

CDWR-SWP Comments to CAISO Partial Participation and SCE Alternate Proposal

December 26, 2008

California Independent System Operator (CAISO) hosted the Demand Response (DR) Working Group meeting on December 12, 2008. The California Department of Water Resources State Water Project (CDWR-SWP) appreciates the opportunity to comment and submits the following:

CAISO Proposal

CAISO's proposal is called Partial Participation. Under this proposal, a Load Serving Entity (LSE) can designate one part of its total Demand as Participating Load and the rest as non-Participating Load. The Participating Load will be settled at Custom Load Aggregation Point (CLAP) or nodal Locational Marginal Price (LMP), while the non-Participating Load will be settled at the Default Load Aggregation Point (DLAP) LMP. CAISO asserted that this design encourages DR participation at high LMP locations.

CDWR-SWP has concerns regarding this proposal. At the location where the CLAP or nodal LMP is higher than the DLAP LMP, LSE1 may not designate any part of its Demand as Participating Load because the Participating Load would be charged at the higher CLAP or nodal LMP whenever it consumes energy and be paid at the high CLAP or nodal LMP only when providing DR to the CAISO. As a result, Partial Participation discourages DR where DR is severely needed. On the other hand, at the location where the CLAP or nodal LMP is lower than the DLAP LMP, the LSE2 has incentives to settle its entire Demand at the low CLAP or nodal LMP. So this LSE2 may designate 100% of its demand as Participating Load.

SCE Proposal

Southern California Edison (SCE) proposed an Alternate Proposal. Under this proposal, DR and Demand would be scheduled and settled separately. DR will be paid at CLAP or nodal LMP, while Demand will be charged at DLAP LMP. Before implementing this proposal, the LSE, DR provider, and CAISO need to determine a Baseline for the Demand.

CDWR-SWP has concerns regarding this proposal as well. The critical point of this design is the Baseline determination. Without an accurate and true Baseline, the amount of DR is difficult to determine, and this proposal would introduce "money machine" opportunities. The LSE1 that is located where nodal or CLAP LMP is higher than the DLAP LMP could schedule "additional demand" to its Baseline Demand, and the corresponding DR1 could schedule a "DR" to offset the "additional demand". As a result, the LSE1 will be charged the lower DLAP

LMP and the DR1 will be paid the higher CLAP LMP. Without actually providing any DR, the LSE1 and DR1 could pay less or even earn revenue. On the other hand, the LSE2 that is located where the CLAP or nodal LMP is lower than the DLAP LMP would be discouraged to provide any DR to CAISO because the Demand would be charged the higher DLAP LMP, and the DR would be paid the lower CLAP or nodal LMP.

CDWR-SWP Suggestions

CDWR-SWP believes that the fundamental problem is the Demand settlement at DLAP LMP. DLAP LMP is a weighted average of nodal LMPs, so it covered price signals at individual locations for Demand to respond. In order to encourage DR participation, DLAP LMP design must be replaced with one under which both Demand and DR are settled at nodal or CLAP LMP. Without transparent and accurate price signals, it is impractical to encourage DR participation. Also, to eliminate the “money machine” opportunities, Demand and DR should be settled at the same level LMP. Consequently, SWP proposes Demand and DR settlement as follows:

- Ideally, all demand should be settled at nodal or CLAP level. Only when they are scheduled and settled at nodal or CLAP level can DR works effectively in solving energy imbalance, supply scarcity, or intra-zonal transmission congestion problems.
- To consider cost impact concerns from high LMP LSEs such as the LSE1 described above, CAISO can start with creating Sub-LAPs that can reflect approximately 20 load pockets in the CAISO controlled grid. All Demand and DR will be settled at Sub-LAPs in the first year. CAISO can phase in the nodal or CLAP level settlement after that.
- Demand and DR will be settled at the same level LMP to eliminate any “money machine” opportunities.