contingency.) Then, if there is not enough gas turbine capacity available to prepare for a possible second contingency, SDG&E proposes that the CAISO direct the arming of controlled load drop schemes. If the second contingency actually happens, controlled load drop would be used to return the system to a secure state; i.e., in preparation of a possible third contingency.

Relying on quick start gas turbine capacity, rather than preemptively starting and running inefficient boiler generation, will help to minimize the cost of preparing for N-1-1 contingency conditions. Under the CAISO's contingency modeling enhancement proposal this should happen automatically because the CAISO's market software will—subject to the specific price/quantity offer prices submitted by parties—select the most economic/locationally-effective mix of generation to prepare for the N-1-1 contingency condition. For this reason alone, SDG&E continues to support the CAISO's contingency modeling enhancement proposal.

Internalizing controlled load drop in the current contingency modeling enhancement proposal does raise important implementation and policy issues. For example, there is currently no price/quantity bid for controlled load drop. There is clearly a cost for dropping load, but establishing the relationship between cost and quantity is challenging. Also, this relationship is likely location- and time-specific. The cost to drop load in some locations and at certain times is likely quite low but at other locations and at other times, very high. Further, it is unclear whether a host utility has the authority to submit a price/quantity bid for controlled load drop that includes direct access or community choice aggregation customers. Note that depending on the circuits involved, controlled load drop may also force wholesale generation connected to a distribution circuit off-line. It is not clear that the host utility has the authority to submit market bids that have the effect of involuntarily forcing non-host utility owned generation off-line. These issues need to be explored in connection with implementing controlled load drop in the CAISO's proposed contingency modeling enhancement program.