

**Comments on Contingency Modeling Enhancements:
Second Revised Straw Proposal**

**Department of Market Monitoring
April 3, 2014**

The Department of Market Monitoring (DMM) appreciates the opportunity to provide comments on the Contingency Modeling Enhancements Second Revised Straw Proposal.

DMM supports the CAISO approach to resolving the WECC TOP-007 reliability requirements. This approach should allow the CAISO to more efficiently manage the 30-minute contingency requirements through market processes, price the reliability service, and compensate resources for providing this service.

Market power mitigation

DMM supports adjusting the Dynamic Competitive Path Assessment (DCPA) to include minimum load and self-scheduled energy for current preventive constraints and the available 20-minute capacity for the proposed corrective constraints. This will provide a more accurate accounting of the available supply of counterflow and result in more accurate identification of local market power through the Residual Supply Index test.

Congestion and CRR payments

Congestion costs from corrective constraints should be included in CRR payments. The shadow values on corrective constraints, like current preventive constraints, represent the costs of moving power across the constraint. Flows across a line create congestion on the preventive constraint, and create a marginal increase in the cost of maintaining reliability via 30-minute recovery. These are actual costs of transmission that are appropriately included in the LMP. These costs also create energy congestion rents in the IFM, and therefore should also be included in the CRR payments.

Day-ahead market revenue inadequacy

The application of corrective constraints can create day-ahead revenue inadequacy. This would occur when a binding corrective constraint causes the scheduled IFM flow over a path to fall below the preventive constraint limit and the effective “flow” of issued CRRs.¹ The day-ahead revenue inadequacy caused by the corrective constraint would be approximately equal to the IFM corrective constraint shadow price for each MW that the path’s scheduled IFM flow fell below the lesser of the preventive constraint limit and the effective “flow” of issued CRRs.

DMM has been working on a methodology that can help resolve this revenue inadequacy without undue complexity in a post market process. For hours when the conditions described above arise, payments to CRRs associated with each binding constraint can be

¹ The “flow” of CRRs is the amount energy that would flow over the constraint if the CRRs were actual injections and withdrawals of energy. This amount multiplied by the shadow value on a constraint is a constraint’s contribution to CRR revenue.

decomposed by constraint. The megawatt values of CRRs used in settlements for each of these constraints can be prorated down based on the degree to which the binding corrective constraint causes the scheduled IFM flow over a path to fall below the preventive constraint limit and the effective “flow” of issued CRRs.

This would prevent payments to CRR holders for transmission capacity that did not create energy congestion rents in the IFM.² These extra payments to CRR holders would otherwise need to be recovered from out-of-market uplift charges allocated based on other participant share of total system load. CRR holders would also receive a prorated rebate of the cost paid by CRR holders for this capacity in CRR auctions.

DMM plans to present a more detailed proposal of this approach after further refinement and review of this methodology.

² This method could also be used to more efficiently price and allocate the risk of CRR revenue inadequacy from transmission de-rates not incorporated into the CRR auction.