

PG&E's Comments

Generation Contingency and Remedial Action Scheme Modeling Revised Issue Paper and Straw Proposal

Submitted by	Company	Date Submitted
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PG&E appreciates the opportunity to comment on the California ISO's (CAISO) Revised Issue Paper and Straw Proposal on "Generator Contingency and Remedial Action Scheme (RAS) model," dated November 7, 2016 and discussion in the MSC meeting on November 18, 2016.

In response, PG&E offers the following comments and clarifying questions:

1. While PG&E generally shares CAISO's goals of transparency and reducing exceptional dispatches, PG&E is concerned that the introduced solution complexity weights against the benefits of the reduced number of exceptional dispatches. In order to better understand the magnitude of the problem and implications of the potential solutions, PG&E requests:

- The CAISO provide an estimate number of generator contingencies and RAS schemes to be included in this initiative and additional detail about the selection criteria.
- The CAISO provide a quantitative analysis of existing exceptional dispatches related to each component of this initiative and how they would be reduced by the proposed solution.

2. PG&E prefers the modified version that CAISO has published in the straw proposal for changing its market optimization to enforce preventive transmission constraints in generator contingencies and remedial action schemes (RAS). The straw proposal would modify the market software to find a dispatch for which transmission constraints will be satisfied post contingency without active redispatch of resources by the ISO. This differs from the previously proposed preventive-corrective approach. However, there are a number of issues related to the Pmax methodology chosen by CAISO that needs further investigation including:

- Changes in commitment between Day-Ahead and Real-Time may cause inconsistent modeling between market runs and revenue inadequacy in the real time market

- Opportunities for virtual bidders to take advantage of CAISO modeling differences
- Impacts to CRR revenue adequacy

3. PG&E requests that ISO investigate solution methodologies in which generation loss in a generator contingency or RAS event is picked up pro-rata on resources that ISO expects to be on-line in Real-Time based on studies that the ISO performs prior to the Day-Ahead Market run. The loss of generation in a generation contingency or RAS event actually occur in Real-Time so the expected commitment in Real-Time should yield a more accurate model than using the commitment in the Day-Ahead Market to model the pick-up of lost generation. This lost generation pick-up using expected commitment should be used in Day-Ahead and Real-Time markets. This would help prevent revenue inadequacy caused by changes in modeled commitment between Day-Ahead and Real-Time Markets.

4. PG&E requests that CAISO adds a market simulation to its design steps presenting the efficacy of the solution methodology in improving cost effectiveness.