



SDG&E Comments on June 7, 2012 Flexible Ramping Product

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SDG&E's objectives for Flexible Ramping Product

1. Procure a minimum amount of flexible ramping capacity (up and down) to mitigate the effect of load variation between RTPD and RTD.
2. Procure ramping capacity in the most cost effective manner in terms of total market cost.
3. Insure that cost causation is applied to the allocation of FRP costs.

Two Proposed Methods of Procurement

CAISO has proposed two possible methods of determining the procurement target. SDG&E requests that the CAISO provide more analysis on which method more effectively solves for the objectives listed above, particularly the first two.

For the explicit approach, solving for objectives 1 and 2 depends primarily on the accuracy of the CAISO's forecast of net load requirements to minimize procurement of FRP while maintaining an adequate level of dispatchable capacity in RTD to manage net load deviations and avoid power balance violations. Given this dependence on the forecast, SDG&E requests the CAISO provide insight regarding ways to optimize its forecast to minimize total FRP and RTD costs.

For the implicit approach to be the optimal solution to objectives 1 and 2, SDG&E requests further detail on the process and data used to develop the penalty prices and ramping demand curve and how this approach solves for minimizing total FRP and RTD costs.

For both methods, the ability to meet objectives 1 and 2 depend on the overall accuracy of the models' forecasts. SDG&E suggests that these models be tested and compared for overall cost effectiveness before an informed decision over which method is best can be made.

Explicit Approach - Open Issues:

DA Procurement

Under the explicit approach, it is beneficial to procure flexible ramping capacity in the DA market (up to a specified confidence level) in order to allow for the commitment of needed long start units. SDG&E suggests that the CAISO run simulations on overall market cost to help determine the most appropriate confidence level to use. Further, a well-defined buy-back mechanism would mitigate the risk of procuring FRP to a higher confidence level in the DA market.

Over Procurement

In an over procurement scenario, the CAISO should enforce the buy-back of surplus FRP in HASP to enable the CAISO to re-optimize its final procurement of FRP and RTD energy.

RUC Integration

SDG&E supports the integration of RUC into the IFM for the purposes of allowing RUC'd units the ability to receive DA flexible ramping awards, to the extent the implementation of this feature is compatible with overall objectives of RUC integration.

Cost Allocation:

SDG&E is encouraged by the clear intent of the proposal to allocate costs based on cost causation. Because FRP procurement for load variability is based on the delta between the CAISO's RTPD forecast and actual load, SDG&E believes the gross total of this delta over the settlement periods in a month should be used to determine the cost allocation to load, rather than spread across measured demand.